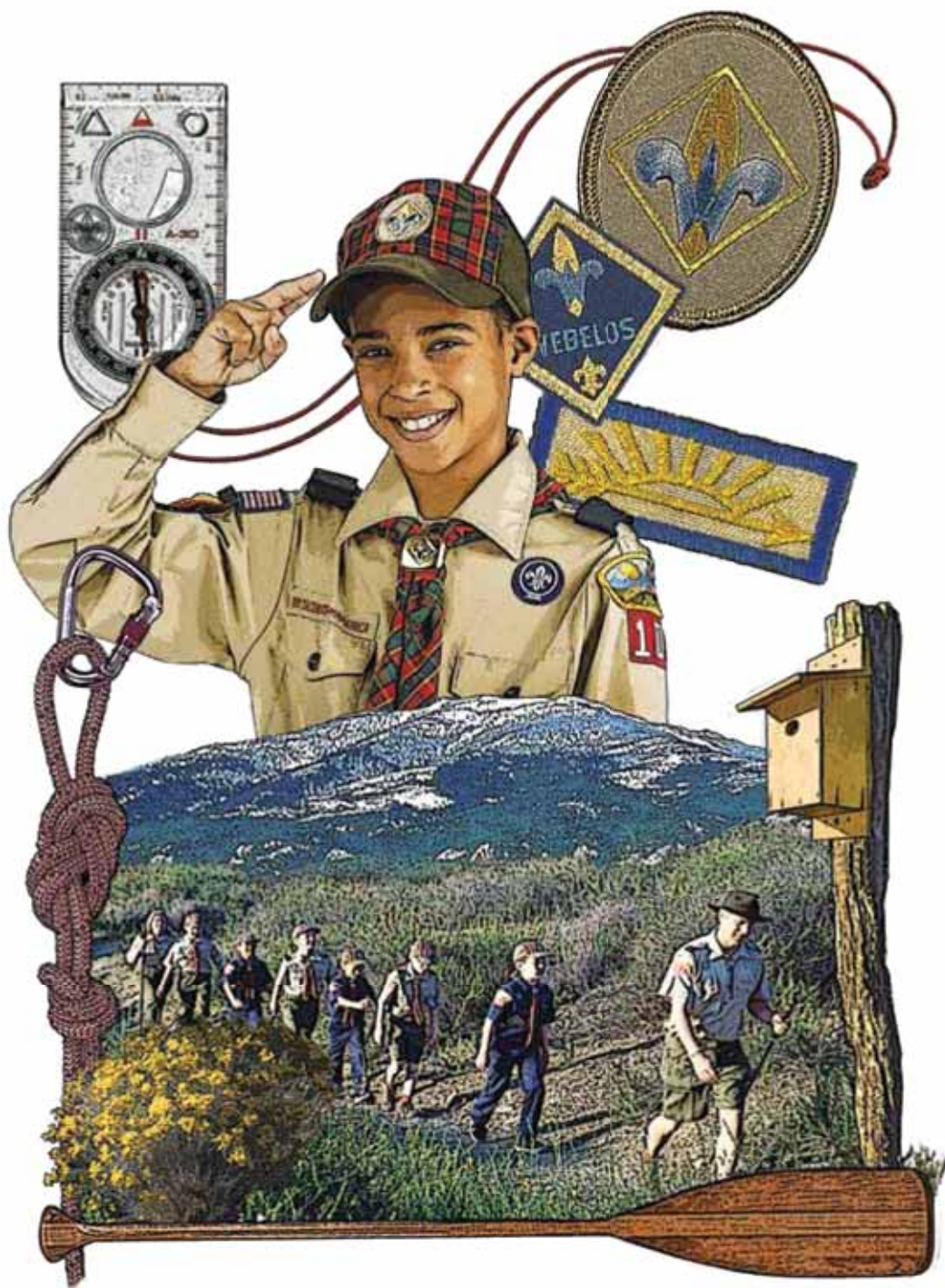


CUB

Webelos
Leader Guide



SCOUTS



BOY SCOUTS OF AMERICA®





THANKS TO YOU,
MILLIONS OF BOYS
... BECOME MORE CONFIDENT
... GROW SPIRITUALLY
... ARE BETTER CITIZENS
... LEARN LIFE SKILLS
... HAVE FUN!
WITHOUT YOU, THEY WOULD NOT.

The Boy Scouts of America welcomes your comments and suggestions
on how to improve this resource.

Please e-mail your thoughts to CS.Weberos.Leader@scouting.org.



WEBELOS LEADER GUIDE



BOY SCOUTS OF AMERICA®

A Word About Youth Protection

Child abuse is a serious problem in our society, and unfortunately, it can occur anywhere, even in Scouting. Youth safety is of paramount importance to Scouting. For that reason, the BSA continues to create barriers to abuse beyond what have previously existed in Scouting.

The Boy Scouts of America places the greatest importance on providing the most secure environment possible for its youth members. To maintain such an environment, the BSA has developed numerous procedural and leadership selection policies, and provides parents and leaders with numerous online and print resources for the Cub Scout, Boy Scout, and Venturing programs.

Effective June 1, 2010, the BSA implemented mandatory Youth Protection training for all registered volunteers.

New leaders are required to take Youth Protection training before submitting an application for registration. The certificate of completion for this training must be submitted at the time the application is made and before volunteer service with youth begins.

Youth Protection training must be taken every two years. If a volunteer does not meet the BSA's Youth Protection training requirement at the time of recharter, the volunteer will not be reregistered.

We encourage all adults to take the BSA's Youth Protection training.

To find out more about the Youth Protection policies of the Boy Scouts of America and how to help Scouting keep your family safe, see the *Parent's Guide* in any of the Cub Scouting or Boy Scouting handbooks, or go to <http://www.scouting.org/Training/YouthProtection.aspx>.

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INTRODUCTION

The basic information for planning and conducting Webelos den meetings and activities can be found in the *Den & Pack Meeting Resource Guide* and *Cub Scout Leader Book*. This *Webelos Leader Guide* supplements the program by providing activity ideas for den meetings, activity badges, advancement requirements, and Boy Scout transition activities.

Determining the Webelos program plan for a den will depend on the starting date and transition date of your boys. A base plan, derived from the den meeting plans of the *Den & Pack Meeting Resource Guide*, is offered on page 5. This plan will create the opportunity to earn the Arrow of Light while boys prepare to become Boy Scouts. The Webelos den leader may modify or reorder this base plan to meet the requirements of the den so long as all advancement requirements are met.

You can find ideas in the boys' *Webelos Handbook*, the *Cub Scout Leader How-To Book*, the *Cub Scout Academics and Sports Program Guide*, and *Cub Scout Ceremonies for Dens and Packs*. You can also get suggestions, information, and support from fellow leaders, the unit commissioner, and the district training staff, as well as by attending Cub Scout leader roundtables, pow wows, and universities of Scouting. Finally, a wealth of information is available at the National Council Web site, www.scouting.org.

SAFETY FIRST

In conducting activities, Webelos den leaders must maintain adequate supervision and assure the proper use of materials. Be careful, and remember: Safety must always come first!

Refer to the latest printing of *The Guide to Safe Scouting*, No. 34416, for information on guidelines relating to the many activities in which your Webelos den may participate.

The *Guide to Safe Scouting* is available from your local council service center, or you can find it on the National Council Web site at www.scouting.org.

PURPOSES OF CUB SCOUTING

In Cub Scouting, boys, families, leaders, and chartered organizations work together to achieve the 10 purposes of Cub Scouting:

- Character Development
- Spiritual Growth
- Good Citizenship
- Sportsmanship and Fitness
- Family Understanding
- Respectful Relationships
- Personal Achievement
- Friendly Service
- Fun and Adventure
- Preparation for Boy Scouts

HISTORY OF THE WEBELOS PROGRAM

In 1902, Ernest Thompson Seton started an outdoor program for boys called the Woodcraft Indians. In 1910, he became one of the founders of the new Boy Scout movement and one of its best-known promoters. During the 1920s, he helped Dr. Huber William Hurt develop the Cub program, and by 1928, Cubbing units were field tested in each of the BSA's regions. On April 1, 1930, the first pack charters were issued for the new Cubbing program (not officially called Cub Scouting until 1945). The first piece of Cubbing literature, *The Boy's Cubbook*, was also published in 1930.

The new program adapted activities, games, and ceremonies from other youth groups, such as Seton's Woodcraft Indians; Wolf Cubbing, developed in England by Lord Baden-Powell; and the Boy Rangers of America. American Indian lore was emphasized.

In the first handbooks, Akela was an American

Indian boy, son of the chief of the Webelos Tribe. "Webelos" was explained as "a word with an inner meaning, signifying progress from Wolf through Bear and Lion Ranks to Scout: W-B-L-S...We'll Be Loyal Scouts." The chief of the Webelos Tribe was named Arrow of Light, which was adapted from the Arrow Park World Jamboree in London in 1929, when the Golden Arrow was made the symbol of world friendship.

The Cubbing story told of the boy Akela being taken on trips into the forest where he learned knowledge and skills from the wolf and the bear. Before he could become a Scouting "brave," he had to look the lion in the eye and learn courage and determination. Then, he was admitted to the lower ranks of the young "braves," the Scouts of the trail, advancing (at the age of 12) from the world brotherhood of Cubs into the world brotherhood of Scouts.

In later years, the name Akela was used for the chief of the tribe or pack. By 1980, a parent, an older brother or sister, or an adult friend could be Akela and help the Cub Scout along the advancement trail.

In the 1930s, Cubbing organization structure was like today's Cub Scouting, except that dens were led by Boy Scout den chiefs. Dens met weekly at a member's home for games, den competitions, advancement awards, stunts, and other activities. A Cub's advancement was from Bobcat (all new members) to Wolf (9 years old), Bear (10 years old), and Lion (11 years old).

But the dropout rate was high in Cubbing, so in 1953, a Cub Scout advisory group began studying a proposed Webelos den plan to help create more variety in the program for older boys. In 1954, the Webelos den was created for 10½-year-old boys, with a new Webelos den badge. The first *Lion-Webelos*

Book with meeting outlines helps for Webelos leaders was introduced in 1958.

In 1988, a two-year Webelos Scout program was recommended; however, the changes weren't fully implemented until 1989. These changes included an expanded outdoor program with more opportunities for boy leadership, which would provide a better vehicle for Webelos Scouts to progress into Boy Scouting.

The Webelos den program of the 21st century is an exciting adventure for boys, their families, and their leaders. The activity badges, the outdoor program, the opportunities for boy leadership, and the preparation for boys to leave Cub Scouting and embark on the adventure of Boy Scouting are all wonderful steps for boys to take on the road to becoming a First Class Boy Scout and then soaring on to Eagle.

TIPS FOR SUCCESS AS A WEBELOS DEN LEADER

PREPARE TO “DO YOUR BEST.” Prepare yourself to “Do Your Best” as a Webelos den leader by focusing on the leader materials and training you should have to best serve your Webelos Scouts. As a Webelos den leader, you should own or have taken:

	BEFORE YOUR FIRST DEN MEETING	AS YOU ADVANCE (WITHIN 3 TO 4 MONTHS)
YOU SHOULD OWN	<i>Den & Pack Meeting Resource Guide</i> <i>Webelos Leader Guide</i>	<i>Cub Scout Leader Book</i>
TRAINING YOU MUST TAKE (TO BECOME A TRAINED LEADER)	Youth Protection ¹ Den Leader Fast Start ¹	<i>Leader Position-Specific Training</i> ^{1,2} <i>This Is Scouting</i> ¹
TRAINING YOU SHOULD CONSIDER		Basic Adult Leader Outdoor Orientation (BALOO) ² Outdoor Leader Skills for Webelos Den Leaders ²

¹Mandatory as of June 1, 2010; available as online training at www.scouting.org/Training.aspx.

²Available as in-person training. Consult your pack trainer or local council office.

PARENTAL OR GUARDIAN INVOLVEMENT. Don't try to carry the load yourself. Involve parents or guardians and encourage them to lend expertise to the program as activity badge counselors in their areas of interest. Each parent has something to contribute. Invite them to participate and use their skills. Use “two-deep leadership,” which means that two adults are required for all outings or activities.

PROGRAM PLANNING. The base plan for Webelos dens on page 5 offers one way to plan your Webelos and Arrow of Light den meetings to assure that your boys have the opportunity to earn the Webelos and Arrow of Light awards. There are many other possible approaches that might be utilized by a Webelos den leader. The key to using alternate den plans is following these steps:

1. Prepare your plan. Considerations should include your start date for den meetings, how frequently you will meet, the ages of your Webelos Scouts (whether they are all in the same Webelos year or not), and critically, the rank requirements (see page 3).
2. Evaluate your plan. After you have your plan worked out, share it with other leaders. Past Webelos den leaders, your Cubmaster, or unit commissioners are good choices.
3. Execute your plan. There is nothing like doing it to see if it's working.
4. Modify your plan. Making early corrections—if they are needed—may be important to your boys reaching their rank advancement.

Always be guided by the desire to have your boys advance in rank by blue and gold (February) so they can continue to work on compass points, achieve their Arrow of Light, and transition to Boy Scouts.

PARTICIPATION. Help the boys and their parents enjoy their participation in Webelos Scouting. Allow your Webelos Scouts to develop their leadership skills at pack meetings and pack activities. At pack

meetings, encourage them to demonstrate activity badge projects they have completed.

WEBELOS-TO-SCOUT TRANSITION. One of the purposes of Cub Scouting is to prepare boys for Boy Scouting. The Webelos den program is the key time for this preparation. Learn which Boy Scout troops are active in your area and get acquainted with the Scoutmasters. Participate in joint Webelos den and Boy Scout troop outdoor activities. With your Webelos den, visit some troop meetings during the year. Ask the Scoutmaster(s) to attend the transition ceremony and welcome the boys into the troop. Everything you can do to encourage a boy to continue in Boy Scouting is helpful, including moving into a Boy Scout troop along with your Webelos Scouts.

SUCCESS. Leadership is learned and developed. You can become an effective Webelos den leader if you complete basic training, plan interesting den meetings, and take the time to understand the boys. Become familiar with the *Webelos Handbook* and provide opportunities for advancement. One of your best resources is your district's monthly Cub Scout leader roundtable, where you can exchange ideas with other Webelos den leaders. Remember to be flexible in your planning. Have fun in the program. Be thankful for the opportunity you have to work with boys and influence their lives. There is great satisfaction in helping boys learn good values and worthy skills along their way to becoming adults.

BASE PLAN FOR WEBELOS DEN MEETINGS

The base plan for Webelos den meetings on page 5 is one plan for Webelos and Arrow of Light dens. This plan is based on dens starting their den meetings in September and concluding in May. This plan is related directly to the den meeting plans in the *Den & Pack Meeting Resource Guide*. Its plans, if followed, will have your boys

- advancing to the Webelos rank by blue and gold in February of Webelos Year 1;
- achieving the compass point badge and compass points from February through May;
- achieving the Arrow of Light in February of Webelos Year 2;
- and, transitioning to Boy Scouts.

Developing a Plan

The base plan is not the only possible plan. Implementing the Webelos program for Webelos Scouts will depend on the starting date and transition date of the boys in the den. Activity badges, the Webelos badge, and the Arrow of Light Award requirements are other factors that you need to consider.

The Webelos badge, compass points, Arrow of Light, and activity badges are explained in detail in the *Webelos Handbook*, but the basic requirements are listed below.

Webelos Badge Requirements

Boys must do the following:

1. Have an adult member of the family read the "Webelos Scout Parent Guide" in the *Webelos Handbook* and sign in the handbook.
2. Be active in the den for three months.
3. Know and explain the meaning of the Webelos badge.



4. Point out and explain the three special parts of the Webelos Scout uniform. Tell when to wear the uniform and when not to wear it.
5. Earn the Fitness and Citizen activity badges and one other from a different activity group.
6. Plan and lead a flag ceremony in your den that includes the U.S. flag.
7. Show that they know and understand the requirements to be a Boy Scout.
8. Earn the religious emblem of their faith or do two of six requirements related to their religious beliefs.

Compass Points Emblem

Boys must do the following:

1. Earn the Webelos badge.
2. Earn four more activity badges for a total of seven to receive the compass points emblem.
3. Earn one compass point for each additional four activity badges:
 - Earn a total of 11 activity badges—first point.
 - Earn a total of 15 activity badges—second point.
 - Earn a total of 19 activity badges—third point.



Arrow of Light Requirements

Boys must do the following:

1. Be active in their Webelos den for at least six months after completing the fourth grade (or for at least six months after becoming 10 years old), and earn the Webelos badge.
2. Show your knowledge of the requirements to become a Boy Scout by doing all of these:
 - Repeat from memory and explain the Scout Oath or Promise and the 12 points of the Scout Law. Tell how they have practiced them in everyday life.



- Give and explain the Scout motto, slogan, sign, salute, and handshake.
 - Understand the significance of the First Class Scout badge. Describe its parts and tell what each stands for.
 - Tell how a Boy Scout uniform is different from a Webelos Scout uniform.
 - Tie the joining knot (square knot).
3. Earn five more activity badges in addition to the three earned for the Webelos badge. The total must include Fitness, Citizen, Readyman, Outdoorsman, at least one from the Mental Skills group, at least one from the Technology group, and one of his choice.
 4. With the Webelos den, visit a Boy Scout troop meeting and a Boy Scout-oriented outdoor activity.
 5. Participate in a Webelos overnight campout or day hike.
 6. After completing all five of the above requirements, and after a talk with the Webelos den leader, arrange to visit, with his parent or guardian, a meeting of a Boy Scout troop he thinks he might like to join. Have a conference with the Scoutmaster.
 7. Complete the Honesty Character Connection.

NOTE: Boys earning activity badges using the Cub Scout Academics and Sports program must earn pins and/or belt loops during the Webelos Scout year.

CHARACTER CONNECTIONS™ IN THE WEBELOS DEN PROGRAM

How to Make More Character Connections With Other Activities

Character Connections™ are outlined for a boy and his leader to follow as the boy completes the requirements in the *Webelos Handbook*. What about including Character Connections in other activities?

Webelos den leaders may emphasize more values and make more Character Connections as boys participate in the many activities they enjoy in Scouting. Leaders can highlight values while going on a hike, cooking an outdoor meal, or making a project. A Core Value can be connected to an activity very easily.

How do leaders make a Character Connection? With an easy three-step method:

1. Plan it.
2. Do it.
3. Review it.

Plan it. Before the activity, gather the group and have a short discussion. Planning the Character Connection takes only a couple of minutes.

Highlight one or two values that you would like the boys to learn through the activity.

- Will they need to show respect?
- Will they need to be honest?
- Will they need to cooperate?
- Will they need a positive attitude?

Identify the ways that youth might encounter these values in the activity.

- Will they experience challenges or difficulties?
- Will they need to cooperate with others?
- Will they face temptations?
- Will they need to follow rules?

Explain leader expectations about the values in the activity.

- Why will these values be important during this activity?
- How can boys use these values during this experience?
- What rules and consequences apply to these values during the experience?

Do it. Conduct the activity. Highlight positive or negative experiences that are teachable moments during the activity. Some teachable moments must be emphasized as they happen; they may lose their effect if discussed at a later time. Others can be emphasized during the review at the end of the activity.

Make mental or written notes from the experience that could be discussed after the activity.

Review it. After the activity, gather the group and have a discussion that involves all boys. Celebrate positive examples of where the values were demonstrated during the activity. Highlight areas for improvement. What part of the value does the group need to practice? What did the group learn about using the value? Determine ways boys can use the value at home, at school, or in other areas of their lives.

DENS WITH NEW FIFTH-GRADE WEBELOS SCOUTS

A new fifth-grader starts by earning his Bobcat badge. He will need significant parental support if he is to earn his Arrow of Light before it is time to cross over into a Boy Scout troop.

Minimize the disruption to the den schedule by having the new fifth-grader participate in ongoing den activities, plus completing the minimum number of first-year requirements (Bobcat and Webelos badge requirements). He will work on five badges from the year he missed: Fitness, Outdoorsman, Family Member, Handyman, and Traveler or Artist.

BASE PLAN FOR WEBELOS AND ARROW OF LIGHT

Month	Den Meeting Plan No./Badge	Rank, Sports Requirements, Character Connections
Year 1–Webelos		
September	1. Fitness and Athlete 2. Forester and Naturalist	Bobcat review (as necessary) Physical Fitness pin ² HA*: Fitness 2–7, Athlete 4–7
October	3. Forester and Naturalist 4. Traveler and Fitness	Webelos requirements 3, 4, 7 HA*: Webelos requirement 8 (Faith) Geography belt loop ² ; Map and Compass belt loop ²
November	5. Citizen 6. Citizen	Citizen belt loop ¹ HA*: Citizen belt loop 1, 3
December	7. Citizen Make up as needed	Webelos requirements 3, 4, 7
January	8. Citizen and Artist Make up as needed	Webelos requirements review and make up as needed
At the end of January, Webelos Scouts may earn their Webelos badge based on having completed the achievements in this plan. See page 3 of this resource or page 49 of the <i>Webelos Handbook</i> for a summary of Webelos requirements. The Webelos badge is often presented at blue and gold banquet in February.		
After boys have earned the Webelos badge, they can earn the compass points emblem. It is awarded after they earn seven activity badges, four more in addition to the three they earned for the Webelos badge.		
February	9. Geologist 10. Geologist	Geology belt loop ² .
March	11. Engineer 12. Engineer	Mathematics belt loop ²
April	13. Craftsman 14. Craftsman	
May	15. Scholar and Artist	Chess belt loop ²
June	Summertime is a great opportunity to extend and continue the Webelos experience. Consider camping opportunities (day camp, resident camp, and council-organized family camps) that may be used to continue earning activity badges.	
July		
August		
Year 2–Arrow of Light		
September	1. Family Member 2. Aquanaut	
October	3. Outdoorsman 4. Sportsman	Two individual and two team sports belt loops ¹
November	5. Scientist 6. Scientist	Arrow of Light review
December	7. Readyman	
January	8. Readyman 9. Readyman	
The end of January is the earliest that second-year Webelos Scouts may earn the Arrow of Light Award based on this plan. Webelos Scouts who earn the Arrow of Light may become Boy Scouts immediately, even though they have not turned 11 or graduated from the fifth grade.		
February	10. Arrow of Light 11. Handyman	
March	12. Sportsman 13. Communicator	Two individual and two team sports belt loops ¹
April	14. Sportsman 15. Sportsman	Two individual and two team sports belt loops ¹

¹Belt loop is required for the activity badge

²Belt loop is one of a number of options for the activity badge

HA* Home assignment

A PACK CHARTERED BY THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A boy enters a Webelos den chartered by the Church of Jesus Christ of Latter-day Saints (LDS) when he turns 10 years old and remains in the Webelos program until his 11th birthday, at which time he enters the patrol for 11-year-old Scouts.

Using the *Webelos Leader Guide*, Webelos den leaders may plan den activities for the year. Often, two activity badges may be earned during one month. Leaders may calendar the monthly themes as outlined in the suggested schedule below.

SUGGESTED SCHEDULE

MONTH	ACTIVITY BADGE
September	<i>Citizen Communicator</i>
October	<i>Citizen Showman</i>
November	<i>Craftsman Readyman</i>
December	<i>Craftsman Scientist</i>
January	<i>Fitness Scientist</i>
February	<i>Scholar Engineer</i>
March	<i>Athlete Engineer</i>
April	<i>Sportsman Family Member*</i>
May	<i>Outdoorsman** Handyman</i>
June	<i>Traveler Artist</i>
July	<i>Aquanaut Geologist</i>
August	<i>Naturalist Forester</i>

Regardless of the month a boy enters the Webelos program, he can achieve the requirements for the Webelos badge and the Arrow of Light Award during the Webelos year.

KEY TO SUGGESTED SCHEDULE

Italics Required for Arrow of Light Award

*LDS Webelos Scouts are encouraged to earn the Family Member activity badge.

**LDS Webelos dens follow the overnight camping guidelines found in the *LDS Scouting Handbook*: "No Scout-sponsored overnight camping should be planned for boys under age eleven."

Family camping experiences that include activities for Webelos requirements should be coordinated with the Webelos den leader and approved by local priesthood leaders.

As each boy enters the Webelos program:

- He should begin to work on the requirements to earn the Webelos badge immediately while also participating in weekly den activities. Requirements are listed in the *Webelos Handbook*. To earn the Webelos badge, an LDS Scout should earn the Faith in God emblem. He is permitted to earn this award at any time during his Cub Scout years, after he is 9 years old.
- The leader introduces the boy and his parents to the requirements for the Webelos badge and a one-year plan that includes all of the necessary achievements for the boy to receive the Arrow of Light Award by the time he enters the patrol for 11-year-old Scouts. With the help and encouragement of his leader and his family, he can complete the requirements listed in the *Webelos Handbook*.

TRAINING, RECOGNITION, AND PROGRAM LITERATURE FOR WEBELOS DEN LEADERS

TRAINING

- Youth Protection training¹
- Cub Scout Den Leader Fast Start training¹
- Cub Scout leader-specific training^{1,2}
- This Is Scouting¹
- Outdoor Leader Skills for Webelos Leaders²

¹Mandatory as of June 1, 2010; available as online training at www.scouting.org/Training.aspx.

²Available as in-person training. Consult your pack trainer or local council office.

RECOGNITION

The Webelos Den Leader Award is for Webelos den leaders completing training, performance, and tenure requirements. Requirements are found in the *Cub Scout Leader Book*.

PROGRAM LITERATURE

The *Webelos Handbook*, No. 33452, is the boys' handbook and includes the requirements that Webelos Scouts need to complete to earn activity badges, the Webelos badge, and the Arrow of Light Award. The book also contains a "Webelos Scout Parent Guide" designed to help parents understand Cub Scouting and another guide for parents titled *How to Protect Your Children From Child Abuse*.

The *Den & Pack Meeting Resource Guide*, No. 34409, is a detailed guide for all den leaders. In this resource guide, you will find individual den meeting plans that will guide you and your boys to rank advancement. These plans also outline the planning and materials requirements for each advancement activity so that den leader planning is facilitated.

The *Cub Scout Leader Book*, No. 33221, is a guide for all Cub Scout leaders. It contains the basic information needed to operate and support Cub Scouting, such as information on Cub Scout policies, leadership duties, program planning, and youth protection.

The *Cub Scout Leader How-To Book*, No. 33832, includes a broad assortment of time-tested program activities for Cub Scout dens and packs. By using these activities, leaders not only help strengthen family relationships but provide opportunities for boys to have fun while they are advancing in rank.

The *Cub Scout Academics and Sports Program Guide*, No. 34299, helps pack leadership use this supplemental enrichment program to complement the existing Webelos Scout program. It includes information about and the requirements for each academic and sport subject covered by the program.

WEBELOS BADGE REQUIREMENT ACTIVITIES

When a boy earns the Webelos badge, he learns many of the requirements for the Scout badge. When he has completed the Arrow of Light requirements, he will have completed most of the joining requirements to become a Boy Scout. The *Boy Scout Handbook*, No. 34554, lists the joining requirements.



A Webelos Scout begins working on the Webelos badge as soon as he joins the Webelos den. The Webelos den leader, assistant den leader, and den chief can all help the boys learn the requirements for the Webelos badge. If there are experienced Webelos Scouts in the den who have already earned the badge,

they too can help. Webelos badge requirements can be worked into the den meeting as an opening ceremony, a gathering-time activity, a game, or a closing ceremony.

When working on the Webelos badge in den meetings, the boys can be divided into two groups—the *learning group* and the *doing group*. New Webelos Scouts will become acquainted with the requirements, and the older boys will practice them.

Use the *Webelos Handbook* as a reference. It tells exactly what the boys must know and do to earn the badge.

The requirements for the Webelos badge and the Arrow of Light Award are related, one building on the other. Both require earning activity badges.

SCOUT REQUIREMENT QUIZ

To earn the Webelos badge, the boys are not required to memorize the Scout Oath, Scout Law, slogan, and motto, although many of them probably will. The important thing is that they understand the meanings. They are explained simply in the *Webelos Handbook* and covered in more detail in the *Boy Scout Handbook*. These can be incorporated in opening and closing ceremonies at den meetings.

Quiz the boys on their understanding of the Oath, Law, motto, and slogan by having one boy read a part of each aloud and having another boy explain the meaning to the group.

SCOUT OATH CHARADES

Write out each of the following phrases of the Boy Scout Oath on an index card. Give one to each boy and have him act out what it says on the card. (You may want to add hints on how to do this under the phrase.) The other boys guess what line of the Scout Oath is being demonstrated.

On my honor, I will do my best... (*Show Boy Scout sign.*)

To do my duty to God and my country... (*Hold hands like praying, then salute.*)

And to obey the Scout Law. (*Count to 12 on fingers.*)

To help other people at all times... (*Get a chair for the leader and have him/her sit in it.*)

To keep myself physically strong... (*Do five jumping jacks.*)

Mentally awake... (*Pretend to read a book.*)

And morally straight. (*Stand at attention, with arms straight at side.*)

NEWSPAPER STUDY

Here's a good way to help Webelos Scouts understand the Scout Law. Divide the den into two teams, and give each team a copy of the same newspaper, the *Boy Scout Handbook*, and a pair of scissors. On a signal, teams start to search for news items that clearly illustrate the Scout Law. Have them cut out the items and number them according to the point of the Law. The team with the most clippings in a given time wins.

OUTDOOR CODE

One of the Webelos badge requirements is that boys understand and agree to follow the Outdoor Code. Scouting is outdoor-oriented, so this is especially important. The Outdoor Code is found in both the *Webelos Handbook* and the *Cub Scout Leader Book*. The *Boy Scout Handbook* also covers what the code means.

The Outdoor Code can be used in an opening or closing ceremony during your work on activity badges such as Naturalist, Forester, Outdoorsman, and Geologist. It will remind boys of their obligation to protect and conserve our natural resources. You may want to obtain copies of the Outdoor Code pocket card (No. 33428) for each boy to have.

SALUTE, SIGN, AND HANDSHAKE

The Scout salute, sign, and handshake are easy to learn. The Webelos den chief can teach them in a few minutes. Include them in den meeting ceremonies.

THE UNIFORM

One of the requirements for the Webelos badge is that boys point out and explain the three special parts of the Webelos Scout uniform and tell when to wear the uniform and when not to wear it.

Conduct uniform quizzes and periodic uniform inspections (references: *Webelos Handbook* and *Cub Scout Leader Book*).

FLAG CEREMONY

Every boy will need an opportunity to plan and lead at least one flag ceremony in the den. It need not be elaborate. Encourage them to create simple ceremonies that include a patriotic song, a few paragraphs of the Declaration of Independence, or a short reading on a patriotic subject.

In earning the Wolf badge, boys led a flag ceremony in their den; for the Webelos badge, they must also plan one. See *Cub Scout Ceremonies for Dens and Packs* for ideas.

ARROW OF LIGHT AWARD REQUIREMENT ACTIVITIES

The Arrow of Light Award is the highest award in Cub Scouting and is the only Cub Scout badge of rank that may be worn on the Boy Scout uniform.

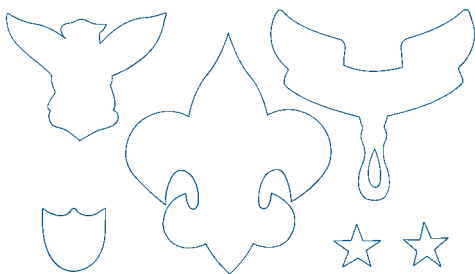


Boys who are working on the Arrow of Light Award can help teach new Webelos Scouts the requirements for the Webelos badge. This way, both groups advance: one by learning requirements, and the other by showing and explaining them.

The Arrow of Light requirements go a step further than those for the Webelos badge. A boy has the chance to learn more about Boy Scouting and to visit a troop meeting and outdoor activity.

One of the most important requirements is the requirement for the Webelos Scout to visit, with a parent or guardian, a meeting of the Boy Scout troop that he thinks he might like to join. The boy also should have a conference with the Scoutmaster at that time. This will encourage him to continue in Scouting and enjoy its benefits. His application to join the troop can be completed and turned in to the Scoutmaster after he receives his Arrow of Light Award and crosses over into the troop.

FIRST CLASS SCOUT BADGE CUTOUT



The Scout badge was adapted from the north point of the old mariner's compass. The design is often called a *trefoil*—a flower with three leaves. It is also known by its French name, *fleur-de-lis*—lily or iris flower. With slight variations, the trefoil badge is used by Scouts around the world. The meanings of the badge parts are found in the *Webelos Handbook* and the *Boy Scout Handbook*.

To help in learning the significance of the Scout badge and the meaning of each of its parts, the boys can make a large one for the den and use it for

practice. Enlarge the patterns of the Scout badge shown. Cut the pieces from scrap wood or plywood with a jigsaw. Assemble pieces on a background and mark where holes should be drilled so pieces can be hung in place on the background. Put finishing nails in the proper locations on the background. Sand and paint or stain.

SCOUT BADGE RACE

Divide the den into two teams and run a race, using the Scout badge cutout described above. Record the starting time and finishing time for each team. Each boy runs forward and puts a piece of the badge in place. As he does so, he must shout out the meaning of the part he has added. If the boy puts the part in the right place and says the correct meaning, the leader says "OK," and the boy runs back to touch off the next team member.

If anything is wrong, the leader shouts "Wrong," and the boy must run back with the part and touch off the next boy, who must carry out the same step correctly. The loss of time in errors will handicap the team. The team with the fastest time wins.

SCOUT BADGE QUIZ

Give the boys pencils and paper and have them answer the following questions:

1. The design of the Scout badge is taken from what? (*The sign for north on the mariner's compass.*)
2. What does the trefoil mean? (*A Scout can point the right way in life, just as a compass points north in the field.*)
3. What do the three points stand for? (*Like the three fingers of the Scout sign, the points stand for the three parts of the Scout Oath.*)
4. What do the two stars symbolize? (*Truth and knowledge; and also the outdoors in Scouting.*)
5. What does the Eagle stand for? (*Freedom and readiness to defend that freedom.*)
6. Why is the scroll turned up at the ends? (*A Scout smiles as he does his duty.*)
7. The knot at the bottom of the badge reminds a Scout of what? (*Do at least one Good Turn daily.*)
8. What does the badge look like for Boy Scout rank? (*The trefoil without the eagle and star.*)
9. What additional part does the Tenderfoot wear? (*The trefoil with eagle and stars.*)

10. What part does the Second Class Scout wear? (*The scroll.*)
11. What is written on the scroll? (*The Scout motto, "Be Prepared."*)

Another way to help the boys is to have a properly uniformed Webelos Scout and the Webelos den chief or other Boy Scout stand side by side in front of the other boys. Ask them to point out the differences in the two uniforms.

SCOUT REQUIREMENT RELAY

The Arrow of Light Award requires that boys repeat from memory the Scout Oath and the 12 points of the Scout Law. This relay is one way they can practice what they learn.

Two teams line up in relay formation. On a signal, the first boy in each team runs to the end of the room and does an about-face. The leader, facing these two boys and with his back to the rest of the den, flashes a card asking for the Scout sign, Oath, salute, or a point of the Scout Law, etc. The two boys follow the instructions on the card, and then run back to touch off the next boy on their team. One point is scored for each correct answer. No points are given for incorrect answers.

SCOUT LAW DART BOARD

A dart game can be used to help teach the points of the Scout Law. You will need a dart board with spaces numbered 1 through 12, and some darts. Each boy, in turn, throws a dart at the board and scores one point if he can recite the point of the Scout Law represented by the number in which his dart sticks. Permit the boy to continue throwing until he either misses a throw or makes an error in the point of the Law.

SCOUT LAW RELAY

Divide boys into relay teams. Place hats with slips of paper in them numbered 1 through 12 about 20 feet in front of each team. On a signal, the first player in each team runs to the hat, draws a slip, reads the number, writes on the slip the point of the Scout Law corresponding to that number, and places it next to the hat. Then he runs back and tags the next player, who repeats the action, and so on, until all slips are answered. The first team finished with the most correct answers wins.

FRIENDSHIP CIRCLE CLOSING

This den closing ceremony is a good way to give boys ongoing practice with the Scout "joining knot." Each den member is given a 3-foot length of rope, which he ties to his neighbor's with a square knot so that a circle is made. Boys pull back on the ropes with their left hands and make the Scout sign with their right. The den leader says, "This circle shows the bond of friendship we have in Scouting. Please join me in the Scout Oath."

TROOP VISITS AND OUTDOOR ACTIVITY

To help the boys complete these requirements, plan periodic Webelos den visits to nearby troop meetings and Boy Scout outdoor activities. These trips should be part of your annual Webelos den program, planned in cooperation with the troop. See the *Cub Scout Leader Book* for more information on joint activities.

Remember that your Webelos Scouts are still Cub Scouts, and some Boy Scout activities are not appropriate for their age. For more information, consult "Age-Appropriate Guidelines for Scouting Activities," available on the National Council Web site at www.scouting.org.

WEBELOS-TO-SCOUT TRANSITION

THE WEBELOS-TO-SCOUT PLAN

Every graduating Webelos Scout deserves the opportunity to continue his Scouting experience as a member of a Boy Scout troop. Bridging the gap between Webelos Scouting and Boy Scouting results in better-prepared and more-enthusiastic new members for the troop, a strong feeling of success for the pack, and most important, an outstanding new Scouting experience for the boys.

The purpose of the Webelos-to-Scout plan is to give every Webelos Scout a sampling of the troop program, troop leadership, advancement opportunities, and fun and excitement of Boy Scouting. His progress toward the Webelos badge and Arrow of Light Award introduces him to some of the basic elements in Scouting skills and the advancement program. He learns more about the troop through joint den-troop activities, which allow him to see boy

leadership at work and his own potential as a leader. He becomes more confident and enthusiastic about his Scouting future as he becomes more familiar with the boys and adult leaders of the troop.

The Webelos Scout advancement plan is an important part of the transition process. By following the base plan for Webelos dens or the plan you develop and review with others, the Webelos den leader will be assured that most boys will earn the Webelos badge by January of their fourth-grade year and the Arrow of Light Award by January or February of the fifth-grade year. A Webelos Scout who has earned the Arrow of Light Award will have already met most of the requirements for earning the Scout badge when he joins a Boy Scout troop.

THE DEN-TROOP PARTNERSHIP

A key factor in Webelos-to-Scout transition is the establishment of a working partnership between the Webelos den and the Boy Scout troop that most of the Webelos Scouts will join. Every Webelos den should be linked to a troop. When a Webelos Scout transitions into a troop he will be a member of a new Scout patrol. The partner troop may provide Webelos den chiefs for the pack, as well as assistance in planning and conducting outdoor activities.

PARENT ORIENTATION CONFERENCE. The Scoutmaster (or assistant Scoutmaster) and the Webelos den leader work together to plan a parent orientation conference for all new Webelos Scouts and their parents or guardians. The Cubmaster may also be part of this conference.

An orientation conference should be held at the beginning of a Webelos Scout's fourth-grade year. The conference could be an open house at a troop meeting during the early part of the program year, or it could be a separate meeting.

The goal of this orientation is to inform parents or guardians how the Webelos Scout program prepares the boy for the bigger adventure of Boy Scouting. It sets the stage for a natural continuation of the Cub Scout and Boy Scout program by removing the perception that boys need to make a conscious choice to join Boy Scouts.

Orientation topics might include

- How the Webelos Scout program works
- How Webelos dens work with Boy Scout troops
- Participation of family members
- Cost and dues
- The patrol method
- Outdoor and overnight events

- Troop programs
- Preparation for transition
- Preparation for summer camp

A second orientation conference should be held in the fall of the fifth-grade year. This conference would reinforce the den-troop partnership, as well as provide further information to Webelos Scouts and parents on upcoming troop programs (including summer camp) and preparation for transition.

JOINT ACTIVITIES. The Webelos den and Boy Scout troop should hold several activities together, particularly during the boys' fifth-grade year. Examples include den-troop campouts, day hikes, sporting events, outdoor skills day, chapel services, and Good Turn projects. Webelos Scouts could visit a troop court of honor, campfire program, or other district or council Boy Scout events as daytime guests of the troop.

Through these joint activities, Webelos Scouts learn about the fun of Boy Scouting and get acquainted with the individual Scouts in the troop. When the time comes for them to move into Boy Scouting, the Webelos Scouts will be able to step into an already familiar and friendly environment.

TRANSITION TO A BOY SCOUT TROOP

The pack's annual blue and gold banquet in February should be a target date for Webelos Scouts to transition into Boy Scouting. The Arrow of Light requirements prepare Webelos Scouts to become Boy Scouts and receive their Scout badge soon after crossing over into a troop. Boy Scouting will offer new challenges and opportunities for them to grow and learn. It is recommended that the Webelos transition take place in February.

WEBELOS SCOUT-SCOUTMASTER CONFERENCE. This conference, part of requirement 6 for the Arrow of Light Award, may be conducted by the Scoutmaster or other designated person and should be held a month or two before a Webelos Scout transitions into the Boy Scout troop. The conference is a valuable opportunity for the Webelos Scout and his parents to ask questions about Boy Scouting, to talk about expectations, and to establish a comfortable relationship with an adult member of the troop.

TRANSITION CEREMONY. Include the Scoutmaster and possibly members of the troop as part of the transition ceremony. Troops may wish to present a certificate, a *Boy Scout Handbook*, a troop neckerchief and slide, or some other joining gift to the Webelos

Scout. Webelos Scouts joining a troop in February will be prepared for summer camp and other troop activities.

Some districts have found that a districtwide transition ceremony for all Webelos Scouts helps motivate the boys to move forward to Boy Scouts. The district transition ceremony should be held in addition to—not in place of—the pack transition ceremony.

At the pack transition ceremony, new Scout leaders may be welcomed at the same time as the boys. When a Webelos den transitions into the troop, the assistant Scoutmaster and Webelos den chief can continue to work with the boys as they form a new-Scout patrol. Likewise, adults associated with a Webelos den can move into roles of troop leadership as their den members become Boy Scouts.

WEBELOS CAMPING

The BSA outdoor program offers ever-increasing challenges in the out-of-doors. Each step of the camping program is a foundation for the next step and includes age-appropriate activities for each level of Scouting. Camping experiences for Webelos Scouts include:

- Cub Scout day camp
- Cub Scout/Webelos Scout resident camp
- Council-organized family camp
- Webelos den overnight camping
- Webelos-Ree events
- Pack overnights

These activities provide opportunities for the Webelos Scout to enjoy increasing camping challenges, but still within the family environment of Cub Scouting. Webelos camping experiences should help prepare the Webelos Scout for the camping adventures of Boy Scouting without taking away from the type of camping he will experience as a member of a Boy Scout troop.

For detailed information on Webelos Scout camping opportunities and requirements, consult the following resources:

- The *Cub Scout Leader Book*
- “Age-Appropriate Guidelines for Scouting Activities,” found on the National Council Web site at www.scouting.org
- Youth Protection training (Effective June 1, 2010, Youth Protection training is required for all BSA registered volunteers. For more information about BSA Youth Protection policies, go to <http://www.scouting.org/Training/YouthProtection.aspx>.) Training is available online at www.scouting.org/Training.aspx.
- The training course “Outdoor Leader Skills for Webelos Leaders” is highly recommended for all Webelos den leaders.
- Other training courses, such as Safe Swim Defense and Safety Afloat

CAMPING HEALTH AND SAFETY

The BSA has policies that must be followed for the health and safety of all campers. These rules can be found in the *Cub Scout Leader Book* and *Guide to Safe Scouting*. These publications provide the requirements for planning safe activities and define outdoor activities that are appropriate for Webelos Scouts.

Review the rules with the boys and parents or guardians before any campout. Particular emphasis should be given to BSA policy issues regarding the following:

- Transportation and Tour Planning Checklist, No. 680-014
- Supervision
- Fuel and fire safety
- Sleeping arrangements
- Drug, alcohol, and tobacco use

WEBELOS DEN OVERNIGHT CAMPING AND JOINT DEN-TROOP CAMPOUTS

Webelos den overnight campouts help build the bridge that spans the gap between Cub Scouting and Boy Scouting. These campouts introduce the boy and his parent or guardian to the camping program under the leadership of the Webelos den leader. A Webelos Scout participating in an overnight den camping should be supervised by his parent or guardian. It is essential that each Webelos Scout be under the supervision of an adult. Den leaders, pack leaders, and parents are expected to accompany the boys on approved trips. Every adult has a share of the responsibility on the campout.

When tents are used, no youth will stay in the tent of an adult other than his parent or legal guardian. When housing other than tents is used, separate housing must be provided for male and female participants.

Dens of Webelos Scouts with their parents or guardians are encouraged to participate in several joint den-troop campouts, particularly during the fifth-grade year. These campouts, conducted with an individual troop for the purpose of strengthening ties between the pack and the troop, are to be held separate from any district or council Boy Scout activities. When a Webelos den participates in a troop activity or campout, all health and safety and age-appropriate guidelines for Cub Scouts still apply. For example, a Webelos den may not use axes or participate in a troop archery activity. See “Age-Appropriate Activities” in the *Guide to Safe Scouting*.

PLANNING WEBELOS DEN OVERNIGHT CAMPOUTS

Choosing a Location

A location that has a tested water supply, toilets, cooking facilities, space for pitching tents, and an area for indoor activity would be appropriate for a Webelos den overnight campout. Consider private land or a public campground for a location with appropriate facilities. Another option is to check with your local council about its facilities for Webelos overnight camping and for a list of other council-approved camping sites. Be sure to file the Tour Planning Checklist and complete proper training (such as Youth Protection training, Safe Swim Defense, etc.) before embarking on any camping activity.

Selecting a Campsite

In some locations, a campsite will be assigned to you. If you have a choice, you should consider several things when choosing a site in which to set up tents and camping quarters:

- Safe surroundings
- Terrain and climate
- Water supply
- Fire regulations

The Campout Program

A planned program for your Webelos den overnight campout is essential so that the boys “do” and “learn” as well as live in a camp setting. Remember that one of the purposes of the campout is to help prepare them for Boy Scouting and its outdoor adventures.

Plan a program of activities in advance. Your plan should be flexible to allow for the changing attention

span of Webelos Scouts. Use the example below as a guide.

- **Activity Badges.** In planning activities, special emphasis should be given to activity badges in the Outdoor Group (Forester, Geologist, Naturalist, and Outdoorsman), as well as to requirements for the Arrow of Light Award.
- **Water Safety.** If aquatics activities are part of your program, be sure to follow guidelines in the *Cub Scout Leader Book* and the *Guide to Safe Scouting*. Before a BSA group may engage in swimming activities of any kind, a minimum of one adult leader must complete Safe Swim Defense training, have a commitment card (No. 34243) with him or her, and agree to use the eight defenses in this plan. Before a BSA group may engage in an excursion, expedition, or trip on the water (by canoe, raft, sailboat, motorboat, rowboat, tube, or other craft), adult leaders for such activities must complete Safety Afloat Training (No. 34159), have a commitment card (No. 34242) with them, and be dedicated to full compliance with all nine points of Safety Afloat. Cub Scout age-appropriate guidelines apply for aquatics, as well as all other activities, even when participating in a joint troop-den activity.
- **Shooting Sports.** Archery and BB-gun shooting are restricted to day camps, Cub Scout/Webelos Scout resident camps, council-managed family camping programs, or council activities where properly trained supervisors are present and all standards for BSA shooting sports are enforced. Cub Scouts are not permitted to use any other type of handgun or firearm.
- **Religious Services.** For weekend campouts, an interfaith worship service is appropriate and recommended. This service should be simple and brief.
- **Outdoor Manners.** Be sure to follow the Outdoor Code and Cub Scouting’s Leave No Trace Frontcountry Guidelines during your campouts. “Cub Scouting’s Leave No Trace Frontcountry Guidelines” can be found on the National Council Web site at www.scouting.org.

See the *Cub Scout Leader How-To Book* for activities that you can do on campouts, including suggestions for outdoor cooking and campfire programs.

SAMPLE CAMPOUT SCHEDULE

SATURDAY

8:30 A.M.	Arrive at campsite.
8:30–9:15	Erect tents, prepare bedding, check cooking areas and fuel supply.
9:15	Flag-raising ceremony and Pledge of Allegiance
9:20–10:20	Nature hike, with instruction for Forester, Geologist, Naturalist, or Outdoorsman activity badges
10:20–11:30	Fishing
11:30–12:15	Webelos Scout-adult teams prepare lunch.
12:15–12:45	Lunch
12:45–1:15	Cleanup and dishwashing
1:15–1:45	Free time
1:45–3:00	Activity-badge work
3:00–4:00	Swimming and boating
4:00–5:30	Free time (prepare cooking fires)
5:30–6:00	Webelos Scout-adult teams prepare dinner.
6:00–6:30	Dinner
6:30–7:00	Cleanup and dishwashing
7:00–8:00	Games
8:00	Flag-lowering ceremony
8:15–9:15	Campfire program
10:00 P.M.	Lights out and camp quiet

SUNDAY

7:00 A.M.	Reveille
7:00–7:15	Air bedding and clean up.
7:15	Raise U.S. flag while all salute.
7:20–7:45	Webelos Scout-adult teams prepare breakfast.
7:45–8:15	Breakfast
8:15–8:45	Cleanup and dishwashing
8:45–9:15	Interfaith worship service
9:15–10:00	Strike camp.

CUB SCOUT OUTDOOR ACTIVITY AWARD



Webelos Scouts have the opportunity to earn the Cub Scout Outdoor Activity Award. Boys may earn the award in each of the program years as long as the

requirements are completed each year. The first time the award is earned, the boy will receive the pocket flap award, which is to be worn on the right pocket flap of the uniform shirt. Each successive time the award is earned, a wolf track pin may be added to the flap. Leaders should encourage boys to build on skills and experiences from previous years when working on the award for a successive year.

Requirements

- Attend Webelos Scout resident camp.
- Earn the Outdoorsman Activity Badge (*Webelos Handbook*); and complete six of the outdoor activities listed below.

Outdoor Activities

With your den, pack, or family:

1. Participate in a nature hike in your local area. This can be on an organized, marked trail, or just a hike to observe nature in your area.
2. Participate in an outdoor activity such as a picnic or park fun day.
3. Explain the buddy system and tell what to do if lost. Explain the importance of cooperation.
4. Attend a pack overnighter. Be responsible by being prepared for the event.
5. Complete an outdoor service project in your community.
6. Complete a nature/conservation project in your area. This project should involve improving, beautifying, or supporting natural habitats. Discuss how this project helped you to respect nature.
7. Earn the National Summertime Pack Award pin.
8. Participate in a nature observation activity. Describe or illustrate and display your observations at a den or pack meeting.
9. Participate in an outdoor aquatic activity. This can be an organized swim meet or just a den or pack swim.
10. Participate in an outdoor campfire program. Perform in a skit, sing a song, or take part in a ceremony.
11. Participate in an outdoor sporting event.
12. Participate in an outdoor Scout's Own or other worship service.
13. Explore a local city, county, state, or national park. Discuss with your den how a good citizen obeys the park rules.



WEBELOS ACTIVITY BADGE PROJECTS

Activity badge projects help Webelos Scouts develop interests in areas that may lead to hobbies, or perhaps career choices for them in later life. The activity badge projects are the foundation for exciting and interesting den meetings. But most important, they help accomplish many of the purposes of Cub Scouting.

Some activity badges may occupy the den for only a couple of weeks; others may take a couple of months. Families are encouraged to work with the boys at home on projects begun at the Webelos den meeting, but completed projects are submitted to the Webelos den leader for approval. Boys display their projects or give demonstrations at the monthly pack meeting.

HOW TO EARN AN ACTIVITY BADGE

1. **Learn the skills.** During the activity badge period of the den meeting, Webelos Scouts receive instruction, practice what they've learned, and take part in games or contests using their new skills.
2. **Complete the requirements.** Webelos activity badge requirements are approved by the Webelos den leader or other designated person, such as an activity badge counselor. This step, which focuses on communication between a boy and an adult other than his parent, is a part of the program that helps prepare Webelos Scouts for their Boy Scouting experience.
3. **Receive the activity badge.** The Webelos den leader makes certain that each boy receives the activity badges he has earned, promptly and with ceremony, in a pack meeting.

ACTIVITY BADGE COUNSELORS

Although the Webelos den leader, assistant den leader, and Webelos den chief will handle some of the instruction during den meetings, activity badge counselors should be used to teach the activity badge requirements, provide resources, lead field trips, and give other useful service. A parent or other family member, pack leader, teacher, coach, or some other adult with talents and skills related to specific activity badges can be of great help. Activity badges will have

more meaning to the boys when a qualified person directs them.

You may also wish to contact the Scoutmaster of your local Boy Scout troop for names of Boy Scout merit badge counselors who have specific expertise. This link with an adult Boy Scout leader can be a valuable part of the Webelos-to-Scout transition process for your boys.

DEMONSTRATIONS AND EXHIBITS

Each month's pack meeting should feature displays or demonstrations by Webelos dens that are related to the current activity badge. Boys need a chance to demonstrate what they have learned. These demonstrations also excite the interest and anticipation of the younger boys in the pack.

Giving a Demonstration

- Plan the demonstration in steps.
- Practice until it can be done smoothly.
- Explain each step as you give the demonstration. Tell the audience what you are doing and why.
- Use visual aids if they will help the audience understand.

Preparing an Exhibit

- Make it simple and attractive. Use signs, streamers, and color. Label exhibit parts with cards containing clear, simple explanations.
- Identify each boy's work.
- Arrange material so it is not cluttered.

PLANNING ACTIVITY BADGE PROJECTS

The remaining pages of this *Webelos Leader Guide* provide tools and ideas to help you plan creative activity badge projects for a Webelos den. A den meeting plan is included with each of the 20 activity badges and outlines four den meetings or other den events for the month. Adapt the suggested schedule as desired to meet your den's needs and interests.

Further ideas and suggestions for planning your Webelos den program are shared at your district's monthly Cub Scout leader roundtable. Two activity badges are usually highlighted during each month's Webelos den leader separate session.

Swimming and water sports provide the finest exercise a boy can get, and the skill involved will last a lifetime. The boy who is a swimmer has self-confidence.

REQUIREMENTS

Do these:

1. Jump into water over your head. Come to the surface and swim 100 feet, at least half of this using a backstroke.
2. Stay in the water after the swim and float on your back and your front, and demonstrate survival floating.
3. Put on a personal flotation device (PFD) that is the right size for you. Make sure it is properly fastened. Wearing the PFD, jump into water over your head. Show how the PFD keeps your head above water by swimming 25 feet. Get out of the water, remove the PFD, and hang it where it will dry.

And do three of these:

4. Do a front surface dive and swim under water for four strokes before returning to the surface.
5. Explain the four basic water rescue methods. Demonstrate reaching and throwing rescues.
6. With an adult on board, show that you know how to handle a rowboat.
7. Pass the BSA "swimmer" test:
 - Jump feet-first into water over the head in depth, level off, and begin swimming.
 - Swim 75 yards in a strong manner using one or more of the following strokes: side-stroke, breaststroke, trudgen, or crawl.
 - Then swim 25 yards using an easy, resting backstroke.
 - The 100 yards must be completed in one swim without stops and must include at least one sharp turn.
 - After completing the swim, rest by floating.
8. While you are a Webelos Scout, earn the Cub Scout Sports belt loop for Swimming.

DEN MEETING ACTIVITIES

- Take the den for a swim. Let them try to pass the 100-foot-swim requirement and the surface dive.
- Have an expert demonstrate the use of a mask, fins, and a snorkel.
- If a rowboat is available, have an expert demonstrate boat safety methods and rowing techniques. Let boys practice what they learn (following guidelines in *The Guide to Safe Scouting*).
- Teach the four basic water rescue methods. Let boys practice reaching and throwing a lifeline for rescue.
- Practice rescue breathing on a mannequin. (Check with the Red Cross or American Heart Association for acquiring a mannequin.)
- Have a swim instructor or someone from the YMCA or Coast Guard explain how to handle emergencies in the water.
- Study and follow the Safe Swim Defense plan. (See *Cub Scout Leader Book*.)
- Have a quiz on boating safety rules. (See "Safety Afloat," *Cub Scout Leader Book*.)
- At the end of the month, have a family splash party at which Webelos Scouts can demonstrate proficiency in swimming, snorkeling, and water rescue. Play some of the water games found in the *Cub Scout Leader How-To Book*.

PLACES TO GO

- Swimming meet or diving exhibition
- Canoe or sailboat race
- Boatyard
- Session of lifesaving course (Boy Scout, Red Cross, or YMCA)
- Municipal swimming pool to see water-filtration system and discuss lifeguard skills and training with the director

Organizing Your Swimming Program

1. **Secure facilities.** Check pool availability with such organizations as the YMCA, Red Cross, parks and recreation department, boys' clubs, public schools, or local community pools.
2. **Secure qualified instructors.** Consider high school and college coaches, local Scouters trained as BSA Aquatics Instructor, or adults or boys trained as BSA Lifeguard.
3. **Separate boys according to ability.** Put non-swimmers in water about 3½ feet deep; beginning swimmers in depths from about 3½ feet to just over their heads; and good swimmers in water not deeper than 12 feet. Pair buddies of similar abilities.
4. **Emphasize safety awareness.** Impress on boys the importance of the buddy system. At all times, have a lookout positioned where he or she can see everyone and have lifeguards with lifelines or reach poles stationed out of the water.
5. **Maintain strict discipline.** Be firm but fair. Make sure every boy understands and obeys the rules. Make no exceptions. Teach buddies to raise their hands together in response to the call "Buddies!" and to check in and out of the water together.

Safe Swim Area

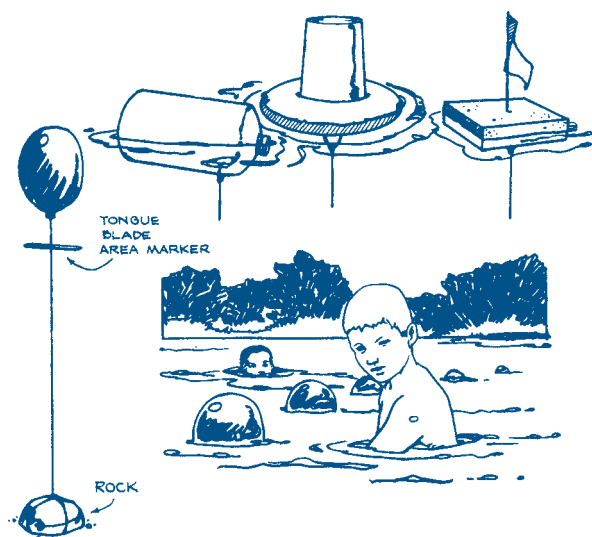
To become an Aquanaut, a Webelos Scout must be comfortable in the water. At the same time, he must realize that the water can become a hazard if he doesn't treat it with respect. He will need to take all precautions necessary for a fun and safe swim.

One of the things that should always be used with any water activity is the Safe Swim Defense plan. Swimming and water safety are extremely important matters and can make the difference between having fun in the water or having an unfortunate experience.

If your den swims in a lake or river, you can set up a safe swim area (one of the points in Safe Swim Defense) by staking out sections according to the following method:

You will need a 200-foot roll of binder twine for outlining the sections and a hand ax for cutting pieces of deadwood to be used as floats. Large rocks tied with twine make good anchors at the outside corners where flag buoys may be placed. To make a flag buoy, tie two crossed sticks together, with a third piece of wood straight up and down through the middle. Put a neckerchief or rag on top.

Have a strong swimmer, with a lifeline tied around his shoulders and the other end held by leaders onshore, explore the bottom for deep holes, rocks, and stumps. Once the safe swim area has been selected, use the binder twine, supported by the floats, to mark off shallow-water sections. The first section should not be more than 3½ feet deep. Mark the next section where the water is just over head-depth for beginners (weak swimmers who can swim at least 25 feet but not 100 yards). The den's good swimmers may swim outside the areas marked with twine, but flag buoys must also be placed at the outer limits of their area.



Here is some more easy-to-make equipment for marking off swimming areas according to the Safe Swim Defense plan. Boundary markers shown are made from

- Balloon
 - Plastic bucket inverted in center of a ring float
 - Flag on a plastic-foam block
 - Empty plastic, capped bleach, or beverage bottle.
- All are anchored by a smooth rock.

Buddy System. One of the eight parts of Safe Swim Defense (see *Cub Scout Leader Book*) is the use of the buddy system. With this method, boys pair off with another person of the same swimming ability. Buddies check in and out of the swim area together.

Buddy Tags. The swim supervisor may issue a buddy tag to everyone so that he or she knows at all times when buddies are in the water. When buddies are in the water, their buddy tags must be displayed in the proper spot (such as on a Buddy Tag Board, below). Simple baggage tags make good buddy tags. So do wooden tongue depressors, which boys can

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Exhibit mask, fins, snorkel, boat equipment, and a rescue-breathing practice mannequin (available from the Red Cross, American Heart Association, or local fire department).
- Demonstrate the care and use of mask, snorkel, and fins.
- Demonstrate basic swimming strokes. If a swimming pool or area is not available, boys could lie on a sturdy bench with head and arms over edge to show arm strokes and breathing.
- Demonstrate the four basic water rescue methods.
- Demonstrate the proper fit and use of PFDs.

stick into the ground near the swim area when swimming. Using pencil or a waterproof marker, mark tags with the swimmer's name and his classification (nonswimmer, beginner, or swimmer). If desired, you can indicate swimming skill with stripes: red for nonswimmer, blue for beginner, green for swimmer. Add stripes as boys improve their skills.

Buddy Tag Board. You can display buddy tags by hanging them on hooks screwed into a rectangle of plywood. Buddies hang their tags on the same hook. When a boy and his buddy are in the water, their buddy tags hang on the board; when they come out, they take them off the board.

Safe Swim Precautions

Follow these precautions when swimming on a Webelos den or pack outing:

- Always first secure an approval slip from each boy's family that includes a notation on his physical condition.
- Be sure the swimming area is safe: a regulated swimming pool or beach, or an area that has been checked for a safe bottom, proper depth, and the absence of dangerous currents. Backyard pools should also be checked.
- The adult in charge must follow Safe Swim Defense, including the use of a buddy plan described above. The leader must also have aquatic safety skills or secure the help of another adult or older Scout with such skills.
- When pairing off buddies, try to have one be older than the other. The recommended standard is for the total age of the two boys to be at least 18 years. If necessary, use den chiefs or adults as buddies.

Precautions are worth all of our efforts. Following water safety rules will help prevent the tragedy of a water accident.

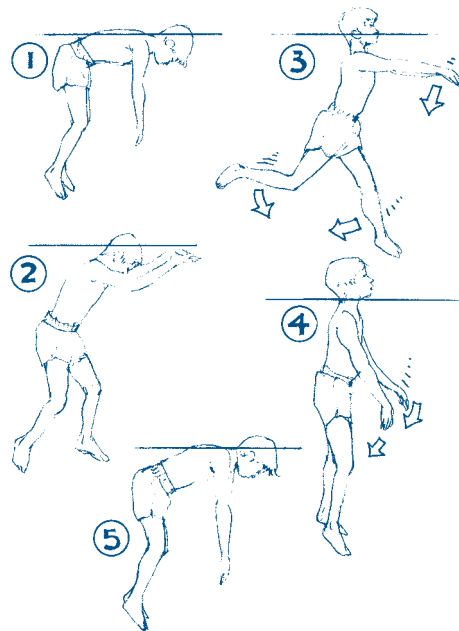
Swimming Skills

Not every Webelos aquanaut will be able to do all the requirements perfectly, but with practice, he will learn. Some boys will know how to swim; others will need help learning how.

Plan a time to take your den swimming.

- Have the boys jump in the water and see how many can pass the 100-foot requirement.
- Have the boys float on their backs and on their chests so you can observe their floating ability.
- Determine which boys need help and encourage them to become more proficient. You may wish to have den chiefs and parents help the boys become better swimmers.

Survival Floating



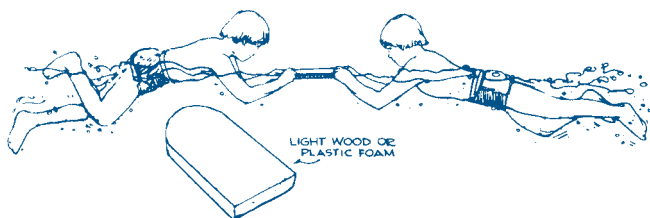
The following technique for staying afloat indefinitely may give confidence to boys who fear the water and don't believe they can float. Cub Scout-age boys should practice in warm water to avoid hypothermia.

1. Relax completely. Be lazy. With your lungs full of air, float face down, with the back of your neck on the surface. Rest for three seconds. This isn't a test to see how long you can hold your breath underwater.
2. Get ready to raise your face above the water surface. Extend your arms forward slowly. Get ready to thrust downward with your arms and legs.
3. As you raise your head to the surface, exhale through your nose and mouth. Your shoulders should stay underwater.
4. Keep your head straight and push downward with your hands to keep your head above water. Inhale slowly. There's no rush. With your lungs again full of air, drop your head forward and thrust downward and backward with your arms and legs.
5. Relax. Hold your breath. Let your arms and legs dangle while you float forward. Beginners should rest at least three seconds before repeating step 1. Experts should rest 10 seconds. Avoid bobbing above or below the surface.

Water Games

Games are a wonderful way to get your boys to feel comfortable in the water. They also provide a good way for you to classify your Webelos Scouts according to their abilities. Unless all den members are good swimmers, play the following activities in water that is no deeper than waist or chest level. Encourage beginning swimmers to take part; competition may spur them to better performance and give them more confidence in the water.

The Cub Scout Leader How-To Book also contains an excellent assortment of water games for all levels of swimmers.



Paddle Wheel Duel. Two players grasp opposite ends of a kickboard. On a signal, both kick as hard as they can, trying to force their opponent backward. Neither player may touch his feet to the bottom.

Balloon Relay. Divide the den (and parents) into two equal teams. Give the first person on each team a balloon. On a signal, he starts swimming or walking, butting the balloon ahead of him—without using the hands. After rounding the turning point, he returns to the starting line. The remaining team members repeat the action. Players cannot touch the balloon with their hands.

Towel Relay Rescue Race. Divide the group into two teams. Station one boy from each team on the shore. Give him a bath towel. The other team members stand in shoulder deep water, facing the shore. On a signal, the boy on shore runs into the water, heaves an end of the towel to a teammate, and pulls him to shore. The boy just rescued jumps back into the water and rescues the next boy, etc.

Water Polo. Use the entire pool as the playing area. Line the teams up at opposite ends of the pool and have them change sides after each score. Toss the ball in the center of the pool. The players may advance it by any means while they and the ball remain in the pool. A score is made by getting the ball into the goal at either end of the pool. The game consists of two 10-minute halves.

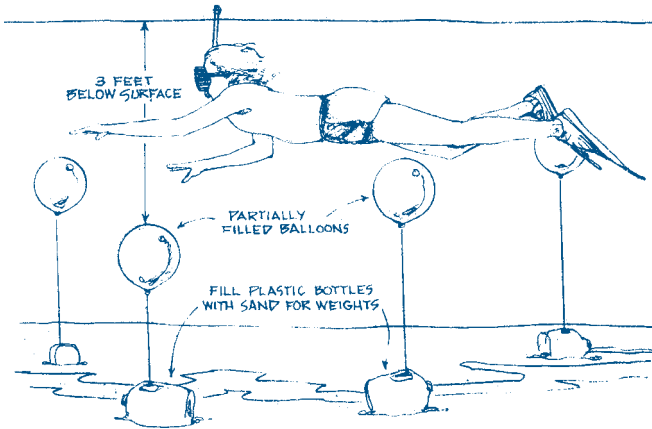
Kim's Game. Play an underwater version of Kim's Game by using five to 10 familiar objects that don't float (for example, spoons, coins, nuts and bolts, and cans or plastic bottles full of water). Place the objects in the water at about the 5-foot-deep level. Players swim out to the location of the objects, surface dive to inspect them, and then return to the starting point. They then tell the leader what they saw and can remember.

Games With Mask, Fins, and Snorkel

When your Webelos Scouts have had some practice with snorkeling equipment, introduce games that will help them increase their proficiency. Here are some examples.

Flapping Fins Race. On a signal from the leader, boys don their fins and race from one side of the pool to the other using kicking motions only (no arm strokes).

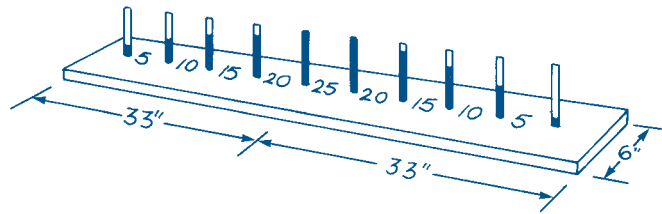
Clearing the Mask Contest. Each Webelos Scout places his mask in shallow water and goes to the edge of the pool. On a signal, all dive in and swim to the masks using fins, recover the masks, clear them, and put them on. The first boy facing the leader with his mask properly cleared and over his face wins.



Slalom Course. Create a slalom course to test boys' swimming and snorkeling ability. About three feet below the surface of the water, anchor several barely inflated balloons in a winding course about 50 to 100 feet long. In turn, the boys don mask, fins, and snorkel and swim the length of the course, passing over each anchored balloon.

Rescue Technique Games

Rope Throw Rescue Relay. Each team has a coil rope (clothesline will do). Adults representing drowning people are in the water. Each Webelos Scout throws the rope to the "drowning person," who grabs it and then lets it go. The boy recoils the rope and hands it to the next boy on the team. Repeat until all teammates have thrown.



Lifeline Throwing Contest. Make a target board, as shown, and let boys practice heaving a rope at the target board as they would to a person in the water. Use a 25- to 30-foot rope and have the boys stand about 15 feet from the target board. Weight the throwing end of the rope with a beanbag. The object is for the rope to fall between the dowels with the higher scores in the middle of the target.

Surfboard Neckerchief Slide

Cut out a surfboard shape from a piece of wood. Sand smooth. Paint as desired. Glue a slice of PVC pipe to the back to slide a neckerchief through.

RESOURCES FOR AQUANAUT ACTIVITY BADGE

- *Cub Scout Leader Book*, No. 33221
- *Cub Scout Leader How-To Book*, No. 33832
- *Cub Scout Academics and Sports Program Guide*, No. 34299: Swimming
- *Swimming* merit badge pamphlet (No. 35957)
- *Lifesaving* merit badge pamphlet (No. 35915)
- *Guide to Safe Scouting* (No. 34416)

You can get help on the Aquanaut activity badge at the monthly Cub Scout leader roundtable and from other Webelos den leaders. Also check with the local Red Cross, YMCA, and swim clubs for materials and assistance.

ARTIST

MENTAL SKILLS GROUP



For some people, art is a *vocation*—the way they make their living. For others, it is a recreational activity that may develop into a lifetime hobby. The Artist activity badge will help Webelos Scouts better understand how artists work and what they are trying to express through their art. Boys will learn to be more observant as they work with different colors, tints, shades, and shapes. They will be more aware of color and design in nature as they learn about these elements of art. And they will develop creativity as they learn to sculpt and make mobiles and constructions.

REQUIREMENTS

Do These:

1. Talk to an artist in your area or to your art teacher about the different occupations in the art field. Make a list of them.
2. Create a scrapbook (portfolio) of your Artist activity badge projects and show it to your den leader.

And do five of these:

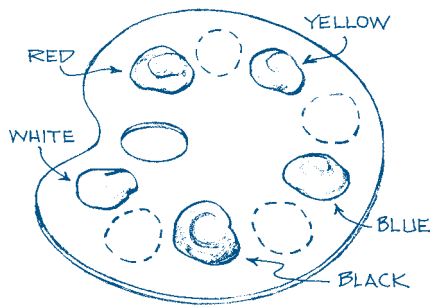
3. Draw or paint an original picture out-of-doors, using the art materials you prefer. Frame the picture for your room or home.
4. List the primary and secondary colors. Explain what happens when you combine colors.
5. Using a computer, make six original designs using straight lines, curved lines, or both.
6. Draw a profile of a member of your family.
7. Use clay to sculpt a simple subject.
8. Make a mobile, using your choice of materials.
9. Make an art construction, using your choice of materials.
10. Create a collage that expresses something about you.
11. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Art.

DEN MEETING ACTIVITIES

- Invite a school art instructor or an artist to den meetings.
- Make pencil sketches of inanimate objects (still lifes).
- Study a color wheel and practice mixing paints to make shades and tints (see *Webelos Handbook*).
- Have each boy prepare a color scheme for his room.
- Using the boys' original designs, do one of the types of printing found in the *Cub Scout Leader How-To Book*.
- ("Crafts"), such as block printing or stenciling. Project ideas for printing might include holiday or other greeting cards, or a cover for a pack newsletter or banquet program.
- Do sand casting, construct mobiles, or make models from clay (see "Crafts," *Cub Scout Leader How-To Book*).
- Start simple constructions to be finished at home.
- Have boys paint original designs on kites, and then fly the kites.
- Have boys make posters, using their own drawings and designs, to advertise a pack or community event.
- Hold an "Art Can Be Fun" night for den families.
- Demonstrate some different ways to make a scrapbook (portfolio).

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display and identify one or two of the best items of each boy's work.
- Have each of the boys design an exhibit table, and then let them vote on the one to be used for the pack meeting display. If possible, tie it in with the pack's monthly Core Value.
- Demonstrate how to begin a sculpture or how to make a mobile.
- Have one or two of the boys actually work on a project (e.g., sculpting, painting, sketching) during the preopening period of the pack meeting.



Color Palette

Make a palette for each boy out of heavy cardstock. Let them fill in the primary colors with acrylic, tempera, or poster paint; then mix the primary colors to see what secondary colors result. Or prepare colored frosting and let boys mix colors to decorate cookies.

Scrapbook (Portfolio)

As boys create works of art, encourage them to create a scrapbook or portfolio to keep it safe. The scrapbook should be a complete collection of the boys' work, even if some of it isn't finished. They can be proud of all of it!

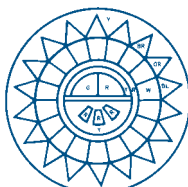
The scrapbook should be sturdy enough to protect the artwork from weather and accidents, but it should be easy to carry. It could be a binder containing pocket folders or a large file folder. Consider making or decorating them at a den meeting.

PLACES TO GO

- Art gallery or museum
- Industrial design company
- Art department of an advertising agency
- Art school



Corn Dancer



Sunburst



Thunderbird

Sand Painting

Many American Indian tribes have practiced sand painting for generations, so boys may want to try an Indian design or scene. Beach sand or any fine sand that has been rinsed with fresh water and a little bleach works best. Color the sand with food coloring or tempera paint, using small amounts until the desired shade is reached. Let the painted sand dry.

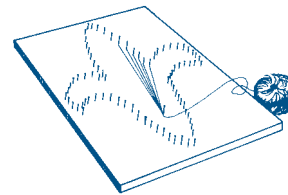
Draw the design on cardboard, indicating the colors to be used. Cover one color area at a time with white glue. Spoon the sand onto the glued surface. Let it set briefly, gently shake off any excess sand, and then move on to the next color area. A large area should be done in several pourings. The sand painting can be framed, if desired.

Salt Scenes

This method is faster and easier than sand painting.

Pour salt on paper. Roll a piece of colored chalk over the salt. The chalk will become powdered and mix with the salt to color it. Prepare several different colors of salt.

Have boys spoon layers of differently colored salt on top of each other in a small jar. Fill the jar to the top. Then insert a piece of wire (opened paper clips work well) down the side of the jar against the glass, pushing through the layers of salt, to form designs. Fill the jar to the very top with additional sand, if needed, and seal it.



String Art

Draw a design on a piece of corrugated cardboard or wood. Outline the design with tacks (for cardboard) or small nails (for wood). Tie a piece of string or thread to a tack in the center and draw string around an outer tack, back around center, around another outer tack, etc., until entire design is covered. One color of string may be used, or a different color for each part of the design. Add a hanger on the back so the work of art can be hung on a wall.

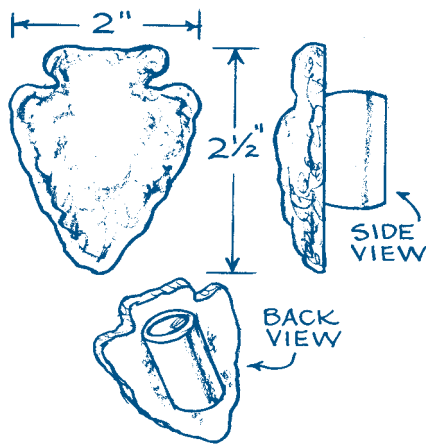
Earthquake Art

Draw or paint a picture in the medium of your choice. Then cut the picture apart into unusual shapes. Put the pieces of the picture back together on a piece of colored construction paper or poster board as you would a jigsaw puzzle, but leave spaces between each piece, allowing the color of the background paper to show through. Paste the picture pieces to the background. Your new picture will look like it's been in an earthquake!



Contrasts and Textures

Draw a simple still life on paper. Divide the picture into irregular areas by drawing straight or curved lines through the still-life objects. With a limited use of color, fill in all the areas, some with solid color, some with dots, lines, etc.



Arrowhead Neckerchief Slide

Sculpt in clay, about 2½ inches high by 2 inches wide. Cut a slice from PVC pipe using a hacksaw; file or sand edges smooth. Press into back of slide. When clay is dry, paint brown or dull gold.

Afterimages

Eyes play tricks. Sometimes they can fool you, and here is proof. Cut 3-inch circles from red, green, blue, yellow, orange, and violet construction paper—one of each color. Then take the circles and a sheet of black or gray construction paper outside or sit under a bright lamp indoors.

Put the red circle on the black paper and look at it steadily for at least 30 seconds. Be sure you don't move your eyes. Now take the red circle away and continue looking at the black background. You should see a circle—but the color will be green, not red.

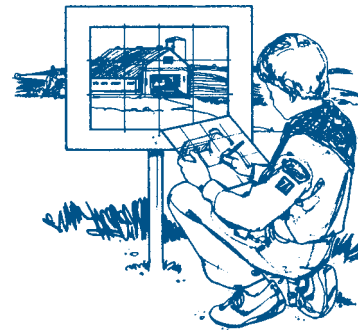
Try the experiment again, using the green circle. The afterimage will be red. The blue circle leaves an orange image; the orange circle leaves a blue image; yellow will leave violet; and violet will leave yellow.

The afterimages come from *retinal fatigue*. The part of the eye that is sensitive to the color red, called *cones*, become tired, so the green-sensitive cones take over.

Collages

Collage is a French word describing a work of art created by pasting different items onto a surface. You can use just about anything you want to create a collage: old photographs, greeting cards, magazine pictures, or even junk mail.

Choose a subject for your collage that tells something about you—about what Cub Scouting means to you, or about a friend, a pet, or your favorite sport. Find some pictures about your subject and arrange them in an interesting way on a piece of cardboard. When you are pleased with your design, paste the pictures down. Use a thin, even coat of paste so that the pictures don't wrinkle.



Sketching Frame

This gadget helps young artists keep details of their pictures in proper proportion. The frame is a cardboard rectangle 12 inches deep by 16 inches wide. Strings divide the frame into 12 equal sections; the artist's sketching paper is divided into similar sections. He looks through the frame and sketches the scene section by section.

Yarn Painting

Draw a design on a piece of cardboard or on a paper or plastic plate. Using a squeeze bottle of white glue, trace the design with lines of glue (do short intervals one at a time).

Take the end of a long length of yarn and press it onto the glue, covering the line drawing. A craft stick may be helpful in pushing the yarn in place. Use different colors of yarn for different parts of the design.

Frame the design as is, or cut out the design around the edge. If you want, you may cover the entire background of the picture with yarn.

Mobiles

You can make mobiles from a variety of materials. Dowel rods, coat hanger wire, craft sticks for small mobiles, or pieces of children's toys could all be choices for the main structure. Then use thin wire, heavy thread, yarn, or fishing line to suspend the ornaments you make to hang on the mobile structure.

Bending Wire. Here's a helpful way of shaping wire for mobiles and constructions. Draw an outline of your design on paper. Place the paper on a wooden block and drive nails part of the way in along the outline. Wind wire around the nails, and you have your wire shapes.

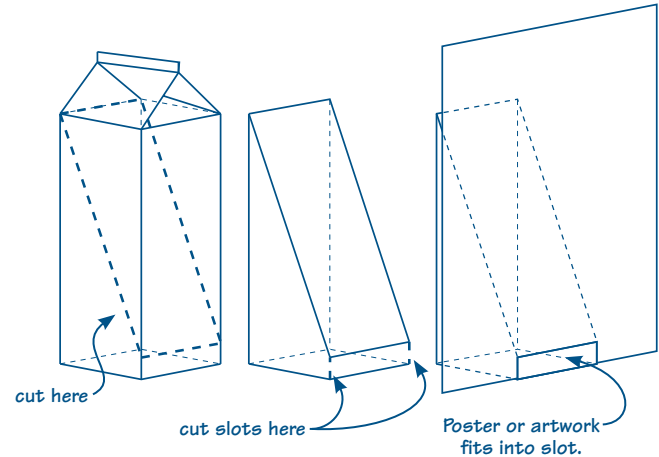
Games

Tag Team Art. Line members up in relay fashion (this may be done in teams). Have a large piece of paper taped on the wall or hung on an easel. Have the first boy begin drawing an object or design on the paper, without telling anyone what he is drawing. Allow him 30 seconds, and then signal for the next boy. This boy adds to the original picture or design. Each boy follows in turn, each having 30 seconds as the artist.

When each boy has had a turn or two (depending on how the picture is taking shape), signal a stop. After all have had time to admire their handiwork, have the first boy share what his original intent was for the drawing.

Artist Charades. Divide the group into two teams. Each has a large sheet of paper. Teams line up in relay fashion. On a signal, the first boy in each line runs to the leader, who gives him the name of an object to draw. The boy goes to his paper and begins to draw the object. As he progresses with his artwork, his team tries to guess what he is drawing. When they

guess correctly, the next boy in line takes his turn as artist. The game continues until all members have drawn. The team that finishes first wins.



Display Easel

Webelos artists could use this easel made from a milk carton to exhibit drawings or paintings.



Living Mural

Have boys draw or paint a scene on a large sheet of mural paper. Plan places in the scene where they can use arms, legs, or heads as part of the picture. Cut out holes from the mural for these body parts. Use the mural as a pack demonstration to tell a story.

RESOURCES FOR ARTIST ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Cub Scout Leader How-To Book*, No. 33832
- *Boys' Life* magazine
- *Cub Scout Academics and Sports Program Guide*, No. 34299: Art

You can get help on the Artist activity badge at the monthly Cub Scout leader roundtable. Also, check public and school libraries for basic art

books. Other resources could include local art instructors, arts and crafts clubs, amateur artists' and sculptors' organizations, stores that conduct arts and crafts classes, ceramics shops, and interior design firms. Paint samples from a paint store might come in handy.

ATHLETE

PHYSICAL SKILLS GROUP



Most Webelos Scouts are bursting with energy and eager to impress others with their physical prowess. The athlete activity badge work fits in perfectly with Scouting's aim of developing strong bodies.

If weather permits, hold the activity badge part of the den meeting outdoors. Many of the tests can be completed in a small, indoor area, but the outdoors will provide more room for vigorous games. All of the tests, except the 600-yard run (walk) and the 50-yard dash, can be completed in a small, indoor area, but the outdoors will provide more room for vigorous games.

Remember that every boy is expected to do his best, and each boy's best will be different. Let each set his own goal, and then give him encouragement and watch him progress. Some Webelos den leaders use a large wall chart to record the boys' progress on the activity badge tests. This chart serves as both a record of achievements and incentive for improvement.

REQUIREMENTS

Do these:

1. With your parent, guardian, or Webelos den leader, complete the Perseverance Character Connection.

2. Explain what it means to be physically and mentally healthy.
3. Explain what you as a Webelos Scout can to do stay physically and mentally healthy.
4. Every time you work on requirement 5 below, start with at least five minutes of stretching warm-up activities.
5. Do as many as you can of the following and record your results. Show improvement in all of the activities after 30 days.
 - a. Have another person hold your feet down while you do as many curl-ups as you can.
 - b. Do as many pull-ups from a bar as you can.
 - c. Do as many push-ups from the ground or floor as you can.
 - d. Do a standing long jump as far as you can.
 - e. Do a quarter-mile run or walk.

And do two of these:

6. Do a vertical jump and improve your reach in 30 days.
7. Do a 50-yard dash as fast as you can, and show a decrease in time over a 30-day period.
8. Ride a bike 1 mile as fast as you can, and show a decrease in time over a 30-day period.
9. Swim a quarter mile in a pool or lake as fast as you can, and show a decrease in time over a 30-day period.

DEN MEETING ACTIVITIES

- | | | |
|--|--|---|
| • Practice the exercises found in the <i>Webelos Handbook</i> and encourage the boys to do them at home about 30 minutes each day. | • Make an obstacle course and time the boys as they run the course. | • Invite a physical education instructor to a den meeting to discuss fitness. |
| • Practice the dual contests found in the <i>Webelos Handbook</i> . | • Try out the agility and flexibility exercises shown in this guide. | • Take the den on a short (5 miles or less) bicycle trip. Or play some of the bicycle games found in the "Games" section of the <i>Cub Scout Leader How-To Book</i> . |
| • Play some of the physical fitness games from the "Games" chapter of the <i>Cub Scout Leader How-To Book</i> . | • Try out the newspaper and rope exercises shown in this guide. | • Learn and practice one of the sports included in the Cub Scout Academics and Sports program. |
| | • Make the homemade physical fitness equipment shown in this guide. | |

PLACES TO GO

- Track meet
- High school or college athletic event requiring strength, speed, or stamina, such as baseball, football, soccer, or basketball
- Gymnastics exhibition or meet
- A gym or health club where boys can try out weight-lifting equipment

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display individual fitness records and home-made fitness equipment.
- Demonstrate some of the dual contests or agility or flexibility exercises.
- Have a standing long-jump competition to see which Webelos Scout can jump farthest.

Agility Exercises

Perform these exercises within the designated time limits. Rest for 2 minutes between each set.

Set 1 (8 minutes)

- **Fish Flops.** Lie flat on your stomach with arms and legs extended and off the ground. Rock back and forth. (2 minutes)
- **Grass Drill.** Run in place. Drop to the ground and bounce up again. Don't allow boys to let their knees hit the ground first. (2 minutes)
- **Quick Foot-Knee Touch.** Drop quickly to one knee and bounce up again. Alternate knees. (2 minutes)
- **Shoulder Push Drill.** Partners square off on all fours, locking right shoulder to right shoulder. Try to rock your opponent on his side. (2 minutes)

Set 2 (8 minutes)

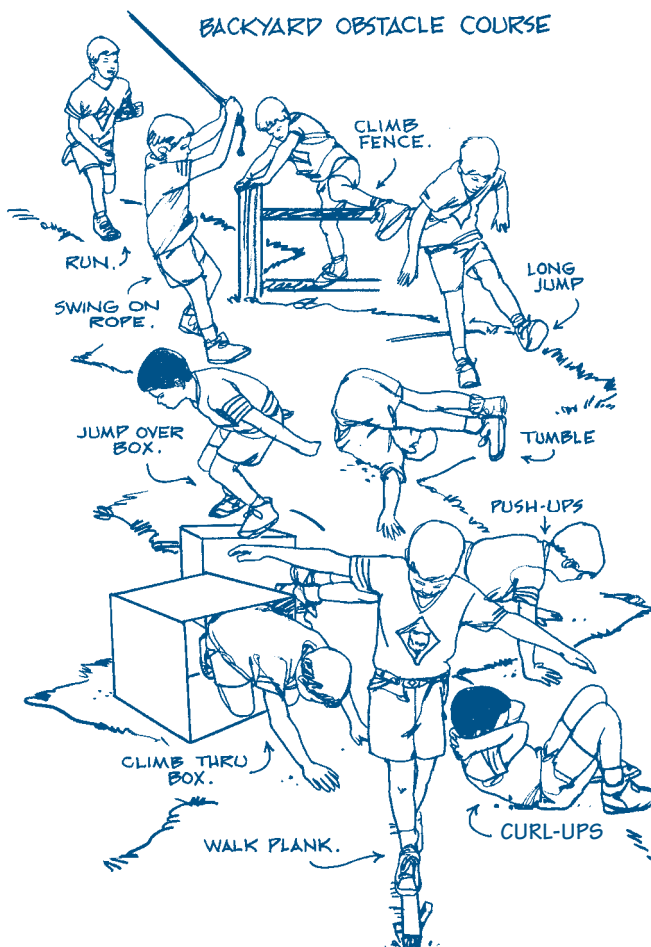
- **Crab Mirror.** Two boys get on all fours. One moves at random to the left, right, backward, or forward. The other mirrors his moves. Switch leaders and repeat. (2 minutes each)
- **Curl-ups.** Lie on back, with feet flat on the ground and knees elevated, arms crossed over the chest. Raise up and touch elbows to thighs. Do as many as possible for 1 minute.

Flexibility Exercises

- **Fingers.** Extend arms to side, palms down. Quickly flex fingers by alternating between fist and open-hand position. (30 seconds)
- **Wrists.** Extend arms to front, palms down, wrists locked. Rotate wrists clockwise, and then counter-clockwise. (30 seconds)
- **Palms.** Extend arms to front, palms down, wrists locked. Turn palms back toward you and then down in quick, short movements. (30 seconds)
- **Forearm Twist.** Extend arms parallel with the ground (arms can be to the side or in front of you). Flex at elbow, bringing tips of fingers to

shoulders. Return to starting position. Alternate palms up and palms down. (1 minute)

- **Shoulder Stretches.** Three-part exercise. (2 minutes)
 1. Rotate your arm over your head and down slowly. Repeat with other arm.
 2. Shrug your shoulders slowly in a complete circle, starting the movement by moving up and back.
 3. Lock your hands behind your head and pull back slowly from shoulders.



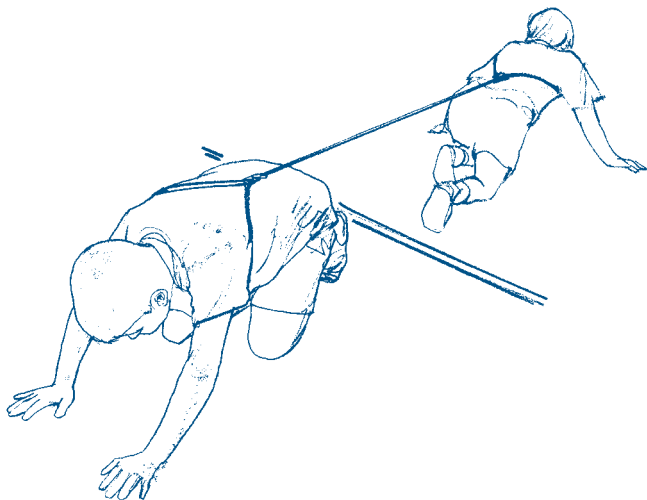
Obstacle Course

Set up an obstacle course that will test the boys' physical fitness and add a touch of competition. Consider using the activities shown, requiring them to do curl-ups and push-ups somewhere in the course. Make it a test of speed and endurance.

For variety, add other obstacles, such as trees to climb, bars to chin, or a heavy weight to carry for a short distance.

Rope Gymnasium

Rope is a handy "gymnasium" in and of itself that can be carried and used for all kinds of fitness activities. For exercise alone, tie the rope to a tree or pole and pass the end over one shoulder. Now pull as hard as possible. This will give the leg, stomach, and back muscles some good exercise.

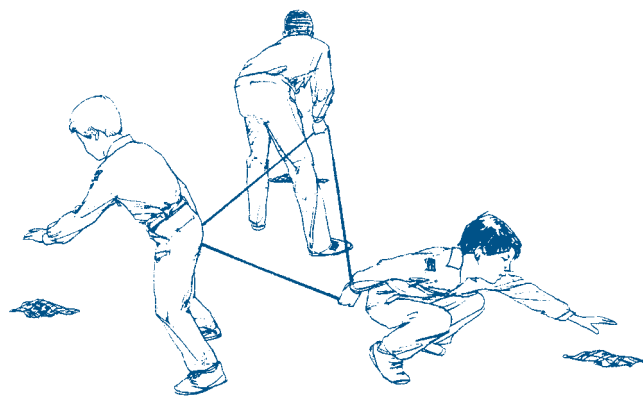


Tractor Pull. This is a game and also a good exercise. Loop a rope around the back and under the armpits of two players, who are facing in opposite directions. On all fours, they try to drag each other across a dividing line.

Jumping Rope. This develops coordination between leg and body muscles. Wrists and arms also get training in rhythm and timing.

Rope Climbing. Tie a heavy rope (at least 1 inch thick) securely to a sturdy tree limb about 15 feet above the ground. At first, climb it any way possible, using calf and thigh pressure. Later, learn to go up hand over hand from a sitting start. This builds arms, grip, shoulders, and the entire upper torso. It's also a skill that may help in future emergency rescue or survival situations.

Tug-O-War. This is one of the toughest rope games. Try one at your den meeting, with half of the den pulling against the other half.



Three-Man Tug-O-War. Take a rope approximately 5 feet long and tie a strong knot in the end of it. Have three boys take hold of the rope, forming a triangle. Place neckerchiefs or pieces of cloth on the ground just outside the reach of each player. On the word "go," each player tries to pick up his neckerchief while preventing the other players from reaching theirs. He has to do this without letting go of the rope.

Newspaper Gym

One-Handed Paper Crunch. Many great athletes use tricks and stunts as specialized body-building exercises. Here's a trick that Webelos Scouts can use. Take a large double sheet of newspaper and hold it by one edge. Using only the fingers of one hand, and without allowing the paper to touch any other part of the body, work it with your fingers until it is a ball. Squeeze hard when you first start bunching up the paper so the wad will be tighter and easier to manage as you reach the end. See how hard it makes your fingers work and how your forearm muscles wriggle and ripple as you try to get the newspaper into a ball. You may want to try it with a sheet of newspaper in each hand for a double workout.

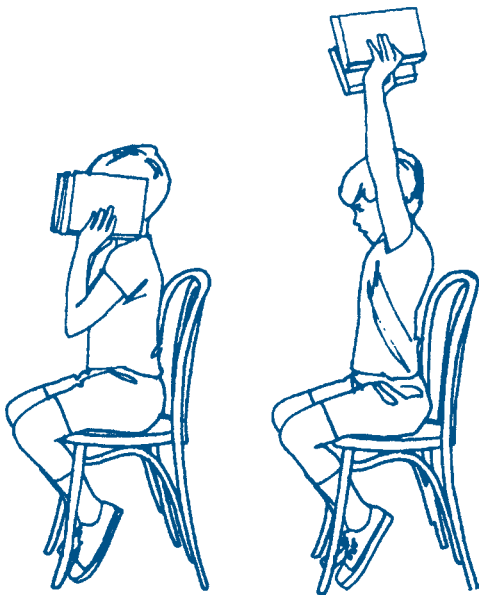
Newspaper Baton. Take two double sections and fold them in halves until you have a flat section with one edge that is a foot wide. Roll that piece up to form a baton and use it for exercises. First try to pull it apart as you hold it in front of your chest. Then try to pull it apart as you hold it behind your back. Finally, see whether you can break it by twisting it clockwise with the left hand. Then see whether you can jump over the paper baton without losing your hold on it. Then try jumping back over it.

Home Muscle Builders

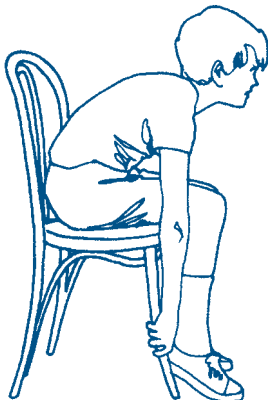
Fitness centers are filled with expensive equipment for exercising and weight training. Boys can achieve the same results with everyday objects found in their homes. A sturdy, straight-backed chair, for example, can be used in a workout. Here are some ideas.

Sitting Exercise. Sit flat on the chair. Place palms of both hands on the seat, turned inward so that fingers of one hand point at the other, under the thighs. Using hands and arms only, raise and lower your body several times.

Stiff Arm. Face the chair away from you. With both hands, grasp sides of the chair back. Lift chair with arms straight. (Webelos Scouts may not be able to keep arms straight.) Hold chair up for a count of 10.



Shoulder Builder. Hold two heavy books (that are about the same weight) at shoulder height, and then push them up as high as you can. Count to three, and then lower them slowly to your shoulders. Rest briefly and repeat.



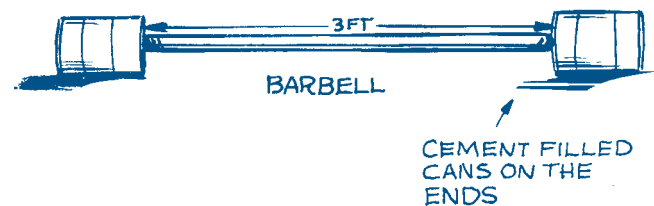
Back Builder. Sit in the chair and grasp the legs of the chair as far down as you can reach. Pull up with

your back muscles. Count slowly to five, let go and rest, and then do it again.



Abdomen Toughener. Sit in the chair. Keep your legs together and hold them straight out in front of you. Bend from the waist and push your hands down on your legs while pushing up with your legs. Hold for a count of five, rest, and then repeat.

Homemade Fitness Equipment



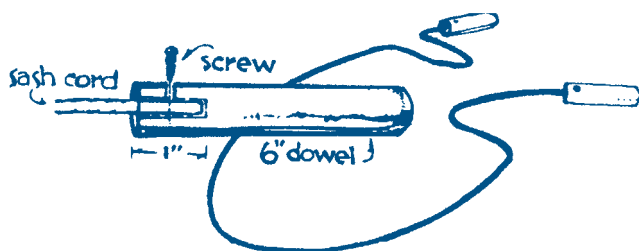
Barbell. Use a 3-foot dowel (or cut broomstick) with $\frac{3}{4}$ -inch pipe on ends, embedded in large cement-filled cans.

Chinning Bar. Using rope, suspend a broomstick from an exposed beam in the basement or garage.

Bicycle Inner Tube (not inflated). This makes an excellent exerciser for building leg, arm, back, and chest muscles by pulling and stretching in almost any direction. If the tube is too hard to stretch, slit it lengthwise.



Jug Weights. Fill plastic bleach containers with sand and cap. These will help develop arm and shoulder muscles.



Jump Rope. Use a 5-foot length of heavy-duty sash cord. For handles, drill 1-inch-deep holes in the end of a 6-inch-long piece of broomstick handle. Insert rope ends and secure with screws through broomsticks.

Champ-Nit

Your den can stage its own decathlon—not in track and field, but in fitness duels. For extra excitement, use the “champ-nit” method of scoring, which is an idea of Baden-Powell’s. The founder of Scouting wasn’t very happy about the “winner-take-all” concept. He felt that the losers needed to keep trying again.

Let’s say you have eight boys in your den. After the first duel, you have four winners, four losers. The winners drop out. After the second duel, you have two winners, two losers. The losers square off again. Finally, you have one loser—the den “champ-nit.” The method is very effective for knotting games and first-aid contests. The loser wins, so he who needs the most practice, gets it!

Athlete Neckerchief Slide

Save a variety of postage stamps that depict Olympic events or portraits of athletes. Cut a piece of wood $\frac{1}{2}$ inch larger than the stamp. Paint the wood a color that complements the stamp, and glue the stamp to the wood piece. Apply several coats of clear acrylic spray. Attach $\frac{1}{2}$ -inch piece of 1-inch PVC pipe to the back.

RESOURCES FOR ATHLETE ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys’ Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832
- *Cub Scout Academics and Sports Program Guide*, No. 34299: various sports

You can get help on the Athlete activity badge at the monthly Cub Scout leader roundtable and from other Webelos den leaders. Also check with local YMCA, fitness centers, and school athletic directors for useful materials and information.



CITIZEN

COMMUNITY GROUP

The Citizen activity badge is important because the work involved relates directly to developing responsible citizens—one of the primary aims of the Boy Scouts of America. The Citizen activity badge is a requirement for the Arrow of Light Award. It is also the first of several citizenship requirements on the trail to becoming an Eagle Scout.

This activity badge gives Webelos Scouts great opportunities for getting a feeling for the real meaning of citizenship. As a leader, take advantage of these opportunities to give your boys a meaningful experience. Pay particular attention to doing service to others, which should be a way of life for all Scouts.

REQUIREMENTS

Do this:

1. With your parent, guardian, or Webelos den leader, complete the Citizenship Character Connection.

Do all of these:

2. Know the names of the president and vice president of the United States, the elected governor of your state, and the head of your local government.
3. Describe the flag of the United States and give a short history of it. With another Webelos Scout helping you, show how to hoist and lower the flag, how to hang it horizontally and vertically on a wall, and how to fold it. Tell how to retire a worn or tattered flag properly.
4. Explain why you should respect your country's flag. Tell some of the special days we fly it. Tell when to salute the flag and show how to do it.

5. Repeat the Pledge of Allegiance from memory. Explain its meaning in your own words.
6. Tell how our national anthem was written.
7. Explain the rights and duties of a citizen of the United States. Explain what a citizen should do to save our natural resources.
8. As a Webelos Scout, earn the Cub Scout Academics belt loop for Citizenship. At a Webelos den meeting, talk about the service project Good Turn that you did.

And do two of these:

9. Tell about two things you can do that will help law enforcement agencies.
10. With your Webelos den or your family, visit a community leader. Learn about the duties of the job or office and tell what you have learned.
11. Write a short story of not less than 50 words about a former U.S. president or some other great American. Give a report on this to your Webelos den.
12. Tell about another boy you think is a good citizen. Tell what he does that makes you think he is a good citizen.
13. List the names of three people you think are good citizens. (They can be from any country.) Tell why you chose each of them.
14. Tell why we have laws. Tell why you think it is important to obey the law. Tell about three laws you obeyed this week.
15. Tell why we have government. Explain some ways your family helps pay for government.
16. List four ways in which your country helps or works with other nations.
17. Name three organizations, not churches or other religious organizations, in your area that help people. Tell something about what one of these organizations does.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Exhibit a display of photos taken at a recent den Good Turn project.
- Display charts, posters, or literature of community agencies and activities.
- Display the Flag Courtesy Kit (page 32) and demonstrate how to use it.
- Have one of the boys tell how "The Star-Spangled Banner" was written.
- Have boys give oral reports on any trips they have taken or requirements they have completed.
- Display Citizen logbooks.

DEN MEETING ACTIVITIES

- Select a Good Turn for school, church, or community and carry it out.
- Plan a special Good Turn, such as collecting food, books, or clothing for a local agency.
- Make logbooks to record work on the Citizen activity badge.
- Learn flag courtesy. (See the booklet *Your Flag*, No. 33188) Use the Flag Courtesy Kit (page 32) to learn proper procedures, and then demonstrate them to a group of younger Cub Scouts.
- Plan an antilitter campaign. This could include making and displaying posters, picking up litter, making litter bags, etc.
- Discuss the community organizations that help people. How are they run and financed? Do they use volunteer help?
- Invite a new U.S. citizen to speak to the den on what becoming an American means to him or her.
- Discuss the rights and the responsibilities of good citizens.
- If an election is coming up, make “Get-Out-the-Vote” posters and display them.
- Discuss the history of the national anthem.
- Invite a local public official to talk with the den about government. This might be a city council member or clerk.

PLACES TO GO

- Attend a naturalization ceremony for new citizens.
- Visit one of the community organizations you discussed during a den meeting.
- Visit a court. Ask the judge to speak to the boys about good citizenship.
- Attend a meeting of your city council, zoning board, or school board.
- Tour a police or fire station.
- Visit a historic site or museum.
- Tour a water (or sewage) treatment plant.
- Spend an hour with the mayor or other official as he or she attends to city business; then talk with him or her.
- Visit the state capitol building, city hall, or a local member of state government.
- Visit a local political campaign headquarters or polling place. Observe the voting process, if possible.
- Visit a local government agency. Find out how it works, what services it provides, and how it affects boys and their families.
- Visit a recycling center.

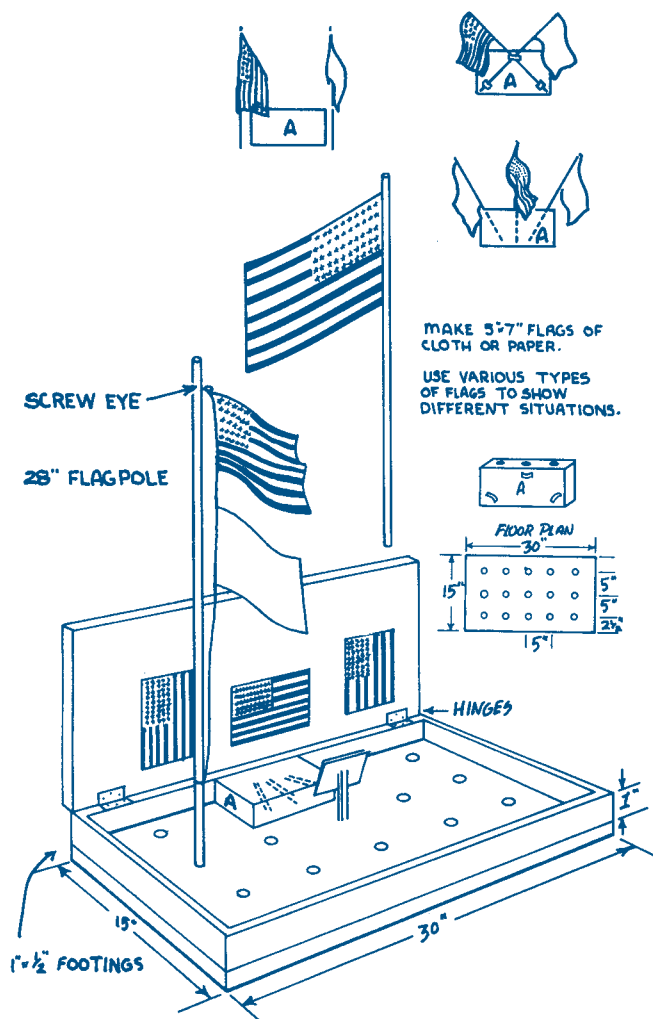
DEN GOOD TURNS

- Clean up a playground or park.
- Do yard work, run errands, or otherwise help an elderly person or someone else who needs help with such tasks.
- Give a party for children who are in the hospital or people living in a long-term care facility.
- Check with local wildlife/environmental conservation agency, and then plant shrubs to provide food and cover for wildlife.
- Collect toys, food, and used clothing for a charitable agency to distribute to people in need.
- Collect wastepaper, glass, aluminum, or plastic for recycling, depending on the recycling efforts of your community.

GOVERNMENT QUIZ

Give each boy a pencil and paper. Read the following questions. Have boys write down their answers and score as shown:

1. Who is the president of the United States? (3 points)
2. Who is the vice president? (5 points)
3. Who is the governor of our state? (7 points)
4. Who is our mayor (or the head of local government)? (7 points)
5. Name our state capital. (5 points)
6. Name three local, state, or federal laws. (3 points each)



Flag Courtesy Kit

Build and use this flag demonstration kit as a simple aid in teaching and testing knowledge about flag courtesy. The boy demonstrating how to properly display the flag staffs and inserts the staffs of miniature flags into the holes drilled in the board to show that he knows the requirement. Use *Your Flag*, No. 33188, as a reference for information. The Flag Courtesy Kit can also be used as a demonstration at a pack meeting or for a group of younger Cub Scouts.

Flag Quiz

This quiz will help boys learn some of the history of our flag. After they have had an opportunity to discuss and study the questions and their answers, ask them the questions and let them answer either orally or in writing.

- The flags of which five countries flew over our country before it became the United States of America? (Spain, France, Holland, Sweden, and England)

- What was the English flag of the Thirteen Colonies called? (The Queen Anne flag)
- When the colonists decided on a flag of their own, what did they call it? (The Grand Union flag)
- How did the Grand Union flag differ from the Queen Anne flag? (It had 13 stripes of red and white.)
- What was the name of the flag made after the Declaration of Independence? (Old Glory)
- How did Old Glory differ from the Grand Union flag? (The union was blue with 13 white stars instead of the crosses of St. George and St. Andrew.)
- What is the largest number of stripes the U.S. flag has ever had? When and why? (The U.S. flag had 15 stripes during the War of 1812, because two new states had been added.)
- Why was the flag changed back to 13 stripes? (Because it began to lose its symmetry and beauty.)

Other questions to ask boys could include the following:

- How do you show respect
 - When the U.S. flag is being hoisted and lowered?
 - When the flag passes in a parade?
 - When you pass the flag?
 - When the national anthem is sung or played?
- What are some of the laws protecting our flag?
- What should be done with worn-out flags?

Rights of Citizens

Have den discussions of these rights and duties of citizens (also refer to the *Webelos Handbook*):

- The right to equal protection under the law and equal justice in the courts
- The right to own property
- The right to be free from arbitrary search or arrest
- The right of free speech, press, and assembly
- The right to equal education and economic opportunity
- The right of religious freedom
- The right to choose public officials in free elections
- The right to have legal counsel of your choice

Duties of Citizens

Discuss the following responsibilities of citizens (also refer to the *Webelos Handbook*):

- The duty to obey the laws
- The duty to respect the rights of others
- The duty to be informed on issues of government and community welfare
- The duty to serve on juries, if called
- The duty to vote in elections
- The duty to serve and defend our country

- The duty to assist agencies of law enforcement
- The duty to practice and teach principles of good citizenship in the home

Several of these rights and duties don't apply to people until they are adults. Stress those that are applicable to Webelos Scouts.

Citizenship Pledge

Teach boys this citizenship pledge and discuss its meaning: *"As citizens, we will do our best to be prepared in body and will, in spirit and skill. We accept our obligation to God and will show by our actions that we are willing to serve others and be good members of the Scouting team."*

Citizen Test

Two teams face each other with a wide space between them. The leader then asks each player a question about the Declaration of Independence, "The Star-Spangled Banner," our elected leaders, flag etiquette, or another fitting subject. A correct answer entitles that team to take one step forward. An incorrect answer passes the question to the other team. The team to cross the other team's starting line first is the winner.

Wanted: Ideal Citizen

Have each boy imagine the type of citizen he would want to find living in his community. How would the person act?

Classified Ads. Have each boy write a "Help Wanted" ad for a den newspaper advertising the search for the ideal citizen. Boys should describe qualities of that ideal citizen and also define their job responsibilities.

Wanted Posters. Design a "Wanted" poster of the ideal citizen. Cut a picture from a magazine or draw an original portrait of a real or imaginary person. Then add descriptive phrases such as "cheerful neighbor" or "community volunteer." Finally, complete the following statements: "This person was last seen [write what the person was doing, such as 'serving jury duty'], once again showing himself/herself to be a responsible citizen. If you have seen or have any information about this person, please contact _____. This person is an ideal citizen because _____."

Den Constitution

Write a den constitution—or body of laws or rules. Afterward, remind boys that together they drew up their set of den rules just as the men at the Constitutional Convention did. To get off to a good

start, read the Preamble to the Constitution with the boys and model your own den constitution this same way: "We, the Webelos Scouts of Den _____, in order to get along together and do our best in Cub Scouting, agree to do the following: In our den meetings we will..."

Making a Scroll. Display your den constitution on a scroll made of parchment paper. Fill a bowl with hot water and place three tea bags in the water. Gently crumple a piece of white paper and drop it into the bowl. Push the paper underwater with a spoon. When the water cools, remove the paper carefully so that it doesn't tear. Lay it flat on several paper towels to dry. When the paper is dry, tear off the edge for a handmade look. Draw fancy designs around the edge of the paper. Write the constitution on the scroll (try using a calligraphy pen) and have the boys sign it at the bottom.

Quill Pen. For an added effect, try signing your constitution with a pen made from a feather. Cut off the bottom of a large feather at a slant and dip it into ink. Practice first before you try writing on your scroll. The quill will have to be recut periodically to allow more ink to be absorbed.

Be sure that you as a den leader sign the den's constitution, too. George Washington acted as the person in charge during the convention. His signature showed that he affirmed or agreed with the ideas, just as your signature affirms the constitution that your Webelos Scouts develop. Post this constitution at the pack meeting for everyone to see.

Bill of Rights and Constitutional Amendments

The Bill of Rights is composed of the first 10 amendments to the United States Constitution. Assign each boy a different amendment to research and make a poster illustrating what it says. Display posters at the pack meeting.

Have Webelos Scouts write an amendment to the Constitution and tell why they think it would be a good one.

Developing Laws and Government

Present the following scenario for Webelos Scouts to consider: A small, unpopulated island has just been discovered in the Pacific Ocean. The island is rich in natural resources. The land is heavily forested, with trees that are well-suited for making furniture. The waters around the island are abundant with a variety of fish.

A major corporation has decided to build two fac-

tories on the island. The factory workers will bring their families to live there with them. One factory will package fish that are caught offshore by people who will inhabit the island. The other factory will manufacture furniture from the native trees. Both the fish and the furniture will be shipped to the mainland and be sold.

Because the island is currently uninhabited, there are no rules or laws in effect.

1. Ask boys to tell what laws and rules they think need to be written before the island is developed—and why. They might think about laws concerning safety, children, health, trade, and resources.
2. How would the laws and rules be enforced?
3. What would happen to people who fail to obey these rules and laws?
4. How would the new inhabitants finance new roads, bridges, and other services they would require?

Have boys vote democratically on which laws to enact. They could take turns debating the issue before any vote is taken.

Campaign Ads

The media can have a great influence on how people vote in elections. Have boys write a script and act out (videotape it with a camcorder if you can) a commercial for a real or mock campaign.

Inauguration Day

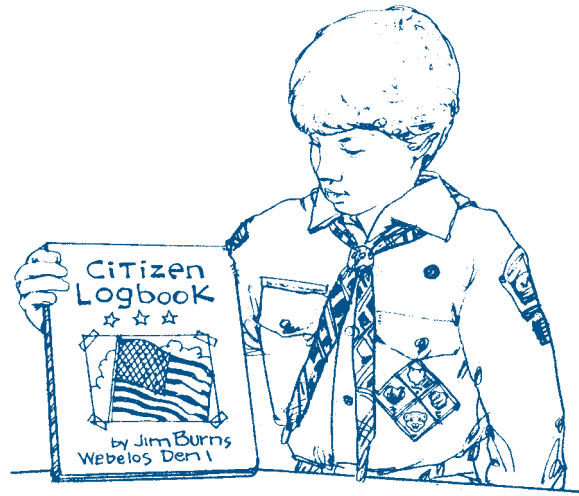
Inauguration speeches by president, governors, and other elected officials include goals for the future. They tell of the hopes and dreams of the person who has been elected. Have each boy give an inaugural speech that tells about his dreams for the United States. What does he want to see happen in the future of our country? What laws would he like to see enacted? If possible, videotape speeches and play them at a pack meeting demonstration.

Government at Work

Most Webelos Scout-age boys have no contact with local government and little understanding of it. By taking a field trip, you can help them get an idea of how government operates and provides services to citizens.

Make advance arrangements. If you live in a small town, ask the mayor or city clerk what meetings the den might attend. Arrange to talk with the presiding officer afterward so that the boys can ask questions about what went on. Otherwise, they may have little understanding of what they saw and heard.

If you go to a service agency like the police or fire department or a water treatment plant, arrange beforehand for a guide. Ask the guide to tell about what the agency does and also what a 10-year-old boy can do to show that he is a good citizen.



Webelos Citizen Logbook

Have each Webelos Scout keep a logbook as he works on the Citizen activity badge. For an effective display at the pack meeting, ask boys to decorate the cover. Inside, they might include pictures of U.S. heroes and photos of the den's Good Turn project, as well as lists and reports required for the activity badge.

Newspaper Search

Give each Webelos Scout a copy of a daily newspaper and have them look for articles on any of the following topics:

- Articles on individuals or corporations that are working to save our natural resources, or that have been abusing resources
- Articles about people who have been good citizens through their actions
- Articles concerning local, state, or federal laws
- Articles about elections and election procedures
- Articles about our justice system

State Quiz

Divide boys into two teams. Place a bell on a table between them. One boy from each team steps forward. Call out a question about your home state (the governor, the capital, the colors in the flag) or your community (mayor, county seat). Whoever can run and ring the bell first with the correct answer scores a point for his team.

Just for fun: Here are some questions you could ask for fun. Can you recognize these states by their abbreviations?

- What state is always sick? (ILL)
- What state is the father's state? (PA)
- What state wears a dress? (MISS)
- What state is always surprised? (OH)
- What state would you find in church? (MASS)
- What state do you go to when you're sick? (MD)
- What state is in the laundry business? (WASH)
- What state can count above nine? (TENN)
- What state carried Noah and his family? (ARK)
- What state cuts the grass in your yard? (MO)

Mock Trials

Hold a mock trial in your den, complete with defendant, attorney, judge, and jury. Consider imaginary cases that boys may have to deal with, such as cheating on a test or trespassing on private property. You might also explore censorship of school newspapers or a libel case—when the school newspaper prints something about somebody that may be wrong.

Citizenship Rating Sheet

Each week for several weeks, ask the boys to rate themselves on their citizenship, using a chart like the one shown below. Rating themselves might have the effect of improving their citizenship traits—or at

least their efforts to become better citizens. Tell the boys that no one will know how they rate themselves, unless they want to tell somebody. Urge them to be honest with themselves when they make their rating each week, perhaps taking this pledge: "I will try to rate myself on the following traits of good citizenship. I will try to improve myself so that on future ratings I can honestly give myself a higher score."

RESOURCES FOR CITIZEN ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys' Life* magazine
- *Your Flag*, No. 33188
- *Cub Scout Academics and Sports Program Guide*, No. 34299: Citizenship

Help on the Citizen activity badge may be obtained at the monthly Cub Scout leader roundtable. Check with local armed forces recruiting and reserve offices for materials and information about the US flag. Check with a local fire department for information and material about fire safety when worn-out flags are being destroyed. Check with a local immigration and naturalization office about citizenship ceremonies.

	Week 1	SCORES Week 2	Week 3
1. I am honest, even in little things.	_____	_____	_____
2. I am courteous, loyal, and kind to other people.	_____	_____	_____
3. I try to show good sportsmanship.	_____	_____	_____
4. My parents and friends trust me to do what I say I will do.	_____	_____	_____
5. I work and play cheerfully with others.	_____	_____	_____
6. I always keep my promises.	_____	_____	_____
7. I take good care of my own things and things that do not belong to me, such as school books, library books, and school property.	_____	_____	_____
8. I do my best to keep the Cub Scout Promise at all times.	_____	_____	_____
9. I always help to clean up after den meetings and when needed in my school classroom.	_____	_____	_____
10. I never make fun of other people.	_____	_____	_____
Rating Scale: 5 = Very good; 4 = Good; 3 = Fair; 2 = Lacking; 1 = Definitely needs improvement			



COMMUNICATOR

COMMUNITY GROUP

Webelos Scouts who earn the Communicator activity badge learn about some of the many ways people communicate. Communication is important in almost everything we do.

Boys will have the opportunity to send messages in various ways. They may learn to operate a personal computer or a CB (citizens band) radio, invent secret codes, or send signals to each other. They will learn that some types of communication are more effective than others and discover how communication is affected and must be modified for people with disabilities or people who speak different languages. This is a good time to visit one of the many communications businesses and to enlist the help of other adults in the pack involved in communications-related fields.

REQUIREMENTS

Do seven of these:

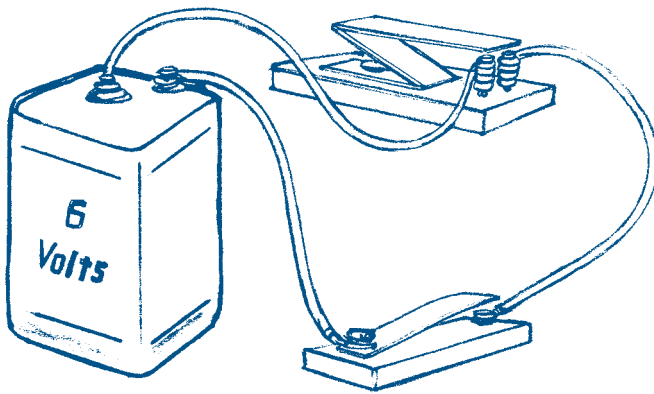
1. Play the Body Language Game with your den.
2. Prepare and give a three-minute talk to your den on a subject of your choice.
3. Invent a sign language or a picture writing language and use it to tell someone a story.
4. Identify and discuss with your den as many different methods of communication as you can (at least six different methods).
5. Invent your own den secret code and send one of your den members a secret message.
6. With your den or your family, visit a library and talk to a librarian. Learn how books are cataloged to make them easy to find. Sign up for a library card, if you don't already have one.
7. Visit the newsroom of a newspaper or a radio or television station and find out how they receive information.
8. Write an article about a den activity for your pack newsletter or Web site, your local newspaper, or your school newsletter, newspaper, or Web site.
9. Invite a person with a visual, speaking, or hearing impairment to visit your den. Ask about the special ways he or she communicates. Discover how well you can communicate with him or her.
10. With your parent or guardian, or your Webelos den leader, invite a person who speaks another language (such as Spanish, French, Arabic, Hebrew, etc.) as well as English to visit your den. Ask questions about the other language (its background, where it is spoken, etc.), discuss words in that language that den members are already familiar with, or ask about ways to learn another language.
11. Use a personal computer to write a letter to a friend or relative. Create your letter, check it for grammar and spelling, and save it to a disk. Print it.
12. Under the supervision of a parent or other trusted adult, search the Internet and connect to five Web sites that interest you.
13. Under the supervision of a parent or other trusted adult, exchange e-mail with a friend or relative.
14. While you are a Webelos Scout, earn the Academics belt loop for Computers.
15. While you are a Webelos Scout, earn the Academics belt loop for Communicating.
16. Find out about jobs in communications. Tell your den what you learn.

DEN MEETING ACTIVITIES

- Discuss various types of hand signals, such as those used in industry, sports, or transportation.
- Play the Body Language Game. (See the *Webelos Handbook*.)
- Exchange messages in sign language or picture writing.
- Discuss proper telephone manners.
- Invite an expert to talk about careers in the field of communications.
- Learn to use a CB radio.
- Discuss Internet safety.
- Create a den code and write messages.
- Invite people who cannot hear, see, or speak to a den meeting.
- Ask them to explain how they communicate.
- Use a personal computer to explore the Internet, write e-mail, write a letter, or to help you with another activity.
- Invite a person who speaks more than one language to visit a den meeting.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Demonstrate sign language.
- Demonstrate different hand signals.
- Demonstrate the proper use of a telephone.
- Demonstrate how to use a CB radio.
- Present a pantomime or other skit about communications.
- Display den code messages.
- Have a multilingual person demonstrate translating a message from one language to another.



Old-Fashioned Telegraph Set

Materials: Two blocks of wood, three screws, two wires, two nails, two metal strips cut from a tin can, one dry cell (battery)

Making this telegraph set will be a lot of fun and a good way of learning the method of transmitting sounds and impulses. Assemble as illustrated. Bend the metal “Z” (sounder) so that it attaches itself to the nails when the key is pressed down.

After the boys have completed their telegraph sets, they can send messages to each other using Morse code.

a .-	j .---	s ...	1 .----	error
b -...	k -.-	t -	2 .----
c ---.	l	u .-.	3 .----	begin
d -..	m --	v ...-	4 .----	message
e .	n -.	w ---	5	end
f	o ---	x ----	6	message
g ---.	p .---	y -.-	7 -....
h	q ----	z ----	8 -....	
i ..	r .-.	o -----	9 -....	

Morse Code

Boys can use Morse code to signal on their telegraph sets. They may also practice by using a flash-light to send signals. This method of communicating is challenging because you have to know the code well to send *and* receive it.

Using the Internet Safely

Webelos den leaders should share these guidelines with Webelos Scouts so that boys may enjoy the benefits of the Internet at the same time as avoiding its risks:

- Never give out a picture or other personal information such as your address, telephone number, the school you attend, or your parents’ work addresses or telephone numbers without your parents’ permission.
- Never agree to meet with anyone you meet online unless you take your parents with you.
- Do not respond to messages that are mean or make you feel uncomfortable. Tell your parents if you receive these messages so that they can contact your online service.

For more information on Internet safety, see the Youth Protection booklet *Power Pack Pals—Be Safe on the Internet* (No. 33981).

Telephone Manners

When you phone someone, always identify yourself, and say “please” and “thank you”: “This is Tommy Brown. May I speak to Jimmy, please? Thank you.”

If you happen to reach the wrong number, don’t hang up until you say, “I’m sorry, I have the wrong number.”

When answering the phone, never let the caller know if you are home alone. If the call is for a parent who is gone, say, “He/she can’t come to the phone right now. May I ask him/her to call you?”

When taking a telephone message, write the name, number, date, and time of the call clearly on a piece of paper, and then be sure the message gets to the proper person.

Follow these general rules:

- Be courteous.
- Speak clearly into the phone.
- Keep conversations short so that others can use the phone.

Translating a Message

One barrier to communication is the fact that people speak different languages. To demonstrate this, recruit an adult who speaks more than one language to participate in a den meeting. Ask the boys to take turns saying a sentence to the multilingual

person and have him or her respond by saying the sentence in another language. The multilingual person could then explain how he or she came to know more than one language and encourage the boys to learn a second language.

Codes and Ciphers

Through the ages, people have used codes and ciphers to communicate information so that the message can't be understood by someone else—such as an enemy during war.

Telephone Code. Check out the letters on the buttons on the telephone. See how the numbers 2 through 9 have letters on the buttons? You can use the numbers to write words in a secret code. All you have to do is look for the letter you want, write down the number of the button, and then write down the number 1, 2, or 3 to show which of the three letters you mean. The word “science” is written like this: 73-23-43-32-62-23-32.

The telephone pad doesn't have a Q or a Z. You could choose to have the number 1 key represent Q and the zero key represent Z because neither of these keys has letters assigned to it.

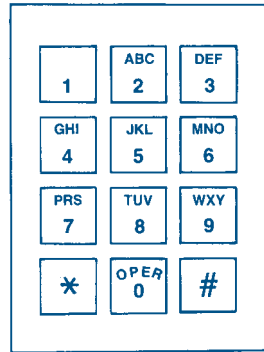
The Civil War Code.

Prisoners during the American Civil War used a cipher to send secret messages to their friends. Here's the key:

To encipher a letter, draw the shape of the box it is in. Then put dots in the box you drew to show the position of the letter in the box. Each box has two or three letters. In position 1 is the first letter; in position 2, the second; and in position 3, the third. Use no dots for letters in the position 1, one dot for letters in position 2, and two dots for letters in position 3. For example, the letters “B,” “O,” and “Y” would be written like this:



“Webelos Scout” would be written like this:



Key Word Code. This code uses a key word, which must have at least seven letters. First write down the key word, and then write the letters in the alphabet in order, leaving out the letters that are part of the key word. Below that, write the entire alphabet in order.

In this example, the word “Scouting” is the key word:

SCOUTING A B C D E F H J K L M P Q R V W X Y Z
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

To turn a message into code, take each letter in the message, find it in the second line, and then write down the letter right above it in the first line. For instance, the phrase “meet me at the park” would be written:

FTTQ FT SQ QGT KSMD

To decode the message, do the opposite: Take each letter in the message, find it in the first line, and then write down the letter right below it in the second line.

Computer Code. Different fonts on a computer can make codes easy. Type a message to a friend, and then change the font, for instance, to a font that is all symbols:

Original message: MEETING TONIGHT AT 7:00

Message in the Zapf Dingbats font:

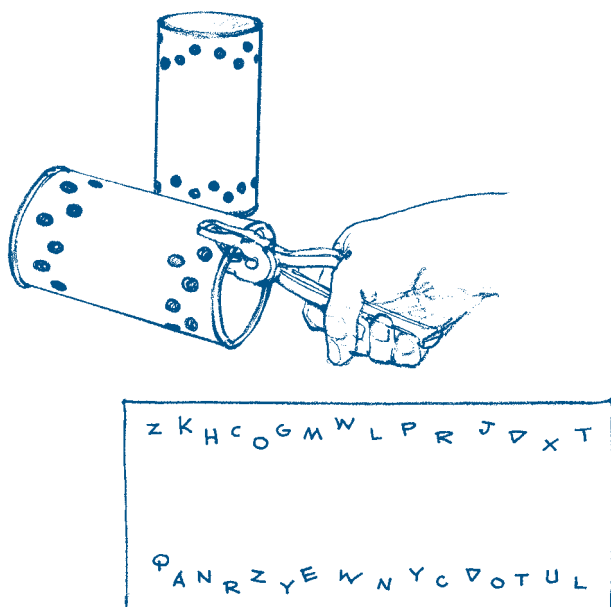
To decode the message, your friend merely has to change the font back to one that uses the regular alphabet. If he got your message on paper, he'll have to type it in first with the Dingbats font, and then change to another font to read it.

Picture Codes. People have been using picture codes since prehistory, before there were alphabets and writing. Have boys invent their own picture code and then write a den story. Here's an example of signs hobos used to communicate with one another while tramping across the country.



(Secret Code)

Crypto Machine

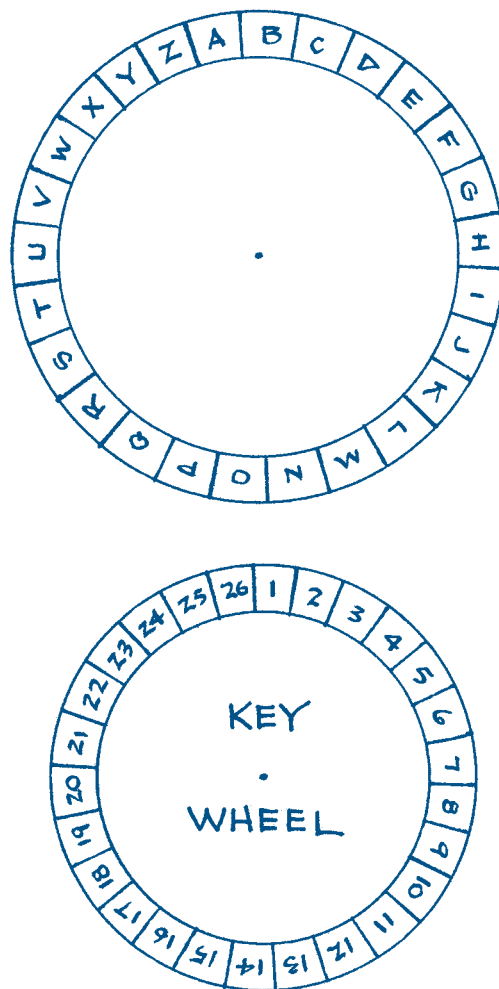


Open the ends of two empty cardboard frozen juice cans that are the same size. Punch holes in one can with a paper punch. You want to punch holes in the second can in the exact same places as the first can, so tape a piece of paper around the first can and mark where the holes are. Then wrap the paper around the second can and punch holes at the marked spots.

Now put a piece of paper inside one can, making sure it fits exactly. Write a message through the holes. Mark on the paper and can where the starting point is. Then mark the other can with the same starting point. Take the paper out and fill the spaces between the message with extra letters.

Give the second can to a friend and explain how to find the message (put the paper inside the second can and read the message through the holes). Then only you two will be able to send messages using your own unique crypto-machines!

Secret Code Wheel



Paste both wheels on light cardboard and cut out. Place the key wheel on the alphabet wheel and fasten with a brass paper fastener through the centers. Use to encode and decode messages in which each number stands for a letter. The receiver must have the same kind of wheel as the sender. To encode, the sender keeps his wheel in one position for the entire message. He tells the receiver how to position his wheel by writing something like "B-20," which tells the receiver to position the "B" next to the "20" before decoding.

Den Games

Charades. Players act out the syllables of a word or phrase while the others try to guess what it is. Divide the den into two teams. Write down a word or phrase and give it to one team. The team leaves the room for a quick rehearsal and then presents its act to the other team. Give each member of the other team a chance to guess what is being dramatized.

Start with simple charades such as single words (“football,” “toothpick,” “paperweight”). When boys have had some practice, try more complex charades, such as TV show titles, movie titles, or places.

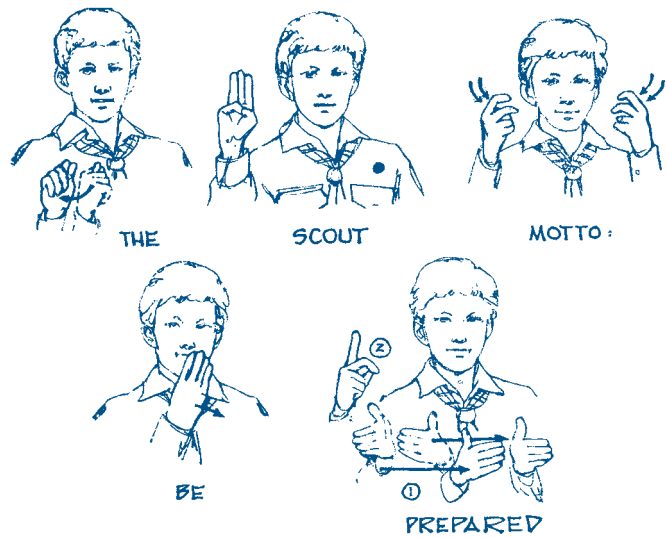
Following Directions. Give each boy a piece of paper the same size. The boys turn their backs to each other and can’t look at each other; no questions are permitted. The leader reads the directions below. There is no “right way” to do this. The game simply illustrates how people hear things differently.

- Fold the paper in half.
- Fold the paper in half again.
- Tear off the top left corner.
- Tear off the top right corner.
- Tear off the bottom left corner.
- Open up your paper.

Now have boys turn around and compare their handiwork!

“Hear, Hear” Game. This is a game of identifying sounds. The Webelos den leader or den chief produces the sounds from behind a screen or in another room while the Webelos Scouts listen. As each sound is produced, ask the boys to write what they think it is. Try some of these sounds:

- Sandpaper rubbed on glass
- Deck of cards dropped on a table
- Eggbeater whipping cream
- Golf ball or table tennis ball bouncing on a bare floor
- Slicing bread
- Cutting glass with a glass cutter
- Bursting a paper bag



Sign Language

People who can’t hear often communicate with each other by forming symbols with their hands and fingers. See the *Webelos Handbook* for illustrations showing the Cub Scout Promise in sign language alphabet.

PLACES TO GO

- Library, to learn how books are cataloged
- Newsroom of a newspaper, radio, or television station, to learn how news is collected and reported
- Police or highway patrol station, to see how a radar operates

RESOURCES FOR COMMUNICATOR ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys’ Life* magazine
- *Cub Scout Academics and Sports Program Guide*, No. 34299: Communicating

Help on the Communicator activity badge can be obtained at the monthly Cub Scout leader roundtable and from other Webelos den leaders. Also check the library and the Internet for information on communication and codes.



Helping Webelos Scouts make and do things that are within their abilities and that interest them is a reward in itself. In working on this activity badge, boys will gain confidence in themselves, develop their talents, and perhaps uncover an ability that will lead to a hobby in one of these areas.

To earn this activity badge, a boy must complete at least seven projects. Obviously, there is no way all projects can be completed in den meetings, so this is a good opportunity to involve families in the work boys do at home.

The *Cub Scout Leader Book* has some valuable tips for working with boys on craft projects, and the *Cub Scout Leader How-To Book* ("Crafts") has sections on leatherworking, woodworking, metal and tin crafts, and tools. Also see the projects in the *Webelos Handbook*.

Encourage boys to Do Their Best and praise them for their efforts. Be sure the boys understand how to use and care for tools and take safety precautions when necessary.

REQUIREMENTS

Do these:

1. Explain how to handle the tools that you will use for this activity badge safely.
2. With adult supervision and using hand tools, construct two different wooden objects you

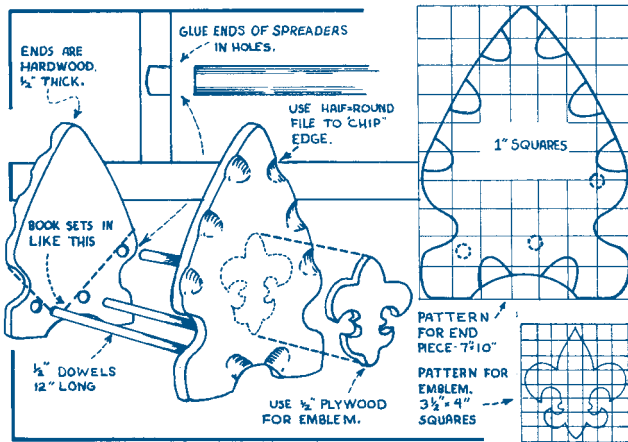
and your Webelos den leader agree on, such as the items listed below. Use a coping saw for these projects. Put them together with glue, nails, or screws. Paint or stain them.

Book rack	Animal cutouts
Shelf	Garden tool rack
Bulletin board	Lid holder
Weather vane	Mailbox
Tie rack	Birdhouse
Letter holder	Desk nameplate
Notepad holder	Letter, bill, and pencil holder
Toolbox	Bread box
Towel rack	Key rack
Recipe holder	Measuring cup rack
Lamp stand	Measuring spoon rack
Kitchen knife rack	
Kitchen utensil rack	
Napkin holder	

3. Make a display stand or box to be used to display a model or an award, or make a frame for a photo or painting. Use suitable material.
4. Make four useful items using materials other than wood that you and your Webelos den leader agree on, such as clay, plastic, leather, metal, paper, rubber, or rope. These should be challenging items and must involve several operations.

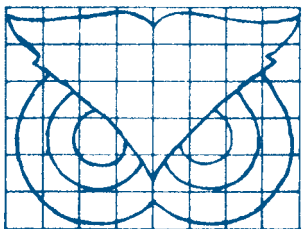
DEN MEETING ACTIVITIES

- Invite a qualified person to demonstrate the proper care and use of woodworking tools.
- Discuss finishing methods for wood projects—the importance of sanding and filling holes and scratches, and the different types of finishes available.
- Have a nail-driving contest. Give each boy a scrap of wood, nails, and a hammer. Let them practice driving nails straight.
- Ask a qualified person to demonstrate leathercraft and show how to use leatherworking tools.
- Ask a qualified person to demonstrate metalwork and show how to use tin snips and a vise.
- Build birdhouses and have a birdhouse-building contest.
- Make a tool chest or bench hook for sawing.
- Make leather covers for the Citizen logbooks boys made for the Citizen badge or for issues of *Boys' Life* magazine.
- Make gifts (toys, games, bookmarks, etc.) for needy children in your community, senior citizens, or shut-ins.
- If a holiday is near, make gift items for family members or friends.



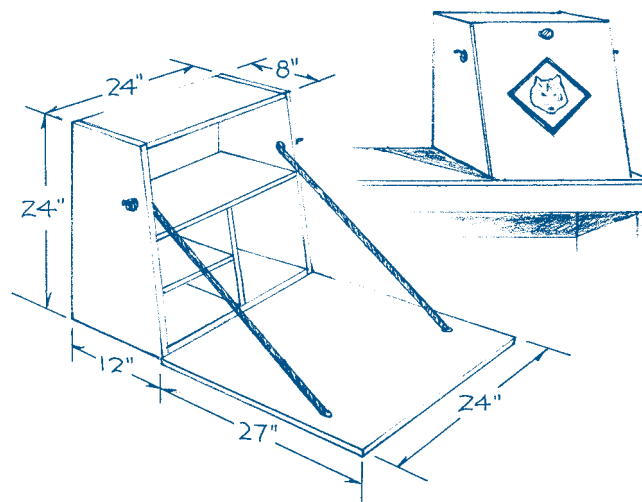
Book Rack

Use 7-by-10-by- $\frac{1}{2}$ -inch hardwood boards for ends. Sand edges smooth and “chip” outside edges with a half-round file. Three 12-inch-long, $\frac{1}{2}$ -inch dowels are used for spreaders, which are glued into holes made in the end. (Make sure that the holes don’t go through wood.) Use thin plywood for the Scout emblem. The Webelos emblem could be used, but the boys will soon be Boy Scouts. The book rack can be stained or painted.



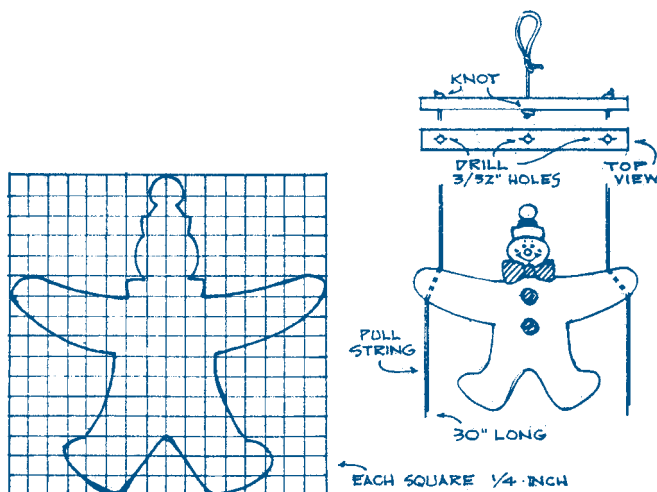
Owl Recipe Holder

Cut owl’s head and body from $\frac{1}{4}$ -inch plywood. Separate a spring-type clothespin into two halves. Screw the half with the spring to the owl’s body. Drill a hole at the top of the spring half for a wall hanger. Screw the other half of the clothespin to the back of the owl’s head. Reassemble the clothespin and it forms a beak to hold recipes or messages.



Storage Shelf

Here’s a handy storage shelf that boys can use to store their Scout mementos and books.

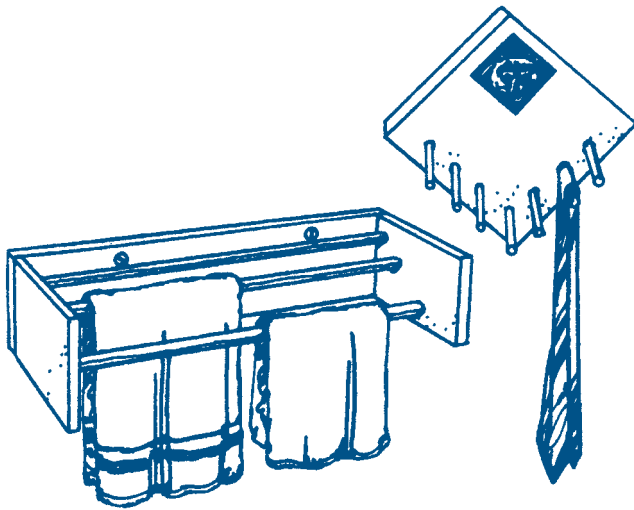


Climbing Clown

Pull one string at a time and the clown climbs; release the string and he slides down. Enlarge the pattern and trace it on a 4-inch-square piece of $\frac{3}{8}$ -inch wood. Cut out, sand, and decorate. Drill hand holes at angles as shown.

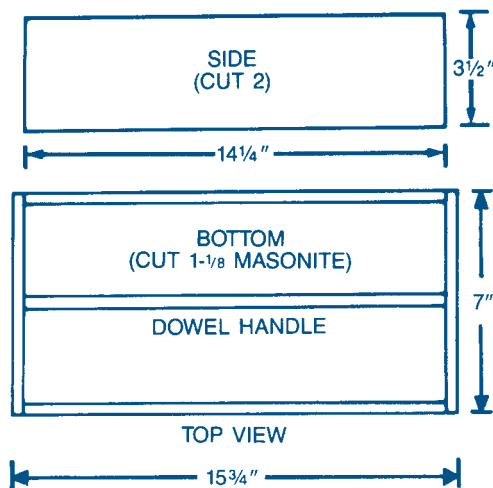
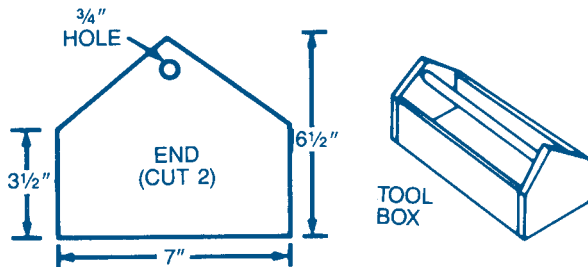
PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Demonstrate the proper use of hand tools such as a hammer, saw, and plane. Stress safety features.
- Demonstrate the proper use of leather tools, and show how to punch and lace.
- Display the examples of each boy’s projects.



Tie Rack and Towel Holder

Use 1-inch pine and $\frac{1}{4}$ -inch dowels. Don't drill all the way through the boards. For the towel holder, assemble the dowels in their holes before screwing the sides to the back. For the tie rack, use wood glue to fasten the dowels.



Tote or Tool Box

Materials:

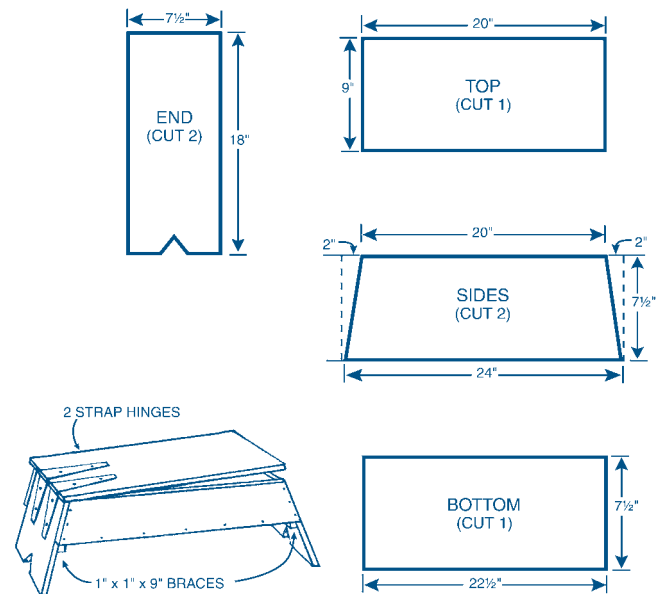
Two ends: $\frac{3}{4}$ -inch pine, 6 $\frac{1}{2}$ by 7 inches

Two sides: $\frac{3}{4}$ -inch pine, 3 $\frac{1}{2}$ by 14 $\frac{1}{4}$ inches

Bottom: $\frac{1}{8}$ -inch Masonite, 7 by 15 $\frac{3}{4}$ inches

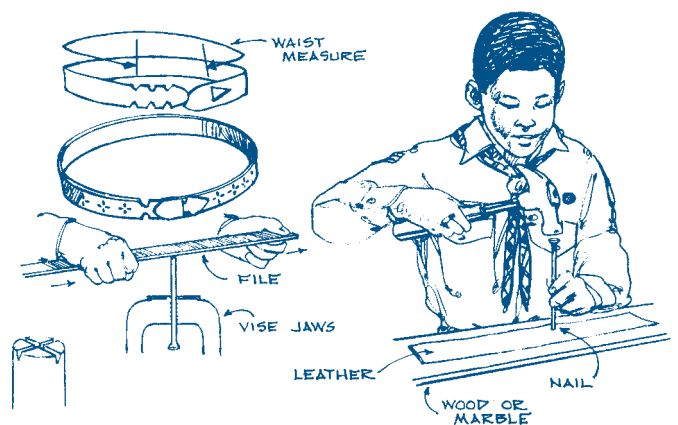
Handle: $\frac{3}{4}$ -inch dowel, 14 $\frac{7}{8}$ inches long

Cut wood pieces as indicated above. Drill a $\frac{3}{4}$ -inch hole, $\frac{1}{2}$ -inch deep, in each end piece for the handle. Nail one end of piece to sides, with side pieces on the inside. Insert handle before nailing on other end piece. Nail on the bottom. Sand smooth and shellac.



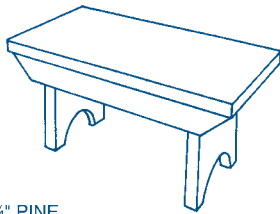
Storage Bench

Webelos Scouts can build this storage bench, decorate it, and use it as a seat at den meetings. The bench will hold boys' materials, tools, and den equipment. If benches are built to this pattern, they will stack neatly out of the way between meetings.

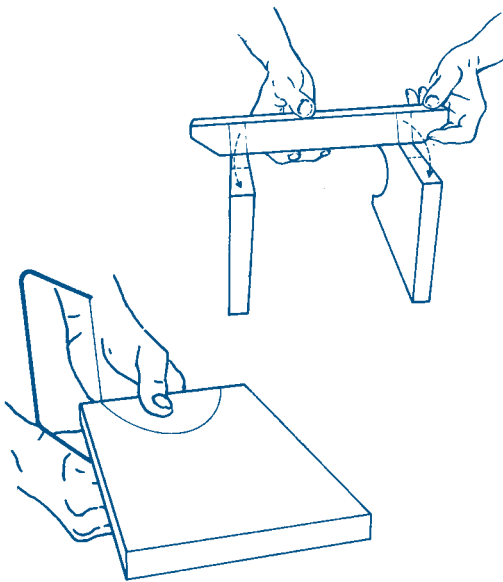
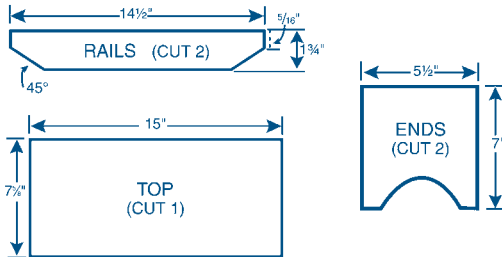


Buckleless Belt

Trim, and shorten if needed, an old leather belt, using a sharp knife on a wooden surface. Make notches and holes as shown. Make stamping designs by filing off points of old nails and filing designs on the flat nail tip. Dampen leather and stamp on design with a hammer.



ALL PIECES $\frac{3}{4}$ " PINE



Five-Board Stool

Back in colonial times, people used footstools to keep their feet off cold, drafty floors. Webelos Scouts can make a practical stool, too. You'll need the following:

One $7\frac{7}{8}$ -by-15-inch length of 1-by-8-inch board (for the top)

Two $5\frac{1}{2}$ -by-7-inch lengths of 1-by-6-inch board (for the ends)

Two rails, each $1\frac{3}{4}$ by $14\frac{1}{2}$ inches of 1-by-2-inch board

Sandpaper

Eighteen 2-inch finishing nails

Carpenter's glue, craft glue, or white glue

Nail set

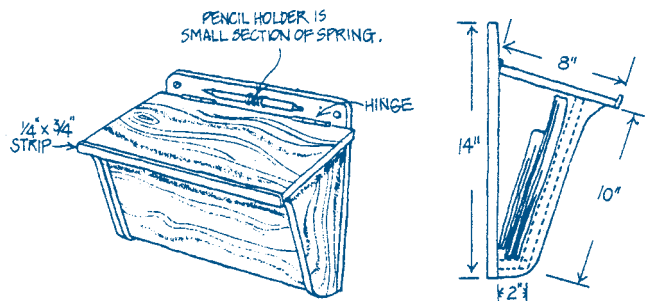
Wood putty

Drill with $\frac{1}{8}$ -inch bit

Stain or paint

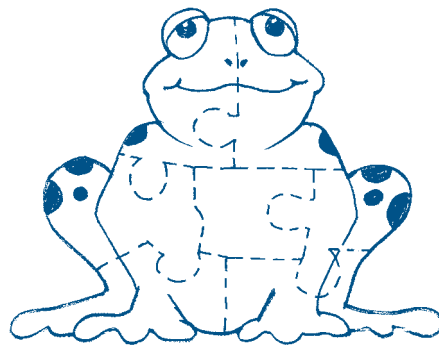
To assemble the stool:

1. Sand all surfaces to a satin finish, sanding with the grain and using a very fine sandpaper for the last sanding.
2. The stool will be assembled with two 2-inch finishing nails and glue at each joint. To prevent splitting the wood, first drill $\frac{1}{8}$ -inch holes through the rails. Then drive the nails through these holes and just enough into the ends to locate their position. Next, drill the same size holes in the ends for the nails, apply some glue, and drive home the nails with a hammer. Use a nail set to drive the heads of the nails slightly below the surface of the wood. Remove any excess glue with a damp cloth.
3. Attach the top of the stool to the rails and ends with two nails on each side, driving the nails into the rails and into the ends.
4. Fill any depressions with wood putty. Give the stool a final sanding, and then apply a coat of stain to finish. It may also be waxed when completed.



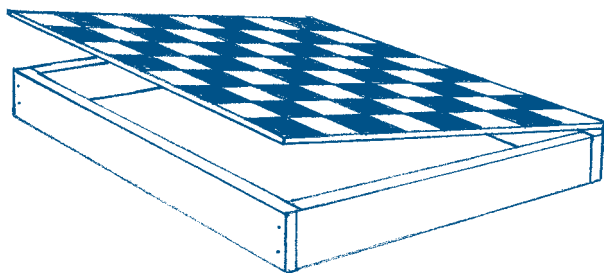
Wall Desk

This is an excellent gift for people to hang under a wall telephone and use for phone books or notebooks. Cut from $\frac{1}{2}$ -inch pine and assemble with nails and glue. Shellac, paint, or stain.



Wooden Puzzles

Enlarge the pattern and trace onto a piece of pine. Cut out the pattern. The dotted lines mark puzzle cut lines. Sand and paint. Try this with any picture from a coloring book.



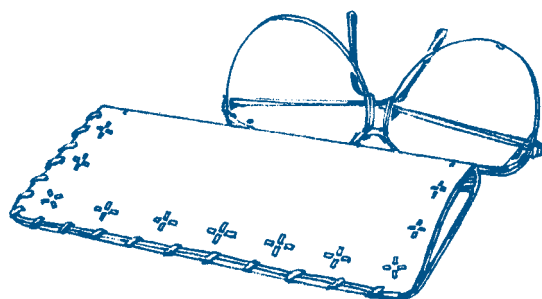
Checkers Game and Box

Boys will be more likely to pick up the pieces of this game when they have made the storage box that holds them!

Materials:

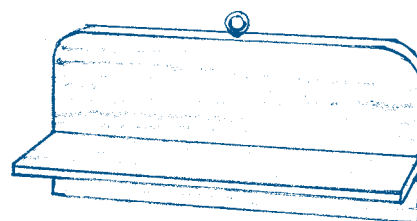
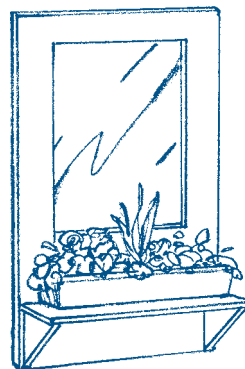
One piece of 1-by-10-by-9½-inch pine (bottom)
Four pieces of 1-by-2-by-9½-inch pine (sides)
One piece of ½-by-9½-by-9½-inch Masonite (top)
Two small hinges and screws
Eight 1½-inch finishing nails
Twelve ¾-inch brads
One ¾-inch diameter dowel rod, 9 inches long

Cut wood pieces to size. (Plywood could be substituted for the top and bottom.) On the top of the Masonite, draw eight squares each way (equals 1⅙ inch spacing on 9½-inch Masonite board). Then cut a small groove on each drawn line with a hacksaw or handsaw. Nail base and sides together. Paint the entire top of the box red. After the paint dries, paint alternate squares black. Paint the remainder of the box as desired. Varnish. Install top with hinges. Cut 24 ¼-inch-thick checkers from the dowel rod; paint 12 red and 12 black.



Leather Eyeglass Case

Measure eyeglasses and cut leather (a piece about 6 by 6 inches square) so glasses fit easily when the case is folded. Fold the leather and punch holes for lacing. Lace with the running stitch shown in the *Webelos Handbook*. With a file, cut a simple design into the head of a large nail; then file off the nail point. Dampen the leather and use a small hammer to tap the design in to the leather.

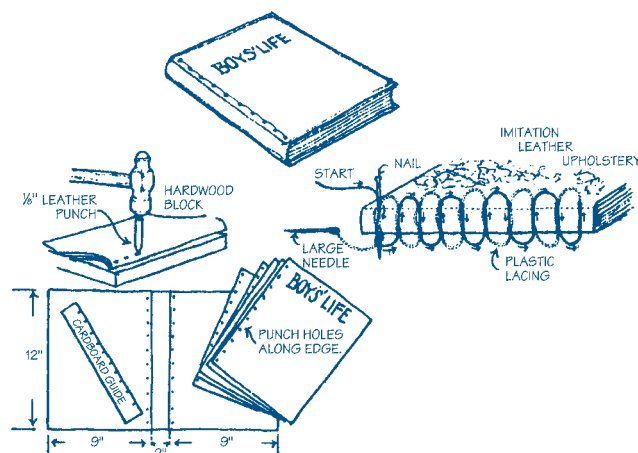


Knickknack Shelves

Materials: Scrap wood boards, large screw eyes, picture wire or strong cord

Cut backboard to desired size. Saw shelf board to match. Glue together. Reinforce the shelf by gluing a rectangular scrap of board centered below it; larger shelves should have a support piece at each end of shelf.

Turn a large screw eye into the center of the top edge of the backboard. Hang on a wall with a loop of picture wire or strong cord. You might choose to mount a mirror on the backboard shelf for added effect.

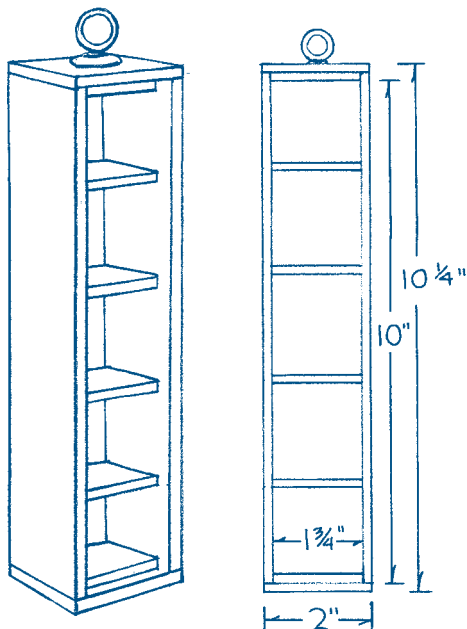


Boys' Life Binder

This binder will hold a year's worth of *Boys' Life* issues.

Materials: 12-by-20-inch piece of leather or imitation leather, 6 feet of plastic or leather lacing, ¼-inch leather punch, hammer, wood block, sack needle, cardboard gauge, nail

1. Use a cardboard gauge to mark an even row of 10 holes along the back edge of each magazine, 1 inch apart and $\frac{1}{4}$ inch from the edge. Place a hardwood block under the magazine while driving the punch through.
2. Punch two rows of holes down the center of the cover, spaced 2 inches apart, center to center. Use the same cardboard gauge to mark these holes.
3. Lace the magazines and cover together. Run half the length of lacing through the bottom hole. Using a sack needle, run both ends through the next hole (one from the top; one from the bottom) so that each end comes out on the opposite side. A nail inserted in the top hole will keep it all in line. Keep the lacing pulled tight and continue to the top hole.
4. Tie the lacing at the back of book with a square knot. Cut off excess. Trim the cover, allowing for an extra $\frac{1}{4}$ inch over the edges of the magazines.
5. The cover can be tooled with the words "Boys' Life" and the year.



Miniature Box

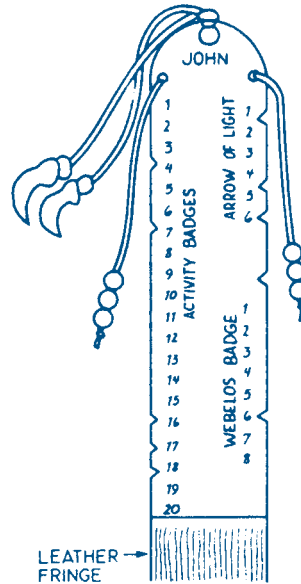
Materials: One wooden yardstick, plywood (2 by 10 by $1\frac{3}{4}$ inches), decorative hanger, glue, acrylic paint

Cut the yardstick into two 10-inch pieces (sides), two 2-inch pieces (top and bottom), and three $1\frac{3}{4}$ -inch pieces (shelves and supports). Split the $1\frac{3}{4}$ -inch pieces lengthwise to get six pieces approximately $\frac{5}{8}$ inch wide and $1\frac{3}{4}$ inch long. Four of these will be used as recessed shelves; the other two will be used as supports inside the top and bottom. Glue the sides

to the outside of the plywood back. Glue the top and bottom pieces to the side pieces. Glue two of the narrow pieces to the top and bottom on the inside of the box. Glue in the four shelves. Let the glue dry, and then sand. Paint box desired color. Add hanger to the top.

Webelos Coupstick (Coo-Stick)

The coupstick is a wooden scorecard that makes an attractive record of a Webelos Scout's advancement in the den.



Cut it from $\frac{1}{4}$ -inch pine so it measures approximately $1\frac{1}{2}$ inches wide by 12 inches long. The numbers can be burned into the wood or painted on. Leather thongs can be used to hang beads and other decorations.

As the boys earn activity badges, notch them on the coupstick. Also notch the Arrow of Light Award requirements as boys complete them. Add beads as the boy takes part in

den or pack activities or joint den/troop activities. The coupstick can be kept at the den meeting place, except on pack meeting night, when they can be displayed on a coupstick display board. The stick can be presented to the boy at graduation.

PLACES TO GO

- Furniture factory, cabinetmaker's shop, lumberyard, sawmill, woodworking or carpentry shop
- Metalworking shop
- Tannery or leather goods manufacturer

RESOURCES FOR CRAFTSMAN ACTIVITY BADGE

- *Boys' Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832

Help on the Craftsman activity badge can be obtained at the monthly Cub Scout leader roundtable.



The Engineer activity badge involves projects that will give Webelos Scouts some insight into engineering. Engineers apply the laws of physics and chemistry to solve problems. There are many branches of engineering, including aeronautical, chemical, civil, electrical, geological and mining, industrial and management, mechanical, safety, and sanitary engineering. Within these branches of study, engineers do many tasks related to research, development, design, maintenance, sales, and management. Boys can learn more about the specifics of these engineers and what they do by searching online or visiting the library.

With careful planning, den meetings on the Engineer activity badge can heighten each boy's concept of manufactured objects—from mere acceptance or a lack of interest to excitement and wonder.

REQUIREMENTS

Do both of these:

1. Talk to an engineer, surveyor, or architect in your area about the different occupations in engineering. Create a list that tells what they do.

2. Draw a floor plan of your home. Include doors, windows, and stairways.

And do four of these:

3. Visit a construction site. Look at a set of plans used to build the facility or product. Tell your Webelos den leader about these. (Get permission before you visit.)
4. Visit a civil engineer or surveyor to learn how to measure the length of a property line. Explain how property lines are determined.
5. Tell about how electricity is generated and then gets to your home.
6. Construct a simple working electrical circuit using a flashlight battery, a switch, and a light.
7. Make drawings of three kinds of bridges and explain their differences. Construct a model bridge of your choice.
8. Make a simple crane using a block and tackle and explain how the block and tackle is used in everyday life.
9. Build a catapult and show how it works.
10. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Mathematics.

DEN MEETING ACTIVITIES

- Have someone explain how to read topographic maps and discuss how they are used.
- Have a builder or carpenter show and explain a floor plan of a house.
- Make a block and tackle. Be sure to explain what it is used for.
- Make catapults and demonstrate them at a pack meeting by shooting candies or marshmallows into the audience.
- Discuss property lines. Have a surveyor show how property lines are determined and measured.
- Discuss different types of engineers. If one can visit your den, let him or her describe briefly what his or her duties are.
- Have boys collect pictures of bridges and note the differences in construction.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display sketches of electrical transmission, floor plans, and bridges.
- Display model bridges, block and tackle, and catapults.
- Using bricks and cardboard, demonstrate the way bridges are made. (See the *Webelos Handbook*.)
- Demonstrate the use of a catapult. Build one large enough so that Webelos Scouts can hurl wrapped candy into the audience at the pack meeting.
- Demonstrate how a block and tackle works.
- Have someone give a report on the different types of engineers and their duties.

PLACES TO GO

- Visit a construction site and see the plans that builders are following. Talk with the project engineer.
- Visit a city planning office and talk with an engineer or surveyor. Let the boys look through the surveyor's manual and learn how to read a surveyor's rod.
- Tour with a knowledgeable guide a house that is under construction.
- Visit an operating drawbridge, grain elevator, ship-loading facility, or other large industrial operation that uses large cranes or other lifting equipment.
- Visit the municipal waterworks, sewage treatment plant, or a television or radio station and talk with the engineers who work there.
- Visit an electric generating or transmitting plant.
- Look at some local bridges. Discuss what kind they are and how they were made.

Simple Switch

A switch acts as a kind of bridge along an electrical circuit on which electrons travel. When the switch is closed, the electrons move freely on the electric circuit and complete the electrical connection. When the switch is open, the electrons stop and the connection is incomplete.

Materials: Spring-style clothespin, one D battery, aluminum foil, flashlight bulb, masking tape, scissors, ruler, testing material such as rubber bands, coins, paper clips

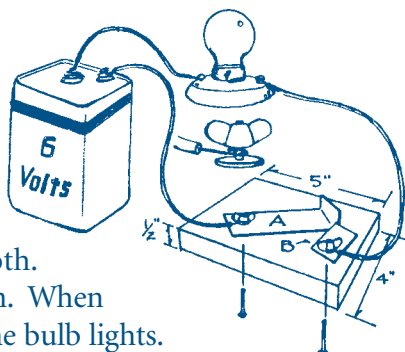
Cut a rectangle of aluminum foil 12 by 24 inches. Fold in half lengthwise five times to form a thin strip 24 inches long. Cut the strip in half to form two 12-inch strips. Tape one end of each of these strips to the opposite ends of the battery. Wrap the free end of one of the foil strips around the base of the flashlight bulb; hold foil in place with the clothespin.

Test the electrical conductivity of several different materials by touching the metal tip of the flashlight bulb to one side of the testing material while touching the free end of the second foil strip to the opposite side of the same testing material. Which objects cause the light bulb to glow?

Light Signaler

Materials: Miniature socket with a flashlight bulb, 6-volt battery with two terminals on top, wire, block of wood, tin can, tin snips, and bolts with washers and wing nuts.

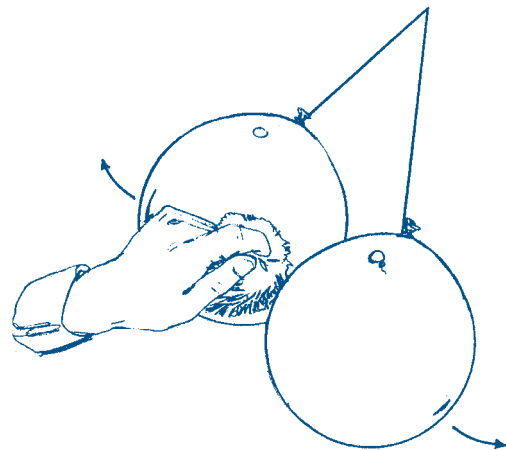
Cut tin pieces A and B and smooth sharp edges with file or emery cloth. Assemble as shown. When you close the key, the bulb lights.



Static Electricity Tricks

Static electricity is made up of electrons that don't move, unlike the current electricity discussed above. You can generate static electricity yourself:

- Run a comb through your hair on a dry day and afterward it will pick up bits of paper.
- Rub a balloon against your clothing and then it will "hang" on a wall.
- Wearing socks, but not shoes, drag your feet along a carpet, and then touch a metal object, such as a doorknob. What happens?
- To see how two electrified objects will repel each other, tie two balloons on a string. Hang them side by side and stroke both of them on a clothing or piece of fur. Watch how they move apart.

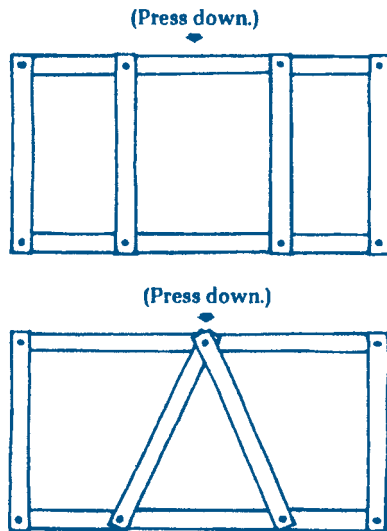


Bridges

Ever since humans found that roads would give them the ability to travel from one place to another more easily and more quickly, they have been faced with the problem of crossing streams, rivers, gullies, and canyons. So they invented bridges—structures that span such geographic obstacles and make the way easier and more direct. At first, two basic geo-

metric forms were used for bridges—the arch and the triangle—and they were built of stone and wood. Today, engineers use steel plates, wire cable, angles, I-beams, H-beams, and concrete to build the bridges we see reaching across interstate highways, rivers, and canyons.

Bridge design and construction depend on the kind of obstruction and how wide it is, the load the bridge must carry, the kind of ground or rock found at the site, and the cost.



Demonstration Bridges. Use stiff cardboard or thin wood and brass fasteners to put together the shapes shown. Have Webelos Scouts experiment to see which type is stronger.

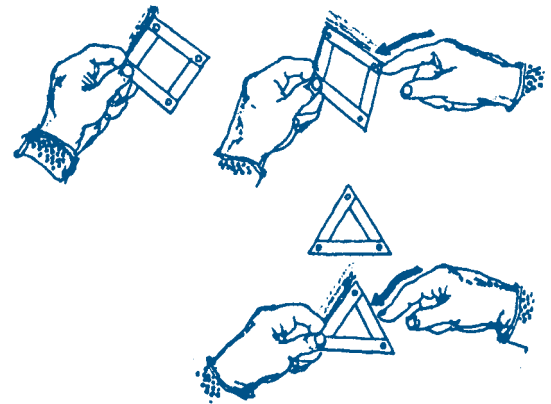
Strength of a Hollow Tube. This demonstration shows why columns—which provide added strength—are used in engineering and the building of bridges. Begin by laying one brick on a plastic foam cup that is lying on its side. The cup collapses. Then place another cup on its brim and add bricks (two or three) until it is crushed. Finally, glue four cups together, rim-to-rim and bottom-to-bottom, with white glue and allow the glue to dry. Place bricks (usually four) on top until the structure crushes.

Strength of an Arch

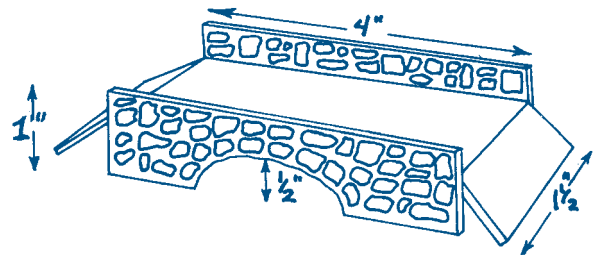
Materials: Two strips of thin cardboard, small jar, about six marbles, six books that are all the same size

Place the books in two stacks and lay the two strips of cardboard across them to form a bridge. Press down on the bridge with your finger and notice how weak it is. Now remove one of the cardboard strips and curve it into an arch. Wedge the arch between the stacks of books and place the other strip across the arch between the books. Now test your bridge for

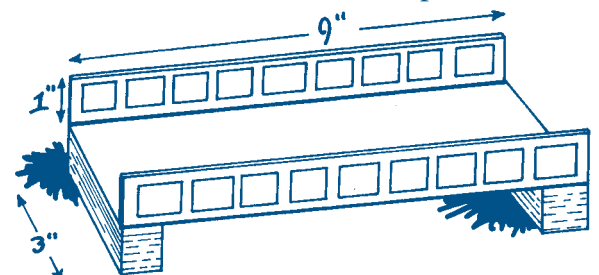
strength. Place the jar on the bridge and put marbles into it one by one. You'll see that the arch will support a lot more weight than a simple bridge.



Strength of a Triangle. This demonstration shows why the triangle is the basis for many bridges. Using heavy cardboard strips and paper fasteners, make a rectangle as shown. Demonstrate how easily it can be collapsed by pushing on a corner. Now construct a triangle. Does the triangle collapse too?

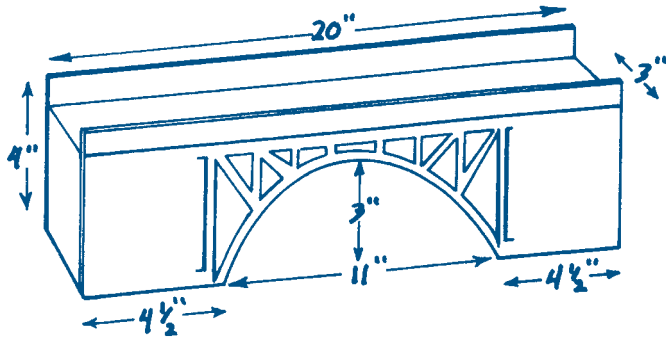


Stone Arch Bridge. Make this bridge with three pieces of cardboard glued together. The sides are 1 inch high and 4 inches long. The arch is $\frac{1}{2}$ by $1\frac{1}{2}$ inches. The floor and ends are one piece, with the ends scored and bent. The floor is $3\frac{3}{8}$ inches long. Each end is at least 1 inch long and $1\frac{1}{2}$ inches wide. Draw the outlines of stones with a pencil.

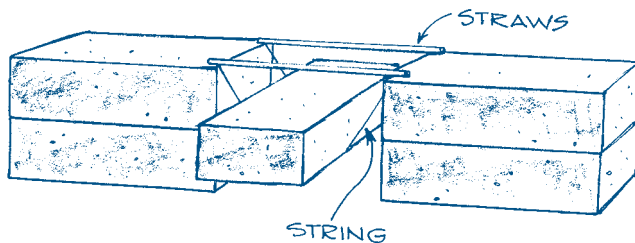


Steel Plate Girder Bridge. This is typical of the reinforced steel plate bridges used for roads and railroads. The bridge floor and sides are made from a 5-by-9-inch piece of cardboard. The floor is 3 inches wide and 9 inches long, with the 1-inch sides formed

by bending the cardboard up. The steel angles that would be used to reinforce the sides are simulated by drawing squares on the sides. Abutments are made from six layers of $\frac{5}{8}$ -by-3-inch cardboard glued together. Pencil dots for rivets, and pencil shading along the sides to give the bridge a three-dimensional effect.



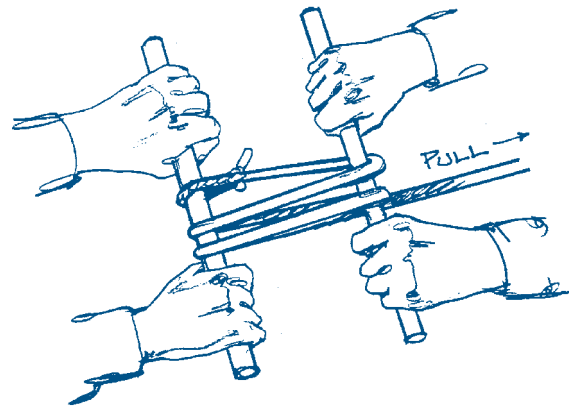
Modern Steel Arch Bridge. Steel arch bridges are used by railways to span deep canyons. When the canyon is rock, no concrete abutments are needed. Make this bridge with three pieces of cardboard. The deck is 3 inches wide and 20 inches long. Sides (or railings) are $\frac{1}{2}$ inch high. Make the sides and deck as one piece, and then score and bend. Lay out one side and one end for the bottom unit as one piece on cardboard. The sides are 4 by 20 inches; the ends are 3 by $3\frac{1}{2}$ inches. The arch opening is 11 inches long by 3 inches high. Lay out vertical steel beams on 1-inch centers and mark them with a black felt-tip pen.



Bridge Challenge

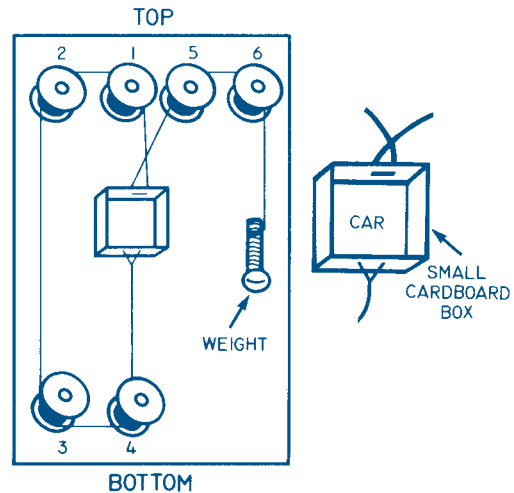
Materials: Lots of paper straws, string, several bricks

Challenge boys to create a bridge with straws and string that will support a brick between two stacks of bricks. After lots of bent straws, explain the trick. Run the string through a straw. Leave lots of slack, and tie the ends together using a strong knot. Make another string/straw combination with a piece of string that is the same length as the other. Place the straws between the brick stacks as shown, and you will be able to support your brick on the strings.



Block and Tackle Challenge

Here's a fun way to show how a block and tackle works. Use two lengths of broomstick with a rope tied to one. Wrap the rope around the sticks as shown, with the sticks about 20 inches apart. Have two of your biggest den members grasp the sticks and try to keep them apart while the smallest den member pulls on the rope. He should be able to pull the sticks together no matter how hard the others try to keep them apart. It's easy because his force, or effectiveness, is multiplied by the number of times the rope is wrapped around the broomsticks. The other two boys don't have a chance!

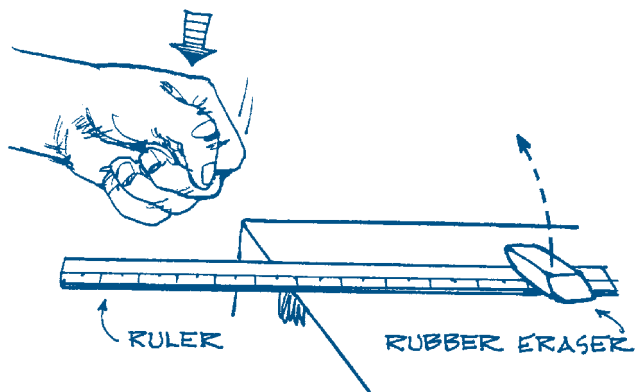


Model Elevator

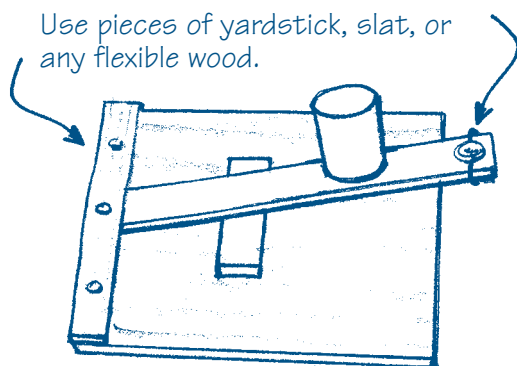
Use a small cardboard box for the elevator car. To keep it from swinging, tie a string to the bottom as well as the top. Drive nails through spools into a board for pulleys, as shown. Slip the string of the car over the spools marked 1, 2, 3, and 4, winding the string several times around spool 2. This spool will be the windlass. The string should be fairly taut when it is in place.

Tie a second string to the top of the car and run it over spools 5 and 6. Fasten a small weight (such as a screw) to this string to balance the weight of the car. When you turn the windlass (spool 2) with your fingers, the car will go up and down.

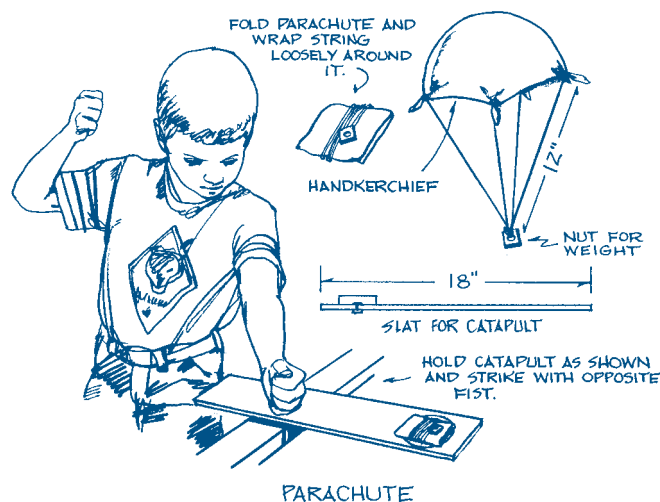
Catapults



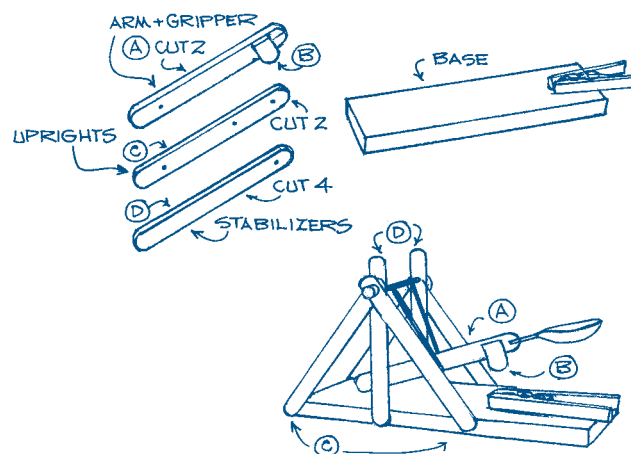
Catapult Experiment. Use a ruler and an eraser or other soft projectile. Have 3 inches of the ruler extend over the edge of a table, and have a boy strike the short end of the ruler. How far does the projectile go? Now have him try it with 6 inches of the ruler over the edge, hitting it with the same force. Is there a difference in the distance? Why?



Simple Catapult and Catapult Catch. Build the simple catapult as shown in the illustration. Glue a paper cup to the arm. Place a button on the end of the arm; if necessary, slide a rubber band over the end of the arm beneath the button to keep it from slipping. With your thumb, press down on the free end of the arm, and then let it go. Try to exert just enough pressure on the arm to have the button land in the cup.



Parachute Game. Make parachutes from handkerchiefs to launch from a catapult. See whose stays in the air the longest or who can land closest to a target.



Tongue Depressor Catapult

Materials:

- Eight ½-inch-wide craft sticks
- Plastic spoon
- 1-by-2-by-8-inch wood lath
- Spring-type clothespin
- Rubber band
- Plastic drinking straw
- Two corks
- Two screws, ½ inch long or less
- Two nails, 2 inches long
- One roofing nail

Arm (A): Glue two craft sticks together, directly on top of one another. Drill a hole, through both thicknesses, an inch from one end. This hole should be large enough to turn freely on a nail. Drill another hole ½ inch from the other end and saw a slot from this hole to the end of the stick. Break the spoon about 1 inch down from the bowl; this should slide into the slot. Cut a small notch in the bottom edge of the arm, about 1½ inches from the end with the slot.

Gripper Piece (B): Cut off a ¼-inch piece from one stick. With strong glue, glue the gripper piece to the arm, between the slot and notch.

Uprights (C): You'll need two sticks. Drill three holes in each stick. Drill the first hole ½ inch from the end (this will be for the screws). Drill the second hole 1¼ inches from the same end. Drill a third hole 1¼ inches from the other end. (Second and third holes are for nails.)

Stabilizers (D): You'll need four sticks. Drill one hole ½ inch from one end. Repeat for the other three sticks.

Base: With sandpaper, sand all the edges of the furring strip. Drill pilot holes from screws 3 inches from one end, on the edge of the base, as shown.

Bushings: Cut two pieces of straw to fit the catapult axle, between the catapult arm and uprights.

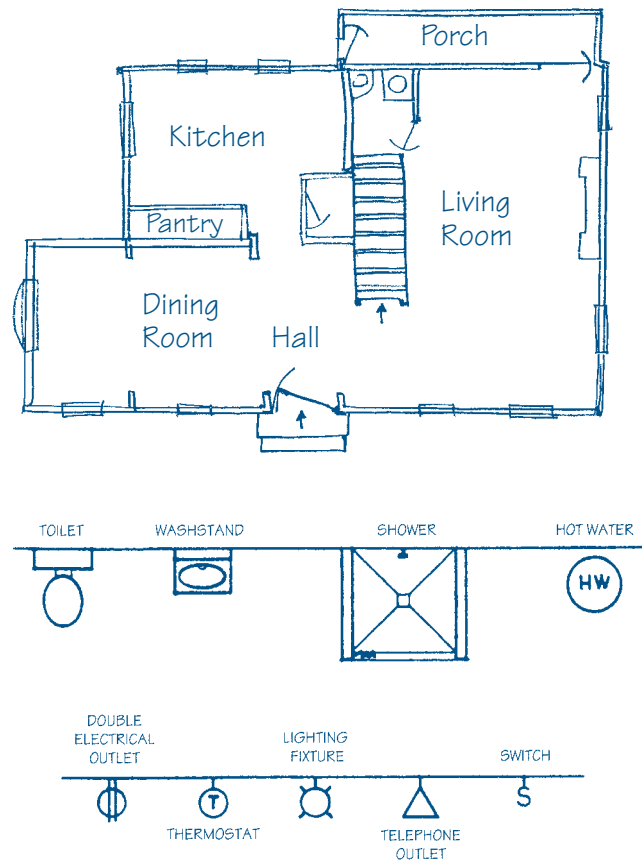
Assemble the Catapult: Lightly screw the uprights to the sides of the base, with single hole end up. Thread a long nail through the two stabilizers, through the top hole of an upright, across the space, through the other upright, and then through the two stabilizers, as shown. Push a cork onto the end of the nail, to hold it in place and to protect your fingers.

Thread a second nail through the middle slot of the upright, a bushing, the catapult arm (with slot end toward the longer end of the base, and the gripper piece pointing downward), through another bushing, and through the second upright. Push cork onto the end of the nail.

Hot glue (with adult supervision) the stabilizers at angles against the sides of the base. Tighten the screws on the uprights.

Position the clothespin so that it grabs the gripper piece firmly. Using a roofing nail, nail the clothespin through the spring to the base. Slide the spoon into the arm slot.

Attach rubber bands to the top nail and stretch it to the notch in the catapult arm. Cock the arm, load, and fire.



Floor Plans and Blueprint Symbols

Boys draw a floor plan of their home for requirement 2. Have them add dimensions to their basic floor plans, making measurements at home. And then boys may want to use the blueprint symbols below to add some professionalism to their floor plans.

Engineer Neckerchief Slide

Have boys cut gear shapes from cardboard, sheets of craft foam, or thin strips of wood. Paint or decorate as desired. Glue several shapes atop each other to resemble the Engineer activity badge. Glue a piece of ½-inch-diameter PVC pipe to the back to hold the neckerchief.

RESOURCES FOR ENGINEER ACTIVITY BADGE

- *Boys' Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832
- *Webelos Handbook*, No. 33452
- *Surveying* merit badge pamphlet, No. 33327

Help on the Engineer activity badge can be obtained at the monthly Cub Scout leader roundtable. Also check with local engineering societies for materials and resources.

FAMILY MEMBER

COMMUNITY GROUP



The Family Member activity badge will help promote better understanding within families. It provides opportunities for the Webelos Scout's family to spend time together in worthwhile activities.

Requirements include learning the meaning of the word "family" and gaining an understanding of what is meant by "duty to family." It also calls for a safety and security inspection of the home and the sharing of chores and responsibilities. Boys will learn how to identify ways their families can save money.

Optional requirements will involve the Webelos Scout in developing a home energy-saving plan, learning why it is important to dispose of garbage and trash properly, helping with laundry, and planning and preparing meals.

REQUIREMENTS

Do all of these:

1. Tell what are meant by family, duty to family, and family meetings.
2. Make a chart showing the jobs you and other family members have at home. Talk with your family about other jobs you can do for the next two months.
3. Make a list of some things for which your family spends money. Tell how you can help your family save money.
4. Plan your own budget for 30 days. Keep track of your daily expenses for seven days.

5. Take part in at least four family meetings and help make decisions. The meetings might involve plans for family activities, or they might be about serious topics that your parent wants you to know about.
6. With the help of an adult, inspect your home and surroundings. Make a list of hazards or lack of security that you find. Correct one problem that you found and tell what you did.

And do two of these:

7. With the help of an adult, prepare a family energy-saving plan. Explain what you did to carry it out.
8. Tell what your family does for fun. Make a list of fun things your family might do for little or no cost. Plan a family fun night.
9. Learn how to clean your home properly. With adult supervision, help do it for one month.
10. Show that you know how to take care of your clothes. With adult supervision, help at least twice with the family laundry.
11. With adult supervision, help plan the meals for your family for one week. Help buy the food and help prepare three meals for your family.
12. While you are a Webelos Scout, earn the Academics belt loop for Heritages.
13. Explain why garbage and trash must be disposed of properly.

DEN MEETING ACTIVITIES

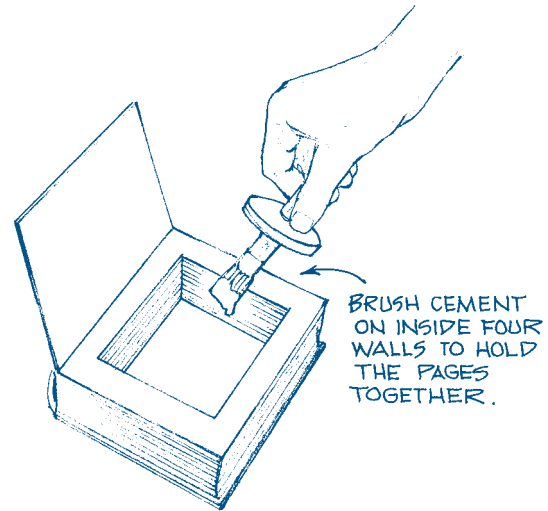
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| • Discuss the meaning of "family," "duty to family," and "family meeting." | • plan. | • Identify safety hazards inside and outside your home. |
| • Make a chart of family responsibilities. Make a poster of your family tree, using snapshots of close family members. | • Have an energy-wasters hunt (page 56). | • Invite a representative from the sanitation and refuse disposal service to explain how trash is disposed of and why proper disposal is important. |
| Note: Be sensitive to boys who may not have a traditional family structure. | • Plan some well-balanced and healthy menus. | • Invite speakers to a den meeting to discuss their family heritage and why it is important to them. |
| • Discuss ways to conserve home energy and how to develop an energy-saving | • Discuss the Home Safety Checklist found in the <i>Webelos Handbook</i> and talk about ways to provide home security. Make posters that promote home safety. | |

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display charts of family responsibilities and posters of family trees.
- Distribute copies of the Home Safety Checklist (*Webelos Handbook*). Explain ways to save energy, and hand out copies of “Home Energy-Saver’s Quiz” (pages 56–57).
- Display a chart of well-balanced and healthy meals or menus.
- Explain ways to provide home security.
- Explain why garbage and trash must be disposed of properly.

Common Sense Tips for Home Security

1. Always keep doors and windows locked. Windows can be locked partially open, but not wide enough for anyone to enter.
2. Don’t hide door keys in the mailbox, under the mat, or in other common locations. Burglars usually look in these places first.
3. Have sturdy locks on doors. Good doors and locks will not prevent forced entry, but they will delay it. Most burglars are in a hurry and will not spend the time to break a sturdy lock.
4. Never open your door to anyone until you are sure who it is. A peephole in the door will let you see who is there.
5. Never volunteer information about who is home and who is away when someone telephones or comes to the door.
6. Remember, burglars look just like anyone else.
7. Be cautious of people who say they are meter readers, telephone company personnel, and people from other service agencies. Don’t hesitate to ask for identification. They usually will drive a marked vehicle and will carry identification.
8. Be familiar with the credentials of your local police. Police uniforms can be rented at costume shops. Don’t rely on a badge. Police officers will carry some type of wallet card.
9. Help strangers, but don’t let them inside your home. If someone’s car breaks down or if there is a minor accident in front of your home, offer to call the police, a taxi, or family member while the stranger waits outside your locked door.
10. Some neighborhoods have a neighborhood citizen alert program. Neighbors working together in this way will help discourage criminals.



Personal Safe

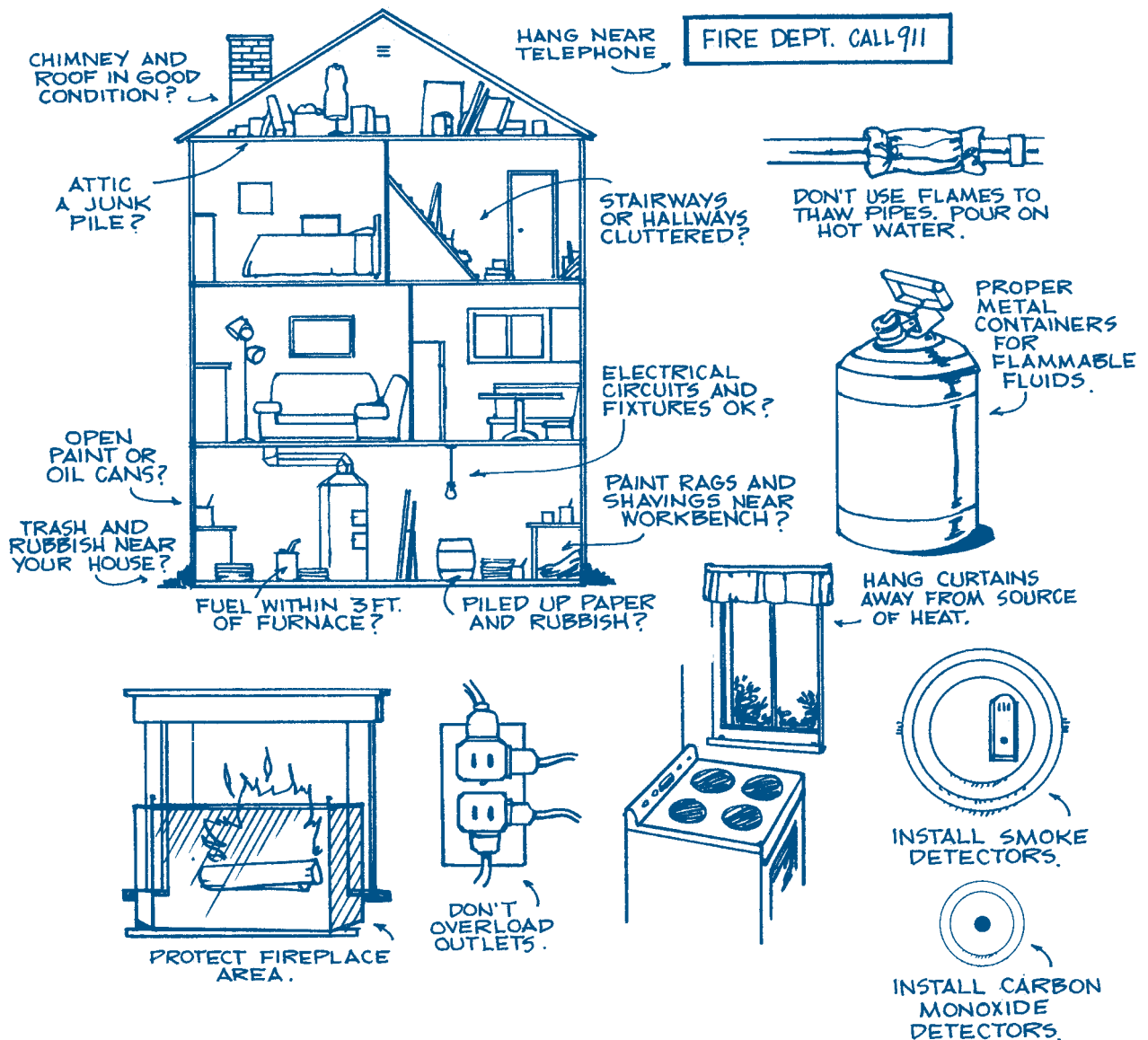
Turn an ordinary book into a secret safe!

Materials: Old hardcover book, hobby knife, ruler, rubber cement, pencil

Cut a piece of cardboard the same size as the inside pages of your book. Using the ruler, draw a rectangle 1 inch inside the border of the page. Cut a center rectangle from the cardboard. This open frame will become your stencil.

Place the stencil over the first page of the book. Use the stencil and hobby knife to cut through several pages at a time. Turn pages and repeat as many times as necessary to carve out an empty space inside the book.

Brush rubber cement along the four walls that line the empty space. This will hold the pages together. Let the rubber cement dry. Now you have a safe and secret place to hide your valuables.



Home Safety Check

Home accidents are a leading cause of accidental death. Discuss the hazards listed below, and then form two teams, one to work outside and one inside. Tour the area, looking for these and other safety hazards.

Outside Team

- Is trash (broken glass, boards with nails in them, empty cans, etc.) strewn around the outside of the house or garage?
- Are insecticides stored in a safe place, out of the reach of small children?
- Are flammable substances, such as paint, thinner, gasoline, or charcoal starter, stored in marked containers and kept in cool, well-ventilated places, away from any flame?
- Are sharp tools in a locked cabinet?
- Are power-tool cords unplugged and out of reach of small children?

- Are roller skates, skateboards, and wheel toys out of the driveway and walk areas?
- Are oily rags lying about?
- Is the door on an unused refrigerator or freezer locked or removed?
- Are all outside lights in working order?
- Are crawl spaces in the house's foundation covered securely?
- If you have a swimming pool, is there a gate around it and are gate latches childproof?
- Are trash and garbage containers securely covered?
- Is your sidewalk free of uneven areas or broken cement?

Inside Team

- Are curtains and furniture placed away from air conditioners and heating elements?
- Does the fireplace have a screen?
- Are large glass doors equipped with decals as a safety reminder?

- Are carbon monoxide detectors installed near every bedroom?
- Are electrical appliances unplugged when not in use?
- Are electrical cords in good condition?
- Are electrical wires on the floor where people can walk on them or trip on them?
- Are insecticides stored in a safe place, out of the reach of small children?
- Are poisonous substances in childproof containers?
- Are all prescription medicines in childproof containers?
- Are the expiration dates on medicine current?
- Are nonprescription medicines stored in medicine cabinets?
- Are matches stored in rodent-proof and child-proof containers?
- Are old newspapers close to a heater or other source of flame?
- Are smoke detectors equipped with working batteries?
- Are fire extinguishers operable?
- Are the telephone numbers of the fire department and paramedics clearly displayed on or beside each phone?
- Are carpets and floor coverings free of tears and holes?
- Are hallway lights in working order?
- Are bathtubs and shower stalls equipped with nonskid tape or mats?
- Are knives and sharp tools put away where children cannot get to them?

After the safety check is completed, assemble both teams and report. Discuss ways to correct the hazards.

Share a Family Project

All family members can share in the following projects. Try one of them instead of watching television.

- Plant a tree, shrub, or bulbs.
- Pick and prepare fruit or garden produce.
- Can, preserve, or freeze fruits and vegetables.
- Bake cookies.
- Make popcorn balls.
- Make a scrapbook.
- Make gifts or greeting cards.
- Model objects out of clay.
- Catch fireflies to observe them, and then release them unharmed.
- Play a game or put together a puzzle.
- Sing songs.
- Take a walk.
- Read aloud favorite stories or poems.

Energy-Wasters Hunt

Before the den meeting, set up examples of energy waste in several rooms. Give each Webelos Scout paper and pencil and tell them to find the waste. Allow about 5 minutes. The winner is the boy with the longest correct list.

Here are some examples:

- Light on in empty room
- Television on in empty room
- Refrigerator door open
- Water dripping in sink
- Thermostat set too high
- Outside door open in cold or hot weather
- Storm window open in cold or hot weather

Home Energy-Saver's Quiz

More than 37 million homes in the United States are insufficiently winterized. By answering the questions below, you can see where your energy dollars are going.

1. What is your thermostat setting?
 - If your thermostat setting is 68 degrees Fahrenheit or lower during the daytime in winter, score 6 points; 5 points for 69 degrees; 4 points for 70 degrees. If your thermostat setting is higher than 70 degrees, score 0.
 - If your house has central air-conditioning and you keep the temperature at 78 degrees Fahrenheit in the summer, score 5 points; 4 points for 77 degrees; 3 points for 76 degrees. If your thermostat setting is lower than 76 degrees, score 0. If you do not air-condition your house, score 7 points.
 - In winter, if you set your thermostat at 55 degrees Fahrenheit or lower at night, score 10 points; 9 points for 56 degrees; 8 points for 57 degrees; 7 points for 58 degrees; 6 points for 59 degrees; and 5 points for 60 degrees. If your thermostat is set higher than 60 degrees at night, score 0.

2. Is your house drafty?

To check for drafts, ask an adult to hold a flame (candle or match) about an inch from areas where windows and doors meet the frames around them. If the flame doesn't move, there is no draft around your windows, and you score 10 points. If the flame moves, score 0.

If there is no draft around your doors, score 5 points. If there is a draft, score 0.

If you have a fireplace and keep the damper closed or block the airflow when the fireplace is not in use, score 4 points. If you do not have a fireplace, add 4 points.

3. Is your floor insulated?

If you have unheated space under your house (such as a crawl space) and if there is insulation under your floor, score 10 points. If there is no insulation, score 0. If you have a heated or air-conditioned basement or if there is no space under your house, score 10.

4. Do you have storm windows?

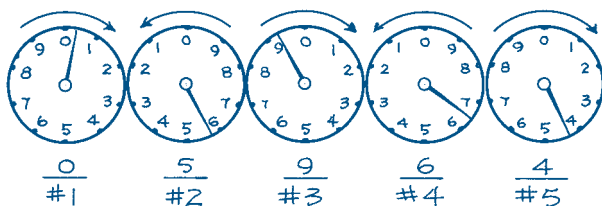
If you live in an area where the temperature frequently falls below 30 degree Fahrenheit in winter and you use storm windows, score 20 points. If you don't have storm windows, score 0.

5. Do you clean or change furnace filters regularly?

If so, score 4 points. If your furnace was cleaned and inspected recently, score 4 points.

TOTAL SCORE: _____

Your "energy quotient" is the total number of points scored. If your score is less than 90 points, you probably can save fuel and money on the heating and cooling of your home.



Electric Meters

Read your electric meter once a week for a month to compare usage, which is measured in kilowatt-hours. When reading dials, use the number that the dial just passed—the lower number.

PLACES TO GO

- Trash collection service or sanitation dump
- Several grocery stores, to compare prices
- Public utility company to learn about energy conservation programs

RESOURCES FOR FAMILY MEMBER ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Cub Scout Leader How-To Book*, No. 33832
- *Boys' Life* magazine

Help on the Family Member activity badge can be obtained at the monthly Cub Scout leader roundtable and from other Webelos den leaders. Also check with local public utility companies and the Department of Energy, Washington, D.C., for information and materials on energy conservation.



FITNESS

PHYSICAL SKILLS GROUP

Good health can mean the difference between just merely living or really enjoying life. When we feel well and are physically and mentally fit, we live life with enthusiasm and interest. Fitness means a happy mixture of the best possible health and physical condition. This helps us perform everyday tasks effectively and meet emergencies when they arise. Physical fitness is the result of regular medical and dental care, proper nutrition, adequate sleep and rest, freedom from worry, and regular physical exercise.

A Webelos Scout's attitude toward health is as important as what he knows about it. What he knows will be of little help if he doesn't *use* what he knows. If two boys have the same physical qualities but one does twice as well in a physical endeavor, the difference may lie in the attitudes of the two boys. Fitness is never just physical; the mind and body work together.

In earning this activity badge, Webelos Scouts learn about well-balanced diets and the harmful effect of drugs, including tobacco and alcohol.

REQUIREMENTS

Do this:

1. With your parent, guardian, or Webelos den leader, complete the Health and Fitness Character Connection.

And do six of these:

2. With a parent or other adult family member, complete a safety notebook, which is discussed in the booklet *How to Protect Your Children from Child Abuse: A Parent's Guide*.
3. Read the meal planning information in this chapter. With a parent or other family member, plan a week of meals. Explain what kinds of meals are best for you and why.
4. Keep a record of your daily meals and snacks for a week. Decide whether you have been eating foods that are good for you.
5. Tell an adult member of your family about the bad effects smoking or chewing tobacco would have on your body.
6. Tell an adult member of your family four reasons why you should not use alcohol and how it could affect you.
7. Tell an adult member of your family what drugs could do to your body and how they would affect your ability to think clearly.
8. Read the booklet *Choose to Refuse*. Discuss it with an adult and show that you understand the material.

DEN MEETING ACTIVITIES

- | | | |
|---|--|---|
| • Discuss the ill effects of smoking and chewing tobacco on the body. | • Invite a doctor or dentist to a den meeting to talk about staying healthy. | • Talk about the effects of exercise and how to choose suitable exercises |
| • Invite a health-care professional to talk to the den about the harmful effects of drugs, including alcohol and tobacco. | • Discuss proper nutrition. | • Play some of the fitness games described in the <i>Cub Scout Leader How-To Book</i> . |
| • Make posters depicting drug abuse prevention or alcohol abuse prevention for display at the pack meeting. | • Prepare and serve a nutritious snack. | • Ask boys to tell the den what good health habits they have practiced since the most recent den meeting. |
| | • Make posters using magazine cutouts to show a well-balanced diet. | |

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display drug abuse or alcohol abuse prevention posters.
- Display posters showing proper nutrition.
- Demonstrate fitness exercises.
- Lead the pack in a fitness game.

Good Health Habits Checklist

Exercise alone won't keep you fit. You need good habits to guard against infection and disease. Develop these habits and be a winner!

- Bathe every day, especially after exercising. Wash your hair at least twice a week.
- Brush your teeth at least twice a day—after each meal if possible. Have regular dental checkups.
- Put on clean socks every day after bathing and keep your fingernails and toenails trimmed. Cut them straight across to prevent ingrown nails.
- Wash your hands before eating, after using the toilet, and whenever they are dirty. Germs on your hands can get into your mouth and spread disease.
- Get plenty of sleep. Most Webelos Scout-age boys need 9 to 10 hours of sleep every night.
- Avoid eyestrain. Use proper lighting.
- Take care of your ears. Don't stick anything into them. Clean them gently.
- Never drink from someone else's cup until it has been washed and rinsed properly. Use only your own washcloth and towel.
- Stand tall, walk tall. Hold your head up, your shoulders back, and your stomach in.
- Eat right! A well-balanced diet makes your body healthier and more energetic.

Eat Right, Sleep Tight

Daily exercise builds and toughens our bodies. But exercise is only one of the important ingredients for developing and maintaining a strong, healthy body. Just as important are sleep and good food.

Our bodies are made of billions of tiny cells that get energy by “burning” the food we eat, like a slow fire without flames. Food fuels the “fires” that keep us alive, alert, and healthy.

A lack of certain nutrients can cause health problems. No one food contains all the nutrients our bodies need; different foods provide different nutrients. To get the proper nutrition, we need to eat a variety of foods each day from the following food groups:

- Whole grains, including bread, cereal, rice, and pasta (at least 3 ounces every day)
- Fruits (go easy on fruit juices)

- Vegetables (focus on green veggies)
- Meat, poultry, fish, dry beans, eggs, and nuts (bake, broil, or grill meat)
- Milk, yogurt, and cheese (use low-fat or fat-free milk)
- Oils

Eating meals at regular times each day is just as important as the types of food eaten. Rushing through meals or skipping meals can be harmful to the body. Choose food and beverages low in added sugars.

To learn more about how you can choose the foods and amounts that are right for you, log on to the United States Department of Agriculture's Web site at www.mypyramid.gov.



MyPyramid.gov STEPS TO A HEALTHIER YOU

- Local health-care facility
- Dentist's office, for a discussion and demonstration of dental health
- Drug or alcohol rehabilitation unit
- Local school cafeteria to discuss menu planning

Another important ingredient in good health is sleep. No one knows exactly why we need to sleep. Some doctors believe our bodies repair themselves while we sleep; others believe we need to sleep so that our brains can sort all the new information we absorbed while we were awake. At any rate, doctors agree that getting the right amount of rest and sleep is important.

Nutritious Snacks

When it is snack time, Webelos Scouts might choose something sweet. But they should be encouraged to break the sweet-tooth habit and try more nutritious snacks. Suggest these alternatives:

- Hard cheese cut into cubes and served with whole wheat crackers and/or apple slices
- Celery stalks filled with cheese spread or peanut butter
- Fresh vegetables served with a dip
- Peanut butter on bran muffins or whole wheat bread or crackers
- Chopped nuts mixed with bits of dried fruit
- Any kind of fruit. If available, try some unusual ones, such as kiwi, pomegranate, or mango.

NOTE: Check for food allergies among your boys—for someone with a peanut allergy, even being around peanuts can trigger an allergy attack.

Hiker's Birdseed. Mix equal amounts of raisins and peanuts, with smaller amounts of carob, sunflower seeds, wheat germ, and shredded coconut.

Peanut Butter Balls. Mix together $\frac{1}{2}$ cup honey, $\frac{3}{4}$ cup peanut butter, and 1 teaspoon vanilla. Mix together $\frac{3}{4}$ cup instant nonfat dry milk, $\frac{1}{4}$ cup quick-cooking oats, and $\frac{1}{4}$ cup toasted wheat germ. Add dry ingredients to honey mixture. Mix thoroughly and then shape into balls the size of walnuts. Chill until firm.

Frozen Yogurt Pops. Combine 1 cup plain yogurt, 1 six-ounce can of defrosted frozen fruit concentrate, and $\frac{1}{2}$ teaspoon vanilla. Mix well. Spoon into small paper cups. Place in freezer. When yogurt starts to harden, insert a plastic spoon or wooden stick into each cup. Freeze until solid.

Consumer Search

The federal government requires that all foods are labeled with ingredients and nutrition information. Have the boys collect labels from various types of food and then compare them. You will be surprised at the variety in simple items such as bread. Boys might also research the nutritional content of their favorite items at a fast-food restaurant. What could they choose from the menu at this same restaurant that would be a healthier choice?

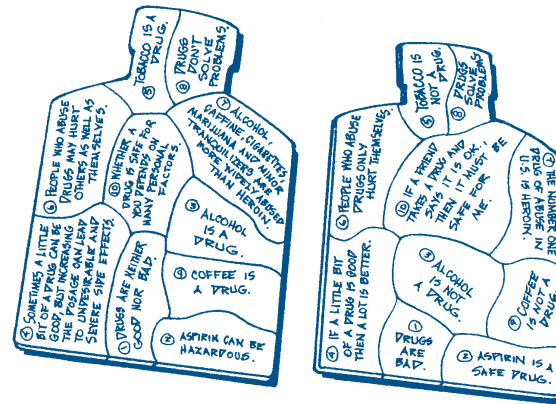
Don't Drink and Drive

Have boys search a local newspaper to see how many automobile accidents during the course of a month are attributed to alcohol use.

Have boys research the number of highway deaths in the country last year that were related to alcohol use. Have them relate this number to a number of people that is meaningful to them—such as “x” number of deaths is equal to the population of a certain town in your area or the number of people who attended a certain sporting event. Putting numbers in a familiar perspective can help boys better understand the seriousness of such statistics.

No Smoking

Obtain pamphlets from the American Cancer Society about the dangers of smoking and tobacco use. Have boys prepare a display of No Smoking posters and information for the pack meeting.



Drug Puzzle Game

These puzzles test boys' knowledge about drugs. To make the puzzles, cut two identical bottle-shaped pieces from heavy cardboard or light wood. On one of them, write true statements about drugs, alcohol, and tobacco. On the other, write false statements. Then cut both “bottles” into jigsaw pieces. Combine and scramble the pieces from both bottles. One player (or half a den) assembles the “true” puzzle; the other boy or team assembles the “false” one. The first finished wins.

Safety Notebook

Have boys make safety notebooks as discussed in the booklet *How to Protect Your Children from Child Abuse: A Parent's Guide* that comes with the *Webelos Handbook*. Notebooks could contain newspaper clippings, magazine articles, or “miniposters” on such subjects as bicycle safety, automobile safety, fire safety, safety when you're home alone, and safety and strangers.

Be sure to list emergency phone numbers, including parents' work numbers and a friend or neighbor's number to call when parents are unavailable.

Do You Know a Drug Abuser?

What clues can a parent, family member, or friend look for to identify someone who has a drug problem? Here are some of the basic signs:

1. Moodiness
2. Sudden changes in behavior
3. Irritability or a short temper
4. Unreasonable bursts of anger
5. A need to be alone much of the time
6. A change of friends, especially ones who are not as nice, respectable, or likable as former friends
7. Falling grades in school or truancy, especially in a formerly reliable, good student
8. Irregular eating habits and loss of appetite
9. Memory lapses and blackouts
10. Drug paraphernalia
11. Uninterested in things enjoyed previously, such as reading, sports, and Scouting
12. Defensive behavior, such as getting angry over normal questions
13. Change in sleep patterns
14. Dilated pupils, red eyes, an unsteady gait, or other physical changes
15. Dishonesty, lying, stealing

RESOURCES FOR FITNESS ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys' Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832
- *Cub Scout Academics and Sports Program Guide*, No. 34299: Physical Fitness

Help on the Fitness activity badge can be obtained at the monthly Cub Scout leader roundtable and from other Webelos den leaders. Also check with local health-care agencies or drug and alcohol abuse prevention organizations for materials and assistance on this activity badge.



FORESTER

OUTDOOR GROUP

FORESTER

Webelos Scouts working on the Forester activity badge will learn how to recognize species of trees by their shape, foliage, bark, and type of wood. They'll also learn how trees live and grow and how to prevent wildfire. Finally, they'll develop a better appreciation of the work of foresters.

Foresters deal with the care and growing of trees. They make tree inventories and estimate lumber content in standing timber. Their work also involves surveying, logging, tree planting, insect control, recreational planning, and the mapping and marking of trees for harvesting. Foresters are concerned with woodlands conservation, and they know how to preserve and protect trees from wildfire.

Many of the products in our world today come from trees: lumber for houses and furniture, textiles, cosmetics, fruits and nuts, medicines, baseball bats and other sporting equipment, and more.

REQUIREMENTS

Do five of these:

1. Make a map of the United States. Show the types of forests growing in different parts of the country. Name some kinds of trees that grow in these forests.
2. Draw a picture to show the plant and tree layers of a forest in your area. Label the different layers. (If you don't live in an area that

has forests, choose an area that does and draw a picture of that forest.)

3. Identify six forest trees common to the area where you live. Tell how both wildlife and humans use them. (If you don't live in a region that has forests, read about one type of forest and name six of its trees and their uses.)
4. Identify six forest plants (other than trees) that are useful to wildlife. Tell which animals use them and for what purposes.
5. Draw a picture showing
 - How water and minerals in the soil help a tree grow
 - How the tree uses sunlight to help it grow
6. Make a poster showing a tree's growth rings or examine the growth rings of a tree stump. Explain how the rings tell the tree's life history.
7. Collect pieces of three kinds of wood used for building houses. Tell what kinds of wood they are and one place each of them might be used.
8. Plant 20 forest tree seedlings. Tell how you planted them and what you did to take care of them after planting.
9. Describe both the benefits and the harm wildfires can cause in a forest ecosystem. Tell how you can help prevent wildfire.
10. Draw your own urban forestry plan for adding trees to a street, yard, or park near your home. Show what types of trees you would like to see planted.

PLACES TO GO

- Visit a lumberyard or sawmill. A local lumber dealer may furnish wood samples for the boys' collections and displays.
- Visit a tree farm. Ask the forester or landowner to explain his or her objectives and methods.
- Go to a paper mill, veneer plant, rayon plant, furniture factory, or construction job to see how trees are used.
- Visit a forest recreational area.
- Go to a managed watershed to see the relationship between forests and water and soil.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display leaf or twig collections.
- Display maps of U.S. forest regions.
- Display wood samples.
- Demonstrate how to tell the age of a tree by its annual rings. Explain why some rings are wider than others.
- Tell about one tree indigenous to your area—what it looks like, how big it gets, what its wood or fruit is used for. Show samples of its bark, seeds, leaves, and fruit.

DEN MEETING ACTIVITIES

- Bring a section of a log to den meeting or find a nearby tree stump and have the boys count the growth rings to determine the age of the tree. See whether they can tell something about the kind of weather—predominantly dry or wet—that the tree lived through.
- Make maps showing forest regions in the United States (see the *Webelos Handbook*).
- Hike in a forest to identify trees and plants; collect leaves, twigs, cones, and seeds.
- Mount or make leaf prints of leaves collected on a hike.
- Have a leaf identification contest.
- Learn to measure tree height and diameter.
- Invite a forest ranger or conservationist to talk about wildfire prevention and control.
- Plant seedlings or shrubs, after checking with a local forester or conservationist for advice.
- Adopt a tree for a long-term project (page 64).
- Make a tree identification kit for the den with strips of bark, leaves, needles, and seeds from a variety of trees.
- Make a wood sample display for the pack meeting.
- Survey and identify the trees of a school yard, a small park, or other small area.
- Look for the thickest, tallest, and most wide-spreading tree in your community.

Read a Tree

After you have crosscut a log, examine the pattern of growth rings. Trees grow a layer of wood for each year. Count annual rings to determine the tree's approximate age.

- Some kinds of trees will show light spring wood and dark summer wood in each year's growth.
- Drought years can cause narrow growth rings.
- Crowding of trees causes zones of narrow rings.
- A leaning tree has rings narrower on one side than the other. A tree on a clearing edge may have similar uneven rings.

Wood Sample Display

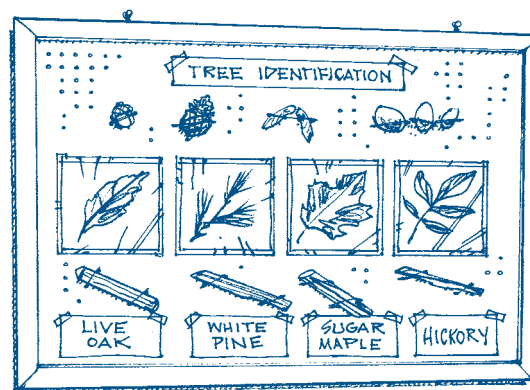
With a little work, small, round logs or tree branches will show what a tree looks like from the inside out. A cutaway view will show the pith, heartwood, spring growth, cambium layer, and bark. Annual rings can be seen on a cross section. Knots show where branches start. Rough, sawed wood can be contrasted with a finished, varnished section.

1. Use small, dry branches of various trees. Sections should be about 3 to 4 inches in diameter and 5 to 6 inches long. Saw the ends squarely.
2. Saw sections lengthwise halfway down the center. Remove one piece by sawing crosswise to the end of the lengthwise cut. Then saw a small, diagonal piece from the top of the remaining half. (Refer to the *Webelos Handbook* for illustration.)
3. Sandpaper the top half and apply a thin coat of varnish or shellac. Leave the bottom half as rough, sawed wood.

4. Insert a small eye screw at one end of each block. Hang it on a board made from native lumber. Add a brief description of each piece, including the name of tree, fruit, leaves, and what it's used for.

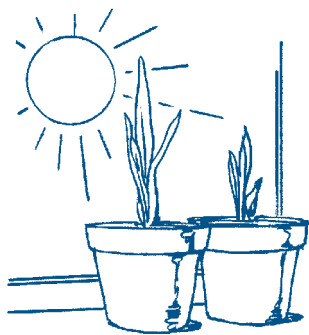
Leaf Identification Contest

Mount about 20 different leaves on a large piece of cardboard with each properly identified. Also prepare another piece of cardboard with the same leaves in different locations. Number these leaves but don't identify them. Give the boys time to study the first display, and then put it away. Give each boy paper and pencil and ask them to identify the leaves on the second display.

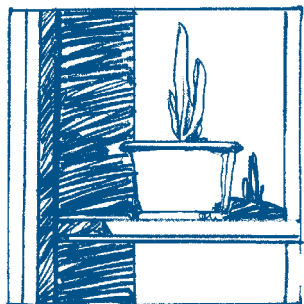


Tree Identification Board

Use pegboard and thin wire. Frame with molding, if desired. Cover leaves with clear plastic or cellophane and tape to the board.



Plants need water. Plant corn kernels or bean seeds in two separate pots. Keep soil moist in both until seeds sprout and plants have grown to about 5 inches. Then stop watering one pot for a week or two. What happens?



Plants need light. Use the healthy plant from the previous experiment. Place it in a dark corner of the attic or cellar or in a dark closet for a week. What happens?



Plants need air. Grow some bean seeds in two small cans. When they have sprouted and grown to about 5 inches, place one can in a dish of water and cover with a glass jar, making it almost air tight. Compare growth with the other plant that gets all the air it wants.

A Tree's Needs

Like all other plants, trees must have light, water, and air. The experiments shown here use smaller plants than trees but demonstrate what happens when light, water, or air is insufficient. Plant seeds at the first den meeting of the month and check their progress at all later meetings. Use bean seeds or corn kernels. (Bean seeds are good because they grow quickly.)

Adopt a Tree

This is a long-term project that the den or individual Webelos Scouts can do. Each boy selects a tree that appeals to him. It should be near his home so he can make day-to-day observations of what is taking place in, under, and around it. If the whole den takes part, try to include a variety of species.

Each boy keeps a diary or scrapbook about the tree in which he records its measurement of its girth, estimates of its height, when it buds, when the leaves change color, when it loses its leaves, and any other interesting things. He should include sketches of the tree and its flower, fruit, and seeds as well as a pressed leaf.

Boys might also note which animals, birds, and insects use their tree. What other plants (vines, lichen, moss, etc.) grow on it? How is its wood used commercially?

Have a tree-visiting day when the den takes a trip to inspect each boy's adopted tree. This is a chance for each boy to show and tell what he has learned. (See the "Outdoors" chapter of the *Cub Scout Leader How-To Book* for more ideas on getting to know your tree.)

Tree Survey

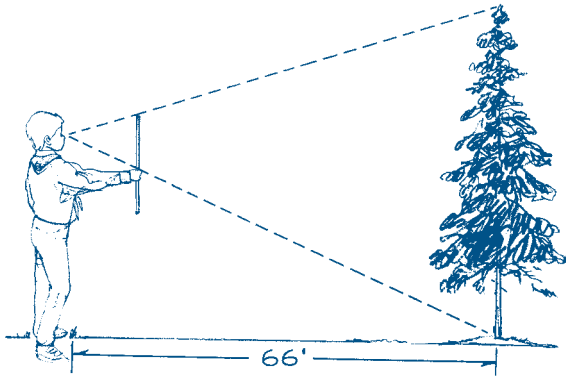
Select a small area that has several species of trees, such as a school yard, a small park, or someone's yard. Sketch a map of the area. Divide the boys into pairs, and assign each a section of the area. Have them collect a leafy twig from each tree in their area and try to identify the species.

Measure the height and diameter of each tree. Collect any fallen twigs, branches, and leaves for leaf prints and wood samples. See how many different species were found.

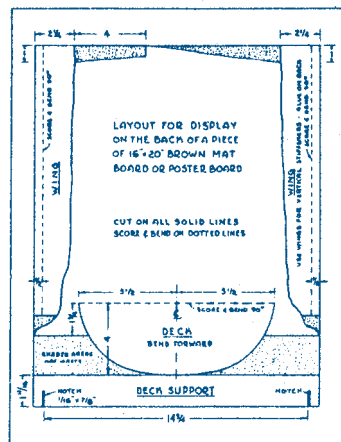
Measuring a Tree

Foresters must measure a tree's height and diameter to figure out the amount of lumber a tree will produce.

Diameter. Make a diameter tape from flexible paper or cardboard about ½-inch wide and 45 inches long. Begin at one end of the strip and make marks 3.14 inches apart. Number these marks consecutively, starting with 1 at the mark nearest the left end of the tape (3.14 inches on tape equals 1 inch of tree diameter). Wrap the tape around the tree at chest height. The diameter of the tree in inches will be at the mark nearest where the tape overlaps the zero end.



Height. Glue a long, narrow strip of heavy paper or cardboard to one side of a yardstick. Beginning at one end, make marks 6.15 inches apart. Number the marks consecutively (each mark equals 16 feet of tree height). Stand facing the tree to be measured at a distance of 66 feet. Extend your arm horizontally, and vertically align the stick with the tree. Move the stick up or down until the top of the stick is in line with the top of the tree. Without moving, and with the stick still vertical, sight the bottom of the tree. Note the place on the stick where the line of sight crosses it. The nearest figure is the number of 16-foot lengths in the tree. (If the figure is 2, the tree is 32 feet high.)



Tree Display

Webelos Scout foresters may want to make a tree display for a pack meeting exhibit. The back piece is a 16-by-20-inch piece of poster board, light plywood, or brown mat cut in the shape of a tree stump. The stand may be made of poster board, mat, or a section of a plastic bottle. Glue or staple it to the back.

The boy cuts out a construction paper silhouette of his tree and glues it to the back. He then adds information about the tree—where it grows, its size, uses of its wood and fruit, etc. He mounts leaves, seeds, and fruit with invisible tape or glue. The wood sample is a dead or downed branch cut first diagonally, and then with an L-shape cut to expose the rings and grain.

Hidden Tree Treasures

Find the names of the trees hidden in the following sentences:

1. The ranger's map led us safely through the woods. (Maple)
2. Will owls hoot in daylight if they see someone in the forest? (Willow)
3. It's fun to tramp in every direction before enjoying a picnic in the woods. (Pine)
4. Forest rangers wear white helmets. (Elm)
5. In a beautiful glade, we saw a honey bee checking clover blossoms for honey. (Beech)
6. Many forest fires are caused by human carelessness, according to rangers. (Fir)
7. Woodcutters have expensive tools and keep them locked in sheds. (Hemlock)
8. Don't plant those seedlings so thick or you won't give them room to grow. (Hickory)
9. We got soaked when we were caught in a spring cloudburst. (Oak)
10. Our grandson's face darkened when we told him it was time to go home. (Cedar)
11. Our lollipop larder is raided when children come to call. (Poplar)
12. We all chased him as he ran down the hill. (Ash)

Find a Tree

Play this game outdoors where there are plenty of trees. Pair the boys with a partner and have one of them put on a blindfold. The non-blindfolded boy leads his partner to a tree, who feels the tree's bark, limbs, and leaves. The pair returns to their starting point. The boy removes his blindfold and tries to find the tree he felt while blindfolded. Then it is the other boy's turn to "find a tree."

RESOURCES FOR FORESTER ACTIVITY BADGE

- *Boys' Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832 ("Outdoors")
- *Webelos Handbook*, No. 33452
- *Trees: A Guide to Familiar American Trees* (Golden Guides), by Herbert S. Zim and Alexander Martin (Golden Books, 1987)

Check with the U.S. Department of Agriculture, Forest Service, for literature, materials, and other information.



GEOLOGIST

OUTDOOR GROUP

Many boys have a rock collection at one time or another. But they may not know that the science of geology deals with the study of rocks.

The *Webelos Handbook* contains information on volcanoes, geysers, and mountains that can help the boys gain a basic understanding of these occurrences with little assistance. In earning the Geologist activity badge, boys will also learn how the earth was formed, how rocks and minerals are used, and how a geologist works.

Physical geology deals with the earth's composition, structure, and the processes by which the earth's surface has been and continues to be changed. This includes the areas of mineralogy, petrology, structural geology, geomorphology, and economic geology. *Historical geology* is the study of the origin and evolution of earth. It includes the study of stratigraphy and paleontology.

It isn't necessary to have a professional geologist help with this activity badge; a "rock hound" can help the boys in their study of rocks and minerals.

REQUIREMENTS

Do five of these:

1. Collect five geologic specimens that have important uses.
2. Rocks and minerals are used in metals, glass, jewelry, road-building products, and fertilizer. Give examples of minerals used in these products.
3. Make a scale of mineral hardness for objects found in the home. Show how to use the scale by finding the relative hardness of three samples.
4. List some of the geologic materials used in building your home.
5. Make a drawing that shows the cause of a volcano, a geyser, or an earthquake.
6. Explain one way in which mountains are formed.
7. Describe what a fossil is. How is it used to tell how old a formation is? Find two examples of fossils in your area.
8. Take a field trip to a geological site, geological laboratory, or rock show. Discuss what you learned at your next Webelos den meeting.
9. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Geology.

DEN MEETING ACTIVITIES

- Collect rocks and minerals and then identify them.
- Invite a "rock hound" to demonstrate a rock tumbler and rock-hunting tools.
- Make the mineral hardness kit (page 68).
- Have boys begin drawings of causes of volcanoes, geysers, and earthquakes.
- Make a model volcano.
- Make a buckskin nugget pouch to carry rocks (page 67).
- Invite a contractor to talk about geologic materials used in home building, such as slate, brick, limestone, marble, cement, and gypsum.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display rocks, minerals, fossils, and other geologic specimens or collections and rock-hunting tools.
- Display a mineral hardness kit.
- Display drawings of the formation of volcanoes, geysers, or earthquakes.
- Display a model volcano.
- Demonstrate the hardness test for minerals.
- Show how to use rock-hunting tools.
- Have a boy explain how mountains are formed or tell about volcanoes, geysers, or earthquakes.

Den Meeting in the Field

A den meeting in the field where boys can look for rock and mineral specimens will be of much help. If you don't have an expert along, take one of the excellent handbooks on rocks and minerals that can be found in the public library. Some have color drawings that will help in identifying the specimens you find.

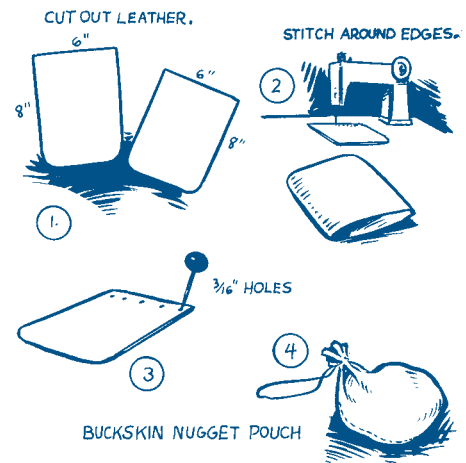
An excavation, a riverbank with steep sides, or a highway cut would be a good place to find mineral and fossil samples. Rocks can be found along road-sides, in streambeds, on riverbanks, or on hillside ledges. Take along newspapers for wrapping samples, notebook and pencil, magnifying glass, heavy gloves, a rock hound's pick and chisel, safety glasses or goggles, rock pouches if the boys have them, and a knapsack to put everything in.

Check local laws before allowing the boys to dig for rocks or minerals. In some states, laws prohibit digging rocks and other things from the ground. Don't allow boys to pick up every rock they see. You won't want to go home with 50 pounds of paperweights! Encourage them to be selective. Fist-size specimens are best. When you get home, clean the specimens with soapy water applied with a soft brush. Soluble minerals and soft stones can't be washed, but can be covered with clear plastic for protection. Use the mineral hardness kit (below) to help identify specimens.

If you search carefully, you may also find some fossils—the remains of ancient plants and animals. Fossils can be found almost anywhere, even in your own driveway. But much more likely sites are old quarries, river bluffs and banks, gravel pits, excavations, and highway cuts—the very places you'll be looking for rocks and minerals. When you find a fossil imbedded in another rock, be patient in taking it out. If possible, chisel a narrow trough around the fossil. When the trough is as deep as the fossil, hit the remaining dirt or rock under the fossil, and the fossil should pop out.

PLACES TO GO

- Operating quarry
- Plant that manufactures cement or steel products
- Rock collectors club meeting
- Jeweler's shop
- Museum of natural history
- Construction excavation site



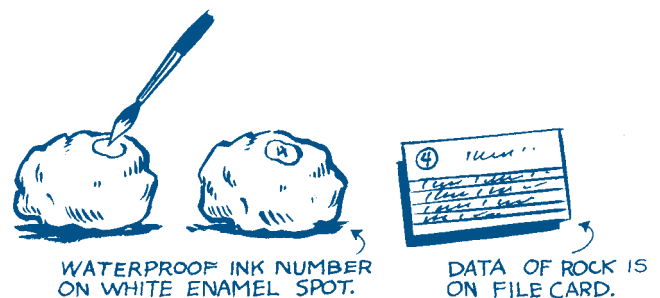
Buckskin Nugget Pouch

The boys will enjoy making and using this replica of a gold miner's leather nugget pouch. It will come in handy for carrying the rocks they collect for the Geologist activity badge. (At the same time, it will help them complete requirement 4 for the Craftsman activity badge.)

Cut two 6-by-8-inch pieces from suede buckskin, sheepskin, or imitation leather. Round the bottom corners, if you wish.

Have someone who is handy with a sewing machine stitch around the edges, wrong sides together, leaving the top open. Or, if you would rather, lace the edges together (right sides together) with lacing material.

Punch $\frac{3}{16}$ -inch holes across the top of the pouch for the drawstring. Turn right sides together and lace with two 14-inch lengths of leather thong, as shown. Knot ends to make drawstring.



Mounting Rock Specimens

To display a specimen, apply a spot of white enamel to each rock. On that spot, write a number in waterproof ink. Write the same number on a file card, and then add the identification information: what the specimen is, any special characteristics, and where and when it was found. Specimens can be displayed in a box (about the size of a cigar box) with partitioned sections or in an egg carton.

Mineral Hardness Kit

One clue to a mineral's identity is its hardness. A hardness scratch test is simple enough to perform in the field. Many experienced rock collectors carry a hardness testing kit on their rock-hunting trips. Knowing the hardness of a mineral will not always tell you its identity, but it will help rule out some possibilities.

The kit can be made from materials found around the house or obtained inexpensively. (Note that the kit items are rated according to hardness, in relation to the mineral hardness scale in the *Webelos Handbook*.) One kit for the den should be sufficient. Include the following:

Tailor's chalk (softest; your fingernail is a hardness of 2)

Copper coin (3)

12-penny iron nail (4 to 4½)

Knife with steel blade (about 5½)

Hard glass, such as window glass (6)

High-speed drill bit (6½)

Metal file (6½ to 7½)

High-speed masonry drill bit (8½)

Abrasive sharpening stone (9)

In using the hardness kit, test the mineral specimen on a flat surface. After you have made a test scratch, try to rub the mark away with your fingers. A true scratch will remain. Use a magnifying glass to examine any doubtful marks.

Special Tests

Geologists use additional tests to help them identify specimens.

Acid Test. The acid test will show whether a specimen contains minerals called *carbonates*. Limestone, marble, and chalk are examples of carbonates. Pour a few drops of vinegar, which is a weak acid, on the sample. If it contains carbonates, the acid will release carbon dioxide and you will see fizzing or bubbling.

Streak Test. In the streak test, geologists rub the sample against an abrasive surface and study the color of the resulting streak. For your streak plate, use the unglazed back of a piece of ceramic tile or the edge of a broken china plate.

Different layers of sand, clay, plaster of paris, pebbles and shells



Sedimentary Layer Simulation

Use this simulation to show Webelos Geologists how sedimentary layers are formed and what they look like.

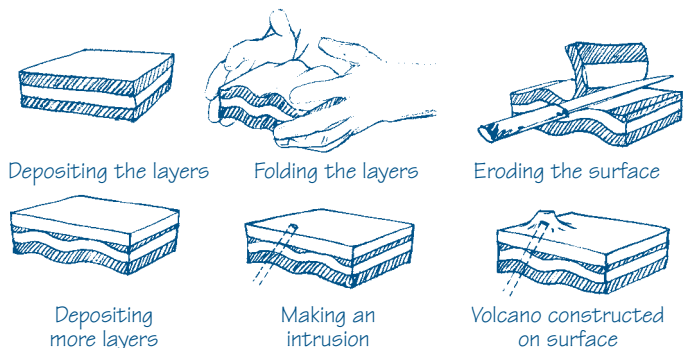
Materials: Shoebox, aluminum foil, string, sand, pebbles, powdered clay, cement, plaster of paris, shells, and water

Line the box with aluminum foil and tie string around the sides so the box won't break or bulge when you fill it. Fill the box halfway with water. Put in a ½-inch-deep mixture of sand and cement and let it settle. Then put in ½-inch layers of plaster of paris and clay. Let each layer settle. Mix pebbles and shells with a small amount of cement and make a layer of each. When the box is filled, let the "rock" harden for a few days. Cut away the box and you'll have a fair approximation of sedimentary layers.

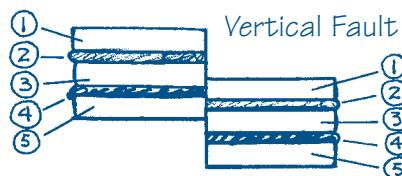
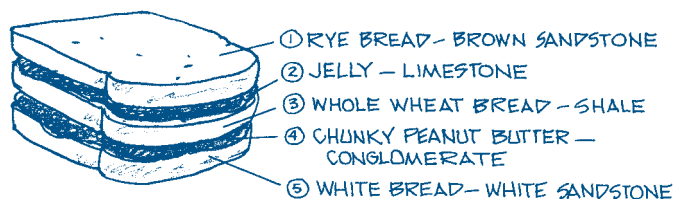
Geologic Formations

Here's a fun way for Webelos Scouts to build models of different geologic formations.

Materials: Modeling clay in at least four different colors, approximately ¼ pound each; talcum powder, a knife, and a straw



When building the models, be sure to put talcum powder between the layers so that they can be easily separated. The straw can be used to show underground lakes or rivers. These models make a great display for the pack meeting.



The same effect as the models illustrated above can be achieved with layered peanut butter and jelly sandwiches to help show how natural forces shape layers or rocks.

NOTE: Check for food allergies among your boys—for someone with a peanut allergy, even being around peanuts can trigger an allergy attack.

Sometimes the earth's crust moves up and down. Cut the sandwiches in half and move one half up or down. This demonstrates a *vertical fault*, a type of movement that can cause earthquakes. Then slide two parts of the sandwich past each other on the same level. This demonstrates a *lateral fault*.

Boys can now eat their rock layers!

Earthquakes

Show the boys how the earth's plates can move, shift, and force down upon each other when you discuss earthquakes. Have each boy put mud in a disposable cake pan. Let it dry. Now, have them flex the pan at opposite sides. The earth cracks and shifts. Some pieces break apart; some will fit back together again.

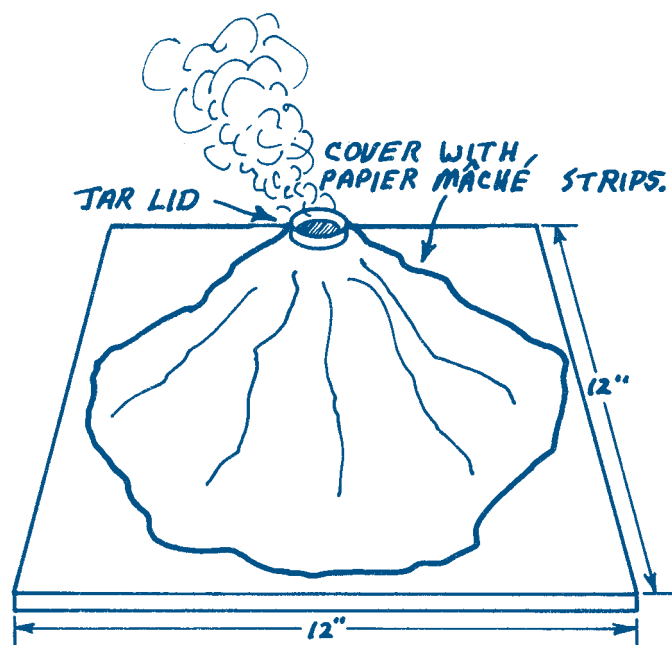
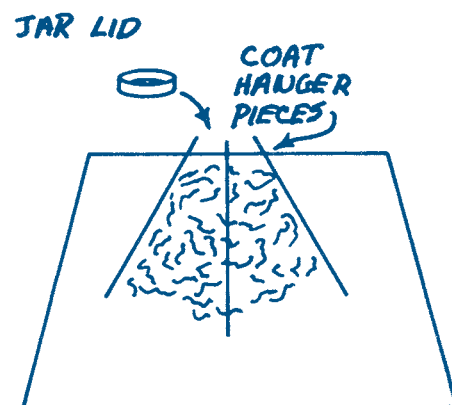
To demonstrate how strong an earthquake is, fold a sheet of newspaper seven or eight times, and then try to tear it. Each sheet of paper represents a layer of the earth. It doesn't take much effort to move one layer of newspaper or earth. However, tremendous force is required to move or fold the earth's crust, which is made up of many different layers.

Papier-Mâché Volcano Model

Volcanic eruptions happen when pressure builds up inside a volcano, forcing ash and lava out the top. In this papier-mâché volcano, you'll use baking soda and vinegar to simulate an eruption.

Materials: 12-inch-square wood for base, aluminum foil, baking soda, vinegar, red food coloring, newspaper and wallpaper paste, jar lid, wire coat hangers

Make a cone-shaped base for the papier-mâché by sticking pieces of coat hanger in the wood base diagonally. Fill in under wires with wadded aluminum foil. Cover cone with papier-mâché. Leave an opening in the top where the jar lid can be set. Let dry. Paint with tempera or acrylic paint. Set jar lid upside down in the top of the volcano. To make the volcano erupt, place about 1 teaspoon of baking soda in the jar lid. Add $\frac{1}{4}$ cup vinegar mixed with a little red food coloring, and watch the action! The baking soda and vinegar react to make carbon dioxide gas. The gas squirts out of the volcano, bringing the foamy red liquid to the surface. This is safe to use indoors.



Snowy Mountain

This outdoor game is messy, but fun!

Materials: Deep pie pan, plate, bag of flour, chocolate drop, table knife

Fill the pie pan with flour; hold the plate over the top of the pan and turn the plate and pan upside down together. Carefully remove the pan, so that you are left with a molded dome of flour on the plate.

Gently place the chocolate drop on top of this, in the very center. Using the table knife, each player in turn must slice away a portion of flour. The object is to keep the chocolate drop on top of the snowy mountain for as long as possible, so each player will want to cut the very smallest slice he can. The player who finally causes the mountain to collapse and the chocolate drop to fall has to place both hands behind his back, bend over the plate, pick up the chocolate drop with his teeth, and eat it.

RESOURCES FOR GEOLOGIST ACTIVITY BADGE

- *Boys' Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832
- *Webelos Handbook*, No. 33452
- *Rocks and Minerals* (Golden Guides), by Herbert S. Zim and Paul Shaffer (Golden Books, 1989)

Check with an oil company, high school science department, state conservation agency, or rock collectors' club for information and resources. Attend your monthly Cub Scout leader round-table for more ideas.



Webelos Scouts are old enough to provide a lot of help around the house. In addition to doing some of the more usual household tasks, such as keeping their rooms clean and taking out trash, they can help adult family members in many other ways. The Handyman activity badge provides the opportunity for Webelos Scouts to learn new skills so that they can be more helpful around their homes.

As they earn this badge, Webelos Scouts will develop confidence in their ability to clean things, make minor repairs, and take care of a house and lawn. They will gain a better understanding of bicycle and automobile maintenance. This is also an opportunity for them to get a home workshop organized, with all materials and tools labeled and stored. The workshop can be put to use when the boys work on this activity badge. The den may have an adult family member who is a handyman or has a home workshop. If so, call on this person for assistance.

REQUIREMENTS

Do this:

1. With your parent, guardian, or Webelos den leader, complete the Responsibility Character Connection.

And do six of these:

2. With adult supervision, wash a car.

3. Help an adult change a tire on a car.
4. With adult supervision, replace a bulb in the taillight, turn signal, or parking light or replace a headlight on a car.
5. With adult supervision, show how to check the oil level and tire pressure of a car.
6. Make a repair to a bicycle, such as tightening the chain, fixing a flat tire, or adjusting the seat or handlebar.
7. Properly lubricate the chain on a bicycle.
8. Properly inflate the tires on a bicycle.
9. Change the wheels on a skateboard or pair of inline skates.
10. Replace a light bulb in a fixture or a lamp.
11. With adult supervision, arrange a storage area for household cleaners and other dangerous materials where small children cannot reach them.
12. Build a sawhorse or stool to be used around your home.
13. Help take care of the lawn.
14. Arrange a storage area for hand tools or lawn and garden tools.
15. Clean and properly store hand tools or lawn and garden tools in their storage areas.
16. Label hand tools or lawn and garden tools.
17. Put together a toolbox for common repairs around the house. Be sure the toolbox and tools are stored safely.

DEN MEETING ACTIVITIES

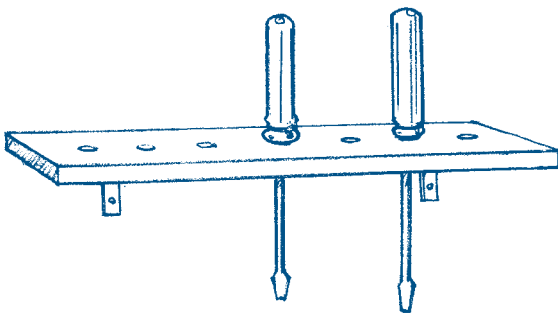
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| • Make some bicycle repairs. (See the <i>Webelos Handbook</i> .) | • how to safely refuel a power mower. | • the safe way to change a tire, car light bulb, and check oil and transmission fluid. |
| • Inflate a bicycle tire. (See the <i>Webelos Handbook</i> .) | • Build a tool rack from pegboard and hangers. | • Make sure that tools in a garage, storage shed, or other area at your house are properly and safely stored. |
| • Lubricate a bicycle chain and crank. (See the <i>Webelos Handbook</i> .) | • Make a Handyman's Helper (page 73). | • Talk to the local police department to find out how to mark bicycles and valuables in the home for identification. |
| • Practice changing light bulbs in a lamp. | • Make a sawhorse. (See the <i>Webelos Handbook</i> .) | |
| • Discuss how to mow a lawn properly and safely and also | • Arrange for a local auto mechanic to visit your den, or visit the mechanic's garage, where boys can learn | |

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Demonstrate how to repair something on a bicycle or how to inflate a bicycle tire.
- Demonstrate how to change a light bulb in a lamp.
- Display Handyman's Helpers.
- Display some tools and have boys name them and tell how they are used.
- Work with your local police department or a bike shop to hold a bike rodeo. Have boys organize a bike repair center, where they inspect and repair bikes for other members of the pack.

PLACES TO GO

- Attend a home and garden workshop at a local nursery or home garden center.
- Tour a local hardware store to learn what materials and tools are available for home repairs.
- Visit a well-equipped home workshop.

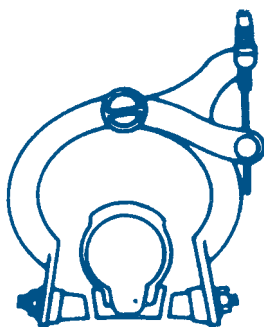


Screwdriver Holder

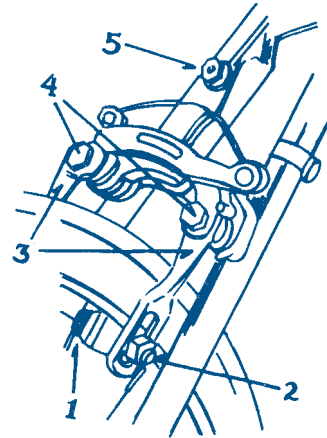
Materials: $\frac{3}{4}$ -by-3-by-16-inch piece of wood, two purchased brackets

Cut wood to size. Drill $\frac{1}{2}$ -inch holes every 2 inches along the top. Sand rough edges. Finish with paint or clear acrylic coating. Attach brackets to back, and attach to wall.

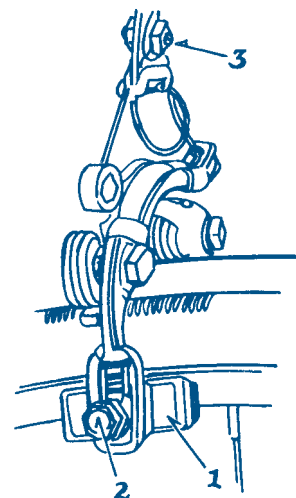
Bicycle Adjustments



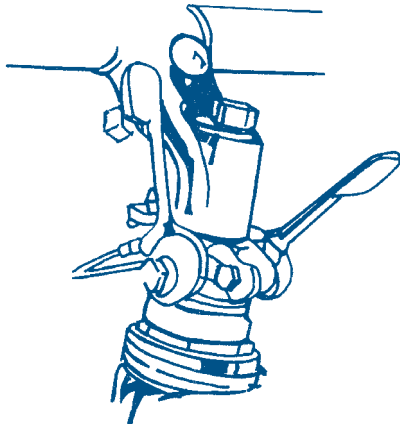
Check front caliper brake arms for freedom of movement. (Side-pull brake shown.) Lubricate bearing with a drop of oil. Wheels should be centered; adjust by loosening axle nuts slightly, and centering the wheel. Then tighten the nuts and double check.



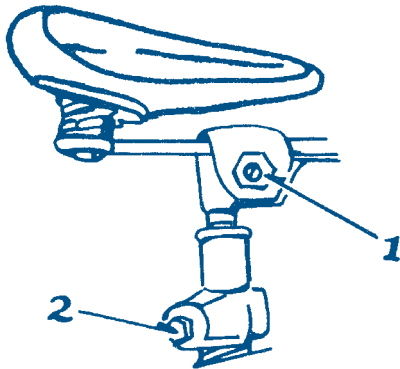
Rear caliper brake arms (3) should move freely. Check operation and put a drop of oil at each bearing (4). Brake shoes (1) must be aligned so they will bear against, and be parallel to, wheel rim; they also must not touch tire sides. Shoes may be adjusted by loosening the nut (2) on both sides of wheel. Brake pads must clear wheels by $\frac{1}{16}$ to $\frac{1}{8}$ inch when the brakes are off. Adjust the cable length if necessary by loosening the cable clamp nut (5). (Center-pull brake shown.)



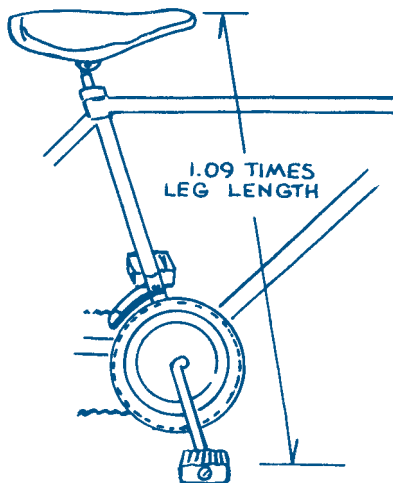
Front caliper brake pads (1) must be aligned with wheel rim. Make adjustments by loosening nut (2) (both sides). To adjust cable length, loosen the cable clamp bolt (3). Brake shoe clearance should be the same as the rear wheel. (Center-pull brake shown.)



Are the handlebars tight in the frame tube? Adjust until comfortable, as long as 2½ inches of handlebar stem are inside frame tube.



Your bike saddle can be moved forward or backward by loosening the seat-clamp bolt (1); move it up or down by loosening the seat-post clamp (2).



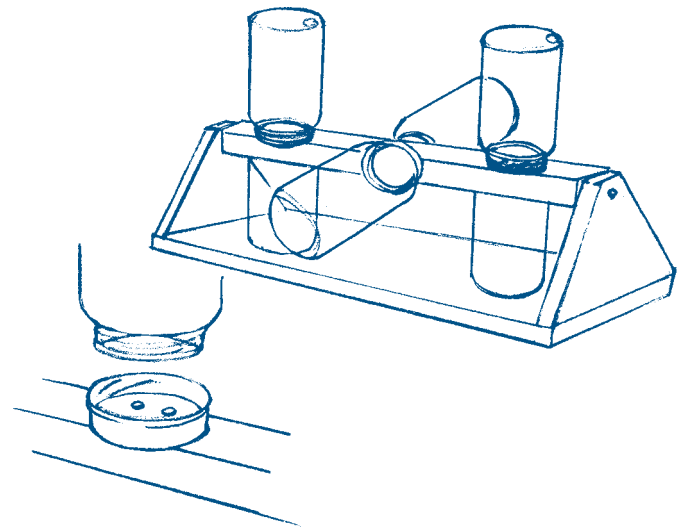
Correct seat height should be 1.09 times your leg length—from crotch to heel. This is slightly more than your leg length.

How to Organize Parts and Tools

Good handyman don't waste time looking for parts, fasteners, and small tools. They store them in labeled boxes so that they can find such things easily. Milk cartons and cigar or candy boxes make good storage containers. Shoe boxes can be used to hold larger items. Small parts can go in 35-mm film cans or pill bottles. Group these items inside larger boxes.

Store similar things near each other. Label the storage boxes. Masking tape works better than gummed labels or cellophane tape. Place the masking tape on the front of the box near the top. Print the label with a felt-tip marking pen.

Affix poison labels on household cleaning products, paint, varnish, thinner, and other toxic materials. Store them out of reach of small children or in a locked cabinet.



Handyman's Helper

Materials:

Base: ½-inch plywood, 4 by 14 inches

Ends: ½-inch plywood, 4 by 5 inches

Handle: 2 by 2 by 13 inches

Small screw-top jars

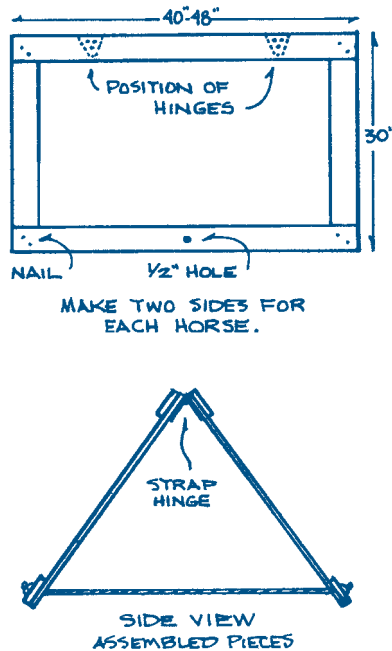
Nails, tacks, paint, or varnish

Cut one base and two ends as shown; sand pieces. Tack jar lids to both sides of handle. Drill holes in ends of handle, slightly larger than nails, so the handle will pivot. Nail pieces together. Paint or varnish. Screw on jars.

Marking Tools

The *Webelos Handbook* advises boys to mark tools (requirement 16) with waterproof ink or plastic tape. But there are other ways to mark tools:

- Use enamel paint and a small brush or cotton-tipped swab to letter the family name on a place on the handle that doesn't get much wear.
- Wrap colored electrician's tape around the handle in some distinctive manner.
- Burn the name on a wood handle with a woodburning tool, or if the handle is metal, inscribe the name with a metal engraving tool or a 10-penny nail.



Sawhorses

Building two all-wooden sawhorses (you can't get by with just one!) pulls into play several carpentry skills: measuring, sawing, checking for squareness, nailing, and inserting screws. You may even paint your sawhorses.

These sawhorses are made of simple wooden rectangles, so they are quite sturdy. Make legs 30 inches long and the crosspieces 40 to 48 inches long. Old shipping crating works well, as do two-by-fours (but two-by-fours make for heavy sawhorses). Strap hinges that are screwed into place hold the two sides together and allow you to fold them up for easier storage. A piece of rope knotted on the outside of holes drilled into the two bottom crosspieces keeps the two sides from spreading too far apart.

Changing Car Light Bulbs

Sooner or later, every driver must change a burned-out bulb somewhere on the car. Check the car owner's manual or the old bulb to see what type of replacement to buy. Many discount stores have automotive departments that carry replacement bulbs.

Before you try to change a bulb, be certain the car ignition switch is turned off. When changing bulbs, the greatest danger comes from accidentally breaking the bulb and cutting yourself. Therefore, it's a good idea to use a cloth or gloves to protect your fingers.

Each car model is different, so check with an adult and follow the owner's manual carefully when changing a bulb.

Be a Tire Detective

You can be a "tire detective" and analyze the tread on your family car—or any car. The tire tread offers many clues about a car's condition and the way it is being driven.

Most tires have built-in tread wear indicators, which appear as hard rubber bars across the tread when it has worn down to $\frac{1}{16}$ inch above the tire's surface. When they appear in two or three places, the tire is too worn for safe driving.

Look at the pattern of tread wear on each tire. If the tread is worn in the middle, and not on each side, the tire is overinflated, or has too much air in it.

If the tread is worn on the sides and not in the middle, the tire is underinflated. Check the sidewall of the tire or the car owner's manual for the correct inflation pressure. It will be listed in pounds per square inch (PSI). Then check the pressure with a tire gauge and have an adult help you add more air at a service station.

Because air in tires heats up and expands with driving, check the tire pressure in the morning before the car has been used.

Reduce Pollution

Keep organic matter out of landfills by making compost. Place leaves, grass clippings, raw kitchen scraps, and other plant material in a pile or a bin. Keep the pile moist and mix it regularly. Over a period of about six months, the material will break down and can be used in the garden as a replacement for chemical fertilizers.

Kim's Game—Handyman Style

Collect 20 items used for household repair jobs, such as a nail, washer, screw, nut, etc. Lay these items on a table or tray. Let the boys have a good look, then cover the items or remove the tray. Each boy writes down as many things as he remembers. Boys may be divided into teams to play the game.

RESOURCES FOR HANDYMAN ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys' Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832

Help on the Handyman activity badge can be obtained at the monthly Cub Scout leader round-table and from other Webelos den leaders. There may be a handyman or mechanic in the pack who would be willing to provide assistance.

Maintaining Skateboard or In-Line Skate Bearings

Bearings are small components that fit inside a wheel. The bearing allows the wheel to turn and fit onto the axle. There are two bearings that fit tightly in each side of the wheel. Some bearings are sealed, which means that you can't remove the shield of the bearing to clean the ball bearings inside. Other bearings are called serviceable, which means that you can remove the shields to clean and lubricate each ball bearing.

Make sure that bearings are clean and dry. They will rust if they stay wet. Throughout the life of a bearing, it will slowly leak the oil or grease inside. When this happens, you will begin to hear the sound of metal spinning on top of metal. This is when you know to replace them!

To increase the life of bearings:

1. Keep them dry.
2. Wipe the dirt off the surface of the bearing with a cotton swab or small cleaning tool.
3. Soak the bearings in citrus cleaner.

Never use WD-40 on bearings! This product will speed up the removal of the oil or grease in the bearing.



NATURALIST

OUTDOOR GROUP

The Naturalist activity badge will help Webelos Scouts increase their awareness of, and gain an appreciation for, the natural world around them. Backyards, parks, woods, fields, and even country roads are inhabited by many kinds of insects, birds, plants, animals, trees, and other forms of life.

A boy's interest in this badge may lead to a hobby or vocation. It will also help prepare him for the new adventures he will find in nature when he moves into a Boy Scout troop.

REQUIREMENTS

Do this:

1. With your parent, guardian, or Webelos den leader, complete the Respect Character Connection.

And do five of these:

2. Keep an "insect zoo" that you have collected. You might have crickets, ants, or grasshoppers. Study them for a while and then release them. Share your experience with your Webelos den.
3. Set up an aquarium or terrarium. Keep it for at least a month. Share your experience with your Webelos den by showing them photos or drawings of your project, or having them visit to see your project.
4. Visit a museum of natural history, a nature center, or a zoo with your family, Webelos den, or pack. Tell what you saw.
5. Watch for birds in your yard, neighborhood, or town for one week. Identify the birds you see and write down where and when you saw them.

6. Learn about the bird flyways closest to your home. Find out which birds use these flyways.
7. Learn to identify poisonous plants and venomous reptiles found in your area.
8. Watch six wild animals (snakes, turtles, fish, birds, or mammals) in the wild. Describe the kind of place (forest, field, marsh, yard, or park) where you saw them. Tell what they were doing.
9. Give examples of
 - A producer, a consumer, and a decomposer in the food chain of an ecosystem
 - One way humans have changed the balance of nature
 - How you can help protect the balance of nature
10. Identify a plant, bird, or wild animal that is found only in your area of the country. Tell why it survives only in your area.
11. Learn about aquatic ecosystems and wetlands in your area. Discuss with your Webelos den leader or activity badge counselor the important role aquatic ecosystems and wetlands play in supporting lifecycles of wildlife and humans.
12. Look around your neighborhood and identify how litter might be dangerous to the birds and other animals. Clean up the litter. Identify what else you might do to make your neighborhood safer for animals.
13. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Wildlife Conservation.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display insect cages, aquariums, terrariums.
- Display bird migration charts, drawings of poisonous plants and reptiles, or insect life-cycle charts.
- Display leaf prints and casts of animal tracks.
- Have a boy tell how to identify outdoor hazards and how to treat poison ivy/oak/sumac rash.
- Have a boy explain how to catch and care for insect "pets."

DEN MEETING ACTIVITIES

- Make insect cages. (See “Outdoors,” *Cub Scout Leader How-To Book*.)
- Make an ant house. (See the *Webelos Handbook*.)
- Learn how to identify outdoor hazards, such as poisonous plants and reptiles and annoying insects. Make drawings of them. Learn how to treat poison ivy, poison oak, or poison sumac rash.
- Take a nature hike to collect specimens for insect cages. You might also make plaster casts of animal tracks, study wild-life homes, or make a list of all plants in a given area.
- Have the boys keep a nature notebook, jotting down discoveries they make on field trips.
- Make charts showing the life cycle of an insect.
- Make aquariums or terrariums.
- Collect tadpoles to keep in an aquarium and watch them grow into frogs.
- Go on a bird-watching hike. Identify birds and make notes about the species you see and their location and habits. Learn to identify bird songs.
- Make bird migration charts, using large U.S. maps. (See the flyway map in the *Webelos Handbook*.)
- Make bird feeders and plan a bird-feeding project. Observe birds using the feeders.
- Make a leaf collection or nut collection.
- Make leaf prints.
- Make nature observation calendars for the month (page 79).
- Invite a naturalist or conservationist to a den meeting to talk about a particular aspect of nature and what he or she does.
- Take a walk through your neighborhood and clean up litter. Afterward, discuss how litter might be dangerous to birds and other animals and what else you might do to make your neighborhood safer for birds and animals.

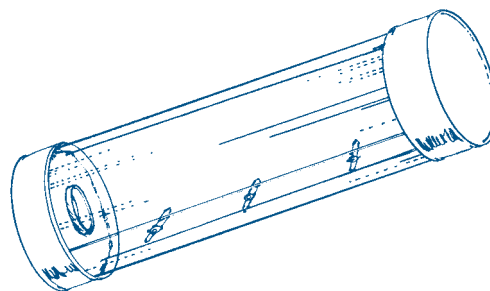
Catching Insects

Boys won't have any trouble finding insects in either the city or the country, but if they want a particular kind, you may be able to suggest where to look for it and how to catch it.

Beetles and Crickets. Sink a small jar or can in the ground so that the rim is level with the surface. Pour in about an inch of a sweet mixture, such as two parts molasses and one part water. This gooey mess will attract hordes of insects, which will tumble into the jar and be trapped. They will drown in a short time, so check the trap frequently to catch a live one.

Butterflies, Moths, and Other Flying Insects. A sweet, slightly fermented pulp of fruits (peaches or apricots) painted on a tree trunk will trap flying insects. Or you can catch them with a net in an empty lot, open field, or public park.

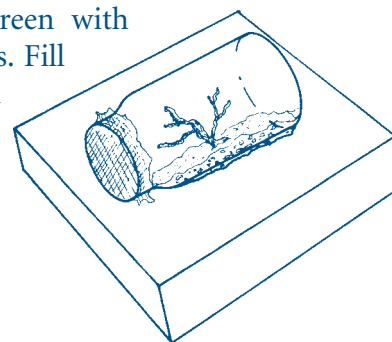
Earthworms can often be found in a handful of soil. Clear away any surface debris from a small patch of ground. Force a soup can deep into the earth, scooping up as much soil as you can, and then empty it onto a sheet of paper (white is best). See how many earthworms and insects you have captured.



Keeping Insects

Bug House. The top and bottom are empty tuna cans. The metal screen is a 10-by-12-inch piece of window screening rolled into a cylinder to fit the cans. Secure the screen with brass paper fasteners. Fill the bottom can with plaster of paris and insert a bottle cap as a “watering hole.” Insert the screen cylinder while the plaster is soft.

Other containers for keeping several types of insects are described in the *Webelos Handbook*. A good one for many insects is easily made by wiring a fine-screen covering over the opening of a 2-quart jar, which is then glued (on its side) to a wood base.



- For caterpillars, use a layer of pebbles on the bottom, a layer of sand, and then top with ordinary soil.
- For spiders, use the same preparation but with less soil. The spider will need a large twig for spinning a web.
- For earthworms, use the same preparation, but the soil must be rich and slightly damp.
- For grasshoppers and walkingsticks, use grass sod about 2 inches thick instead of plain soil.

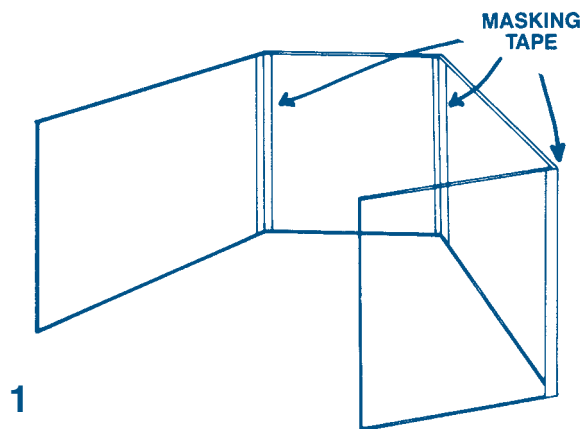
NOTE: When you aren't observing your ants or worms, keep their jars covered with dark paper or cloth.

Feeding Insects

Boys should be reminded that insects need food and water to stay alive. **Note:** Once the insect study is completed, boys should release the insects near where they found them.

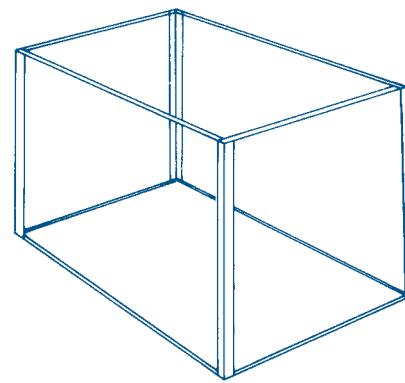
- Praying mantises will eat a bit of fresh liver from your fingers or from a toothpick. They may drink from a spoon and like milk or watermelon juice. They also need live food, such as grasshoppers, flies, and beetles.
- Earthworms will eat small pieces of carrots and lettuce, grass cuttings, corn meal, or leaf mold.
- Crickets will eat bits of bread soaked in water, lettuce, and even peanut butter.
- Grasshoppers and walkingsticks will eat the grass sod in the bottom of their cage.
- Caterpillars must be fed the same kind of leaves as those you found them on.
- Spiders can be fed flies, inchworms, or other small insects. The food must be alive.

Terrarium for Pets

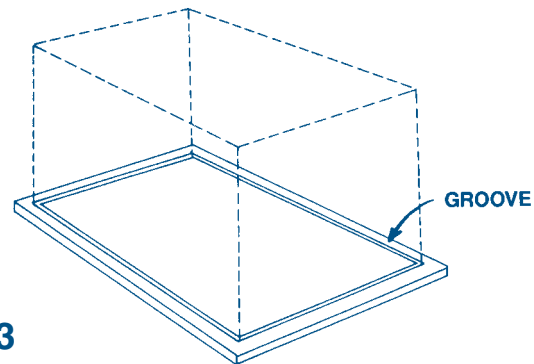


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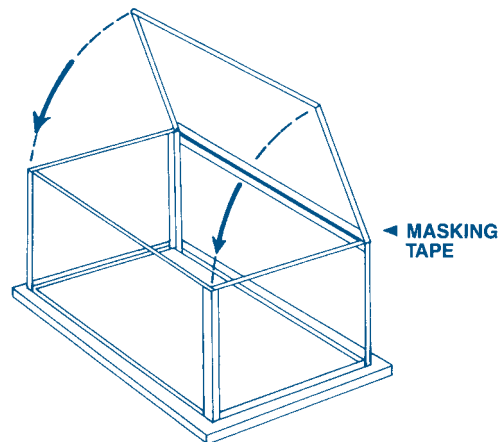
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3



4



A terrarium can be an indoor home for a pet turtle, snake, newt, toad, or salamander. An old fish tank makes a fine terrarium, and it doesn't matter if it leaks because it won't be filled with water. A terrarium can also be made from windowpanes, following these easy steps:

1. Tape together four pieces of glass with 1-inch-wide masking tape.
2. Put the pieces together as a glass-sided box.
3. Place on a board, mark an outline of the sides, and cut a $\frac{1}{4}$ -inch groove in the board for the glass box to set in.
4. Tape a glass lid to the box that can be raised and lowered.

- Place stones and dirt in the terrarium. Add live plants that will duplicate the natural surroundings of the pet.
- Feed the pet regularly with the food it likes best. Be sure to place a small dish in the terrarium for drinking or swimming water.

To make a terrarium for plants, see the *Webelos Handbook* or the “Outdoors” chapter of the *Cub Scout Leader How-To Book*.

Observing Insects

Here are some things the boys might watch for when observing insects:

- Watch how ants work together to accomplish a task. Make a note of what they do, and which ants perform each of the various duties.
- Does light or temperature have any effect on the speed of crawling insects?
- Does the insect prefer one type of food to another? What does it like best?
- Listen to music-making insects, such as grasshoppers, crickets, and katydids. How many chirps do they make in a minute? Does a temperature change affect the number of chirps per minute?

Raising Frogs

Frog eggs can be found attached to aquatic plants in swampy pools and ponds. They are usually laid in clumps that are covered with a jellylike protective coating.

Collect only 30 to 40 eggs along with some of the plants and greenish scum (algae) to provide food for the tadpoles and to help keep the water fresh. Place all of this in an aquarium of pond water away from direct sunlight so the water doesn't get too warm.

After the tadpoles hatch from the eggs, they must be fed daily. Collect more pond water, which contains small plants and animals that are the tadpoles' natural food. You may also add commercially prepared food used in aquariums to the water. As the tadpoles grow, they can be fed bits of raw meat or fish.

Frogs and toads should be fed live insects or bits of meat and fish. They prefer grubs, earthworms, or other soft insects. Adult frogs need a dry-land resting place because they breathe air.

NATURE OBSERVATION CALENDAR						
SUN	MON	TUES	WED	THURS	FRI	SAT
			1 GRASS IS TURNING GREEN	2 SONG SPARROW SEEN ON FEEDER	3 ICE IS BREAKING UP	4 HAD A SMALL SNOWSTORM
5 CAUGHT TADPOLES	6 FOUND SNAIL SHELL IN WOODS	7 DAFFODILS COMING UP	8 LOCATED BIG DIPPER	9 OUR GUDDIE HAD 12 BABIES	10 SAW DEER TRACKS	11 COCOON FOUND ON TREE
12 WHITE PINE	13 SAW A GARDEN SNAKE	14 FOUND BLACK BIRD FEATHER	15 SAW FIRST ROBIN	16 SHOOTS FROM SUGAR MAPLE	17 FOUND FOSSIL IN CAVE	18 COLLECTED ROCKS
19 SAW POISON IVY	20 SAW RED BUDS IN BLOOM	21 COLLECTED LEAVES	22 TULIPS COMING UP	23 DOGWOOD IS BUDDING	24 SAW SPIDER	25 WENT TO LAKE
26 FOUND TRACKS ON BEACH	27 COLLECTED CATTAILS	28 WENT FISHING	29 SAW GEESE FLYING	30 SAW A FALLING STAR		

Nature Observation Calendar

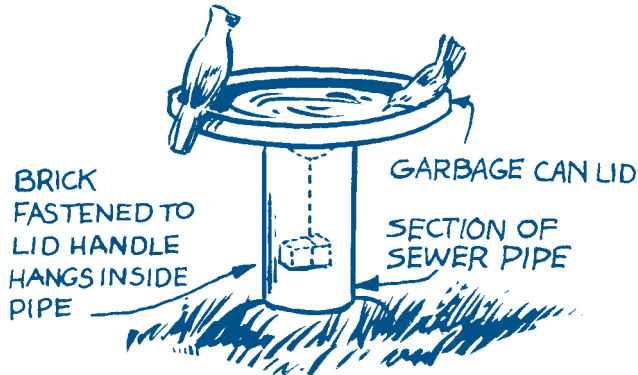
Have each boy make a calendar, such as the one shown, on a 10-by-12-inch piece of heavy paper or cardboard. Letters and numbers can be drawn with a marking pen. Ask them to record their daily observations of nature and make drawings to illustrate the calendar.

Wormy Experiment

Try this experiment to show your den how worms work. Put 4 to 5 inches of rich soil in a large glass jar with a half-dozen earthworms. On top of the soil, put an inch of light sand. Sprinkle corn meal on the sand. Wrap black paper around the jar to shut out light. At your next den meeting, take off the paper and see what has happened. The worms will have moved dark soil up into the sand and sand down into the soil. You'll see tunnels along the glass marking their travels. Explain that the worms' tunnels help oxygenate the soil to nurture life and help the soil hold water.

Bird-Feeding Project

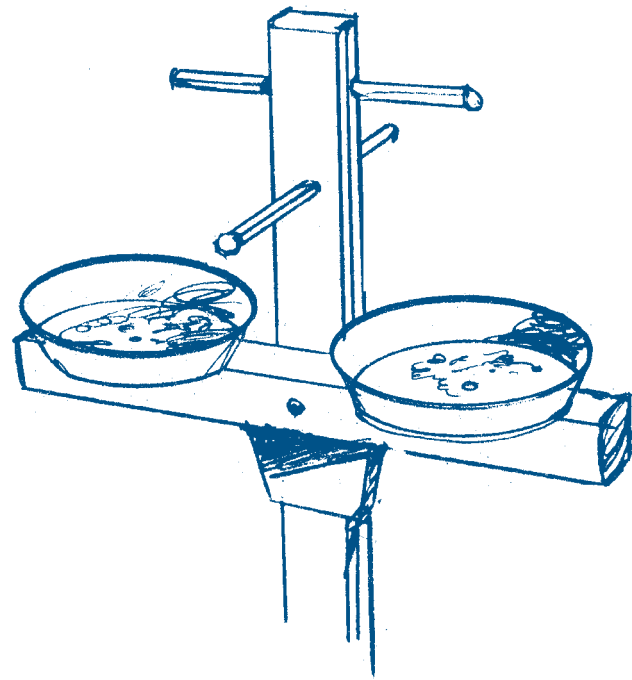
Birds are probably the easiest wildlife to observe because they are so plentiful and so easily attracted to feeders and bird baths. The den might make and maintain a bird feeder and bird bath to offer hospitality to birds and to encourage the boys to look closely at wild creatures.



You can make a bird bath from an old trash can lid, turned upside down on a tree stump or other base (see illustration for one idea). (You don't want to put it on the ground, because then birds may be endangered by prowling cats or dogs.) The water should be 2 to 3 inches deep.

Several bird feeders and birdhouses are described in the "Outdoors" chapter of the *Cub Scout Leader How-To Book*. Also see the bird food recipes and rules for feeding birds in that chapter.

Keep a list of the species attracted to your feeder or bath. Are they male or female? What food do they like best?



Dual-Purpose Bird Bath

Make a post about 48 inches long and add a 20-inch crossbar (use 2-by-2 wood stock). Mount the crossbar so that aluminum pie plates are 24 to 36 inches above the ground. Paint the plates with a dull finish (so birds aren't scared away by the brightness) and fasten them to the crossbar with screws and rubber washers. Fill one plate with water and one with seed.

PLACES TO GO

- Museum of natural history
- Fish hatchery or game farm
- Zoo
- Conservation demonstration area run by fish or wildlife agency or agricultural service
- National wildlife refuge run by the U.S. Fish and Wildlife Service

RESOURCES FOR NATURALIST ACTIVITY BADGE

- *Boys' Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832
- *Webelos Handbook*, No. 33452
- *Bird Study* merit badge pamphlet, No. 35865
- *Sharing Nature With Children*, by Joseph B. Cornell (Dawn Publications, 1998)
- *Insects: A Guide to Familiar American Insects* (Golden Guides), by Herbert S. Zim and Clarence Cottam (Golden Books, 1987)



The Webelos program is the bridge between Cub Scouting and Boy Scouting. In earning the Outdoorsman badge, a Webelos Scout will be introduced to outdoor living and get a preview of the fun he'll have in the troop.

One of the requirements is for a boy to camp out away from home. This can be through family camping, Webelos den camping, or Webelos resident camping. The *Cub Scout Leader Book* gives details on planning a Webelos den overnight campout and offers encouraging tips for family camping. Additional information can be found in the "Webelos Camping" section of this book. The main objective of the campout is for boys and their adult partners to have fun. Webelos Scouts will learn some camping basics; later, when they join a troop, they'll become proficient in camping skills.

REQUIREMENTS

Do two of these:

1. Present yourself to your Webelos den leader, properly dressed, as you would be for an overnight campout. Show the camping gear you will use. Show the right way to pack and carry it.
2. With your family or Webelos den, help plan and take part in an evening outdoor activity that includes a campfire.
3. With your parent or guardian, take part in a Webelos den overnight campout or a family campout. Sleep in a tent that you have helped pitch.

4. With your parent or guardian, camp overnight with a Boy Scout troop. Sleep in a tent you have helped pitch

And do five of these:

5. During a Webelos den meeting, discuss how to follow the Leave No Trace frontcountry guidelines during outdoor activities. (See the *Webelos Handbook*, page 72.)
6. Participate in an outdoor conservation project with your Webelos den or a Boy Scout troop.
7. Discuss with your Webelos den leader the rules of outdoor fire safety. Using these rules, show how to build a safe fire and put it out.
8. With your accompanying adult on a campout or outdoor activity, assist in preparing, cooking, and cleanup for one of your den's meals. Tell why it is important for each den member to share in meal preparation and cleanup, and explain the importance of eating together.
9. Discuss with your Webelos den leader the things that you need to take on a hike. Go on one 3-mile hike with your Webelos den or a Boy Scout troop.
10. Demonstrate how to whip and fuse the ends of a rope.
11. Demonstrate setting up a tent or dining fly using two half hitches and a taut-line hitch. Show how to tie a square knot and explain how it is used.
12. Visit a nearby Boy Scout camp with your Webelos den.

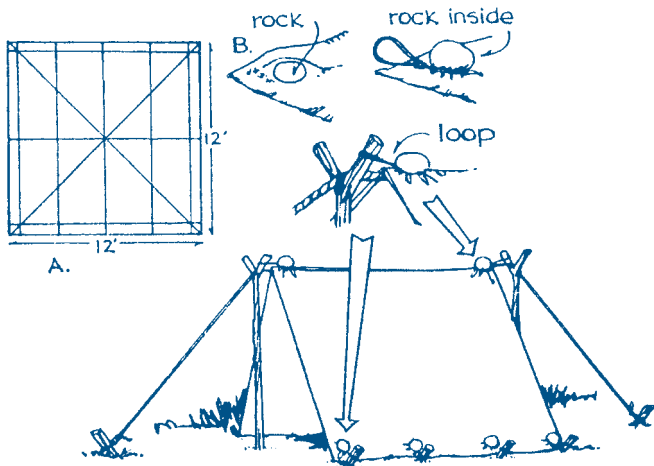
PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display a backyard tent and envelope bed.
- Demonstrate pitching a tent.
- Demonstrate how to make an envelope bed.
- Demonstrate various ways of tying knots.
- Demonstrate how to lay a fire.
- Have a boy explain outdoor fire safety rules.
- Have a boy explain what to do when one is lost in the woods.
- Show a video or slideshow presentation of digital photos of a Webelos den overnight campout.

DEN MEETING ACTIVITIES

- Learn how to make an improvised sleeping bag or bed. (See "Sleeping on the Ground," *Webelos Handbook*.)
- Make outdoor cooking utensils. (See "Crafts," *Cub Scout Leader How-To Book*.)
- Learn aluminum foil cooking techniques. (See "Outdoors," *Cub Scout Leader How-To Book*.)
- Build tin can stoves. (See "Crafts," *Cub Scout Leader How-To Book*.)
- Have a den cookout.
- Make a den first-aid kit described in the "Readyman" section of this book (pages 88–89).
- Make a simple tent, such as the polytarp (below).
- Discuss the items needed for backyard camping and then practice camping in the backyard.
- Practice laying charcoal or wood fires.
- Make lists of items needed for overnight camping. (See the *Cub Scout Leader Book*.)
- Learn the Outdoor Code. (See the *Cub Scout Leader Book* and *Webelos Handbook*.)
- Learn the basic knots needed for an overnight campout. (See the *Webelos Handbook* and *Boy Scout Handbook*.)
- Discuss camping health and safety rules. (See the *Cub Scout Leader Book*.)
- Discuss hiking safety rules. (See the *Cub Scout Leader Book*.)
- Plan a campfire program. (See the *Cub Scout Leader Book*.)
- Plan and hold a Webelos campout. (See the *Cub Scout Leader Book*.)
- Visit the local council's Scout camp.

Place filament tape horizontally, vertically, and diagonally, as shown in figure A. The taped side will be the inner side of the tent.



The Polytarp

The shelter illustrated is called a polytarp. It can be rigged in many different ways. It weighs only about 4 pounds and sleeps two boys comfortably. You can buy polyethylene sheets at a hardware store, or you might be able to salvage discarded sheets from farm suppliers or building contractors. The plastic is available in colors or transparent.

Materials:

- 12-by-12-foot-square, 4- or 6-mm-thick polyethylene
- 150 feet of 2-inch-wide adhesive filament tape

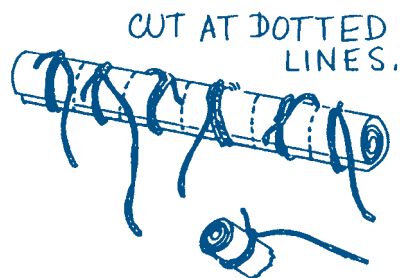
30 to 40 feet of No. 36 nylon twine (260-pound test)

26 feet of nylon braided rope for ridgeline

20 feet of string (chalkline)

Scissors, yardstick, chalk

1. Lay out polyethylene sheet on a flat, clean, dry surface. Be careful not to punch any holes in it. (Holes can be patched with filament tape or plastic adhesive tape).
2. The polyethylene must be clean and dry when applying the filament tape for reinforcing. With the yardstick, chalk, and chalkline, mark the lines along which the filament tape must be attached (see illustration) and then stick on the tape. The side of the polyethylene sheet with the filament tape is the inner side of the tent.
3. To pitch the polytarp, attach ropes for guy lines, tent pegs, etc. (see illustration). Using two half hitches, tie a wad of leaves or a smooth rock the size of a walnut in the plastic where you want the guy line or peg to be attached. Then loop the twine around the plastic-enclosed rock.
4. Tie down tightly the ridgeline, all corners, and at several points where the tent meets the ground. Be sure to allow for ventilation, because air doesn't pass through polyethylene.



Quick Fire Starters

You need newspapers, string, wax, a large can, and an old pot to melt the wax in. Melting is best done as a double-boiler method, in which the can with wax in it is placed inside a larger container that has water up to about 2 inches from the lip of the can. An adult should handle this chore.

Melt two or three blocks of wax (home canning size) or a handful of old candles. While the wax is melting, have each Webelos Scout roll a section of about 18 pages of newspaper into a tight cylinder. Tie the cylinders with string about every 2 or 3 inches, leaving a foot-long length of string hanging for each tie. Then cut the cylinders into sections with a saw or serrated knife.

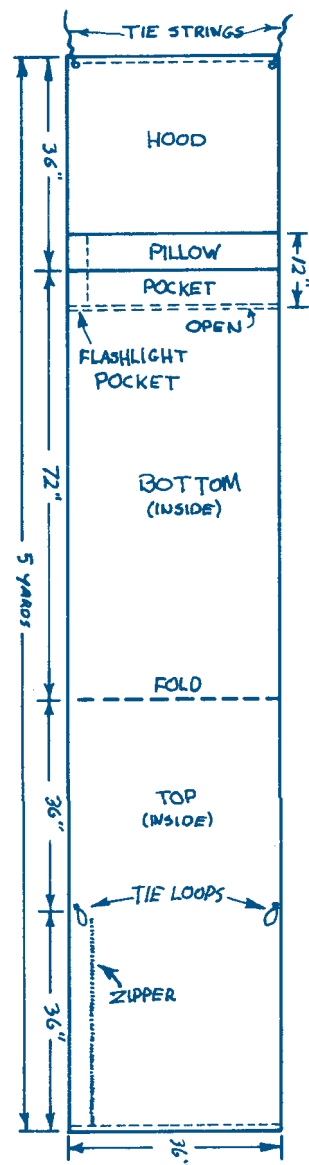
Spread old newspapers on your work surface and put the can of melted wax on it. Have the Webelos Scouts dip their paper sections into the wax, holding onto them with the long strings.

Place the fire starters on other newspapers to dry. When using them, tear the edges slightly for faster ignition.

Litepac Sleeping Bag

The litepac sleeping bag protects blankets and keeps bugs, dirt, and moisture where they belong—on the outside. The pillow pocket covers the blanket ends by day and keeps your clothing dry and clean at night. An emergency will not catch you fumbling for your flashlight, for there is a handy pocket for it.

This bag is good for summer nights, and with a couple of wool blankets added, it will also keep you warm on freezing nights. Waterproof the hood and bottom of the sleeping bag, but never the top. You lose almost a quart of water through your lungs and skin every night, and that water must get out! Good campers give their blankets daily airing to keep them dry.



A good grade of muslin will do, but poplin or light canvas is best for making this sleeping bag. It will weigh about 5 pounds (with one blanket), and the total cost is reasonable.

Materials:

5½ yards of poplin, light canvas, or good-grade muslin

Zipper, 36 inches long

4 feet of twill tape

Waterproofing

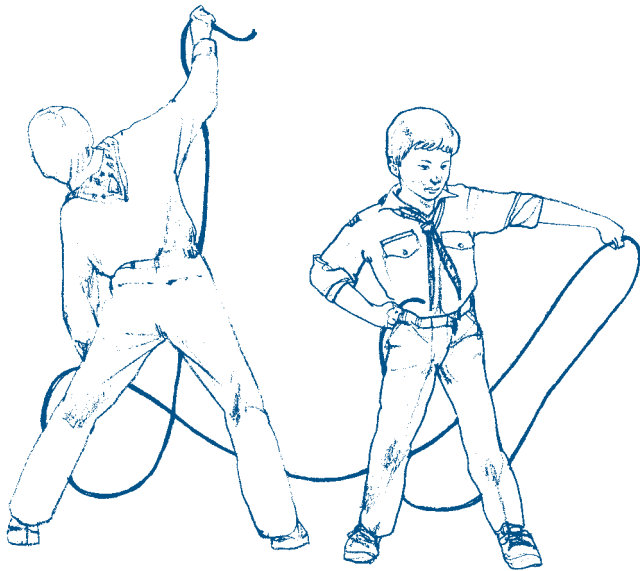
Lay out the material and hem the ends. Sew in the zipper and then the pockets for a pillow and flashlight. Fold the material and sew up the sides. Put in tie loops and tie strings. Waterproof the bottom of the bag and hood only. Then go camping!

Knot Games

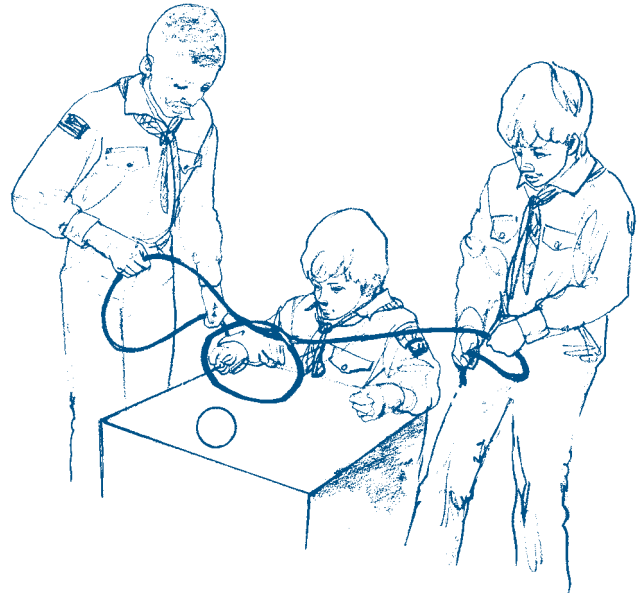
Learning to tie a variety of knots is an important part of camping and outdoor skills. Here are some games to play that will help you teach knot-tying and have fun, too.



One-Handed Overhand Knot. Drape an 18-inch length of rope over a contestant's wrist as shown. Using just that hand, he is to tie an overhand knot as quickly as possible. The knot is considered tied when it is free of the contestant's arm.



Giant Square Knot. Two Webelos Scouts hold the free ends of a 10-foot-long rope in their right hands. Working together, they try to tie and tighten a square knot without letting go of the rope.



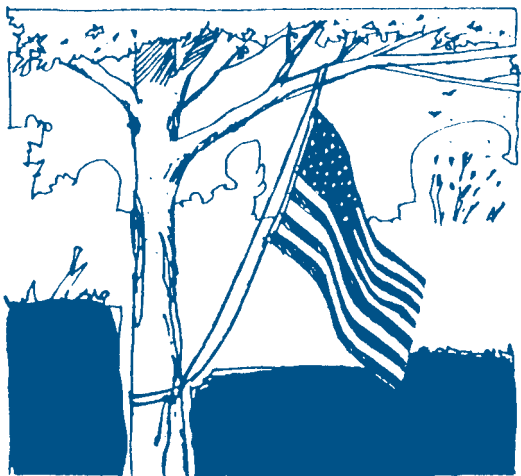
Snatch. The object of this game is to snatch the ball (or other small object) off the box without being caught in the 1-foot-diameter loop that's held about a foot from the ball. If the Webelos Scout tries to feint a move with his hand, he will be disqualified. An 8- to 10-foot length of rope will do.

Knot Trail. Tie different knots about two feet apart in a long rope. Attach the rope to one tree with a clove hitch and to another tree with two half hitches or a taut-line hitch. You may use different ropes in the length, tying them together with a sheetbend or square knot. Ask each Webelos Scout to walk silently along the rope from one tree to the other and back, noting and remembering the knots used. Then each boy tries to make a list of the knots used in the correct order.

Knot-Tying Relay. Have a 6-foot-long rope for each team. Ask the Webelos Scouts to line up in file relay formation about 15 feet from a goal line. In turn, each Webelos Scout races to the goal line, where he selects a card with the type of knot he is to tie. He runs back to the team and ties the knot correctly. Then he unties the knot and hands the rope off to the next player. The first team to complete all the knots correctly is the winner.

Knot Step Contest. Have the Webelos Scouts line up side-by-side at one end of the room. They each have a piece of rope. Call out the name of a knot. Each boy ties the knot. Judges quickly check the knots. Each Webelos Scout who ties his knot correctly can take one step forward. Leader calls out another knot, and the same procedure is followed. The first boy to reach the opposite wall is the winner.

Knotting Circle. Webelos Scouts form a circle facing inward with their hands behind them. “It” walks around the outside of the circle, places a rope in someone’s hands, yells the name of a knot, and then speeds off around the circle (or a few times around the circle if the group of boys isn’t very large). If the recipient succeeds in tying the knot correctly before “It” comes back, “It” must proceed again. Otherwise, the recipient becomes “It,” and the previous “It” takes his place in the circle.



Fly the Flag

The U.S. flag should fly over Webelos overnighter campsites. If your campsite doesn’t have a flagpole, toss a line over a tree branch and attach the flag as shown. Raise it in the morning and lower it in the evenings, with simple ceremonies attended by all den members and their adult partners.

Easy Starting Charcoal Fire

Fill a paper bag three-quarters full with charcoal as shown. Place a layer of kindling on top of the charcoal, and then a layer of paper (or fire starters) on top of the kindling. Place the bag upside down at your fire site or on your grill (that is, with the layer of paper or fire starters at the bottom) and light.



NOTE: All fires must be outdoors only—never in tents or in buildings.

Compass Neckerchief Slide

Materials:

- Toy compass
- 10-inch suede cord
- Hot glue gun
- Three pony beads
- 4-inch pipe cleaner

Glue the suede cord all around the compass. Leave both ends hanging from the compass. Cut ends into a point to make stringing pony beads easier. Slide both ends into one pony bead and push the bead all the way to the compass. String one pony bead onto each end. Tie knot to secure. Trim. Glue pipe cleaner onto the back of the compass to twist into a neckerchief slide.

RESOURCES FOR OUTDOORSMAN ACTIVITY BADGE

- *The Complete Guide to Knots and How to Tie Them*, by Walter B. Gibson (Lifetime Books, 1997)
- *Boys’ Life* magazine
- *Webelos Handbook*, No. 33452
- *Cub Scout Leader How-To Book*, No. 33832
- *The Boy Scout Handbook*, No. 34554
- *Cub Scout Leader Book*, No. 33221

Check with outdoor-equipment shops for other literature and resources.



READYMAN

COMMUNITY GROUP

In keeping with the Boy Scout motto “Be Prepared,” Webelos Scouts begin learning how to be prepared for emergency situations. They learn some basic first aid, including how to handle “hurry cases.” They’ll also learn how and where to get emergency help quickly in a variety of situations.

Other requirements for the Readyman activity badge cover bicycle safety rules, the Safe Swim Defense plan, car passenger safety, and home safety. Working on these requirements will help boys understand what types of situations typically cause accidents and will help them develop attitudes and skills that will protect them and aid them in protecting others.

REQUIREMENTS

Do all of these:

1. With your parent, guardian, or Webelos den leader, complete the Courage Character Connection.
2. Explain what first aid is. Tell what you should do after an accident.
3. Explain how you can get help quickly if there is an emergency in your home. Make a “help list” of people or agencies that can help you. Post it near a phone or in another place with easy access.
4. Demonstrate the Heimlich maneuver and tell when it is used.
5. Show what to do for these “hurry cases”:
 - Serious bleeding
 - Stopped breathing
 - Internal poisoning
 - Heart attack

6. Show how to treat shock.

7. Show first aid for the following:

- Cuts and scratches
- Burns and scalds
- Choking
- Blisters on the hand and foot
- Tick bites
- Bites and stings of insects other than ticks
- Poisonous snakebite
- Nosebleed
- Frostbite
- Sunburn

8. Tell what steps must be taken for a safe swim with your Webelos den, pack, family, or other group. Explain the reasons for the buddy system.

And do two of these:

9. Explain six safety rules you should follow when “driving” a bicycle.
10. Explain the importance of wearing safety equipment when participating in sports activities (skating, skateboarding, etc.).
11. Make a home fire escape plan for your family.
12. Explain how to use each item in a first-aid kit.
13. Tell where accidents are most likely to happen inside and around your home.
14. Explain six safety rules you should remember when riding in a car.
15. Attend a first-aid demonstration at a Boy Scout troop meeting, a Red Cross center, or other community event or place.

PLACES TO GO

- Fire station
- Red Cross center
- Trauma center or hospital emergency room

DEN MEETING ACTIVITIES

- Discuss first aid. Understand and practice the treatments for “hurry cases.”
- Put together a first-aid kit for your den.
- Practice mouth-to-mouth resuscitation on a mannequin. If you are not familiar with the proper procedure, invite a medically trained person to help.
- Talk about where and how to get help in various emergency situations. (See the *Webelos Handbook*.)
- Play the First-Aid Contests (page 89).
- Make a list of emergency telephone numbers. Duplicate and distribute this “Get Help Quick” list at pack meetings.
- Make floor plans showing a home fire escape route. Discuss home fire escape procedures.
- Make posters showing how and where home accidents are most likely to happen.
- Review bicycle safety rules. (See the *Webelos Handbook*.)
- Plan a bicycle reflector campaign (page 90).
- Have a bicycle obstacle course competition. Be sure to include a safety check and all appropriate safety equipment.
- Review the Safe Swim Defense plan. (See the *Webelos Handbook* and *Cub Scout Leader Book*.)
- Ask an off-duty local rescue squad or ambulance corps to demonstrate some first-aid situations and techniques.
- Role-play various emergency situations to help boys develop the courage to respond appropriately.

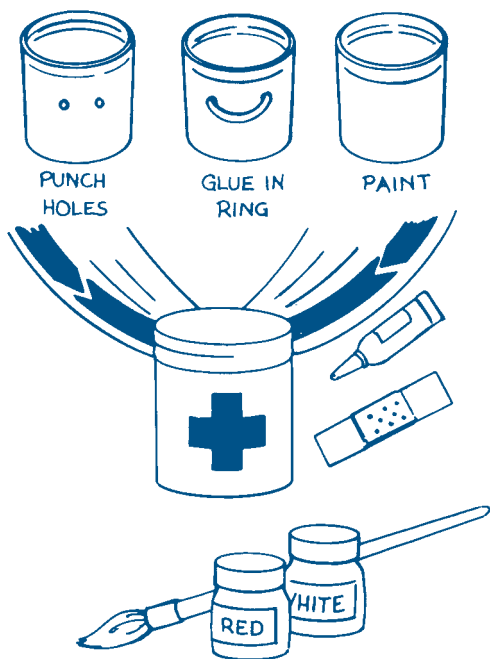
PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display floor plans of your home fire escape route.
- Display posters showing how and where accidents commonly occur in the home.
- Dramatize the danger of having medicine bottles without labels in the home.
- Explain the danger of frayed wires on an electrical appliance, emphasizing that major wiring repairs should be done by an expert.
- Demonstrate how to use the telephone to get emergency help.
- Hand out “Get Help Quick” lists of telephone numbers.
- Show and explain how to handle first-aid “hurry cases,” using suggestions made in Realistic First Aid Practice (page 90).
- Display den first-aid kits.
- Recognize any adult pack members who work in emergency services.

What Would You Do?

To introduce the Readyman badge, ask Webelos Scouts these questions and discuss their answers:

- In a fire at your home, what would you do if flames were blocking the usual exit? Would you know an alternative way out—one planned in advance? Would you be able to lead others to safety?
- What would you do if someone were drowning? Would you know how to rescue that person?
- If someone isn’t breathing, would you know how to start mouth-to-mouth resuscitation? Would you know how to send for help?
- What would you do if your home had a broken water pipe, a leaky faucet, or a stopped-up toilet? Would you know how to turn off the main water valve?
- What would you do if the electricity went off in your home? If a fuse blew or a circuit breaker was tripped? Do you know where the fuse box or circuit breaker box is located in your home?
- What would you do in any emergency? Would you panic? Or would you keep cool because you are prepared? Would you know where to phone for emergency help? How to give first aid? What not to do?



Neckerchief Slide First-Aid Kit

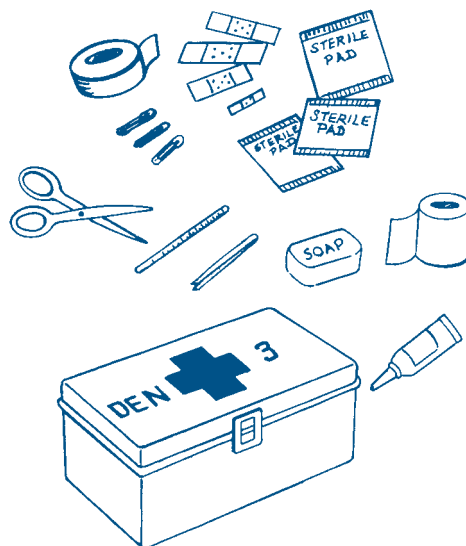
For each slide, use a plastic film can with a lid. Punch two holes in the back of the can so the slide can be inserted. Paint the can white; let it dry, and then paint on a red cross, or use small pieces of red plastic tape to make a cross. Glue in leather thong for ring. Put a small adhesive bandage in the can with a small tube of antiseptic ointment. Add an alcohol wipe, two safety pins, coins for a pay phone, and emergency phone numbers.

Home Fire Escape Procedures

Draw a floor plan of your home, including the locations of smoke detectors. Map out an escape route from each room, making sure that there are at

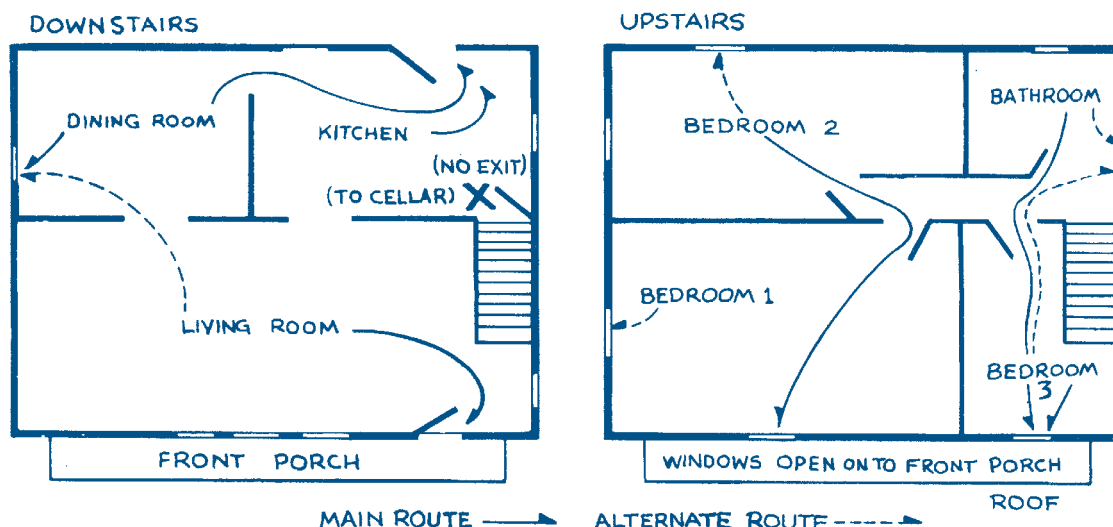
least two exits from every bedroom—the usual exit and an emergency one in case the usual way out is blocked by smoke or flames.

Have a family meeting and discuss the fire escape plan. Teach everyone how to get out of the house if there is a fire; they mustn't grab clothes, papers, jewelry, or other belongings—just get out! Have all family members practice alternate routes to safety. To make sure that everyone can get outside even in darkness or blinding smoke, practice the drill when it is dark. Have an outside meeting place planned.



First-Aid Kit

A well-equipped first-aid kit is a must for the Webelos den. Rather than buying one, let the Webelos Scouts help put together a kit themselves. They may also want to prepare similar kits for family use.



FAMILY ESCAPE PLAN

The den's first-aid kit can be packed in any water-proof container, such as a plastic food storage box, lunch box, tackle box, or coffee can. It should contain at least the following:

- Soap (for cleaning wounds)
- Box of waterproof adhesive bandages (assorted sizes)
- Adhesive tape
- Sterile gauze bandages (small and large)
- Small scissors, tweezers, packet of needles
- Safety pins
- Calamine lotion
- Cold pack
- Latex gloves
- Goggles or other eye protection
- Petroleum jelly
- Baking soda
- Triangular bandages
- Booklet of first-aid instructions
- Pen or pencil and pad of paper
- Coins for telephone calls
- Health histories of den members
- Telephone numbers of rescue squad, trauma center, and Scout executive
- Mouth-barrier device (for rescue breathing)

First-Aid Contests

These first-aid games will help boys practice their first-aid skills.

Pressure Pad Relay. Divide the den into two teams. One member of each team is the "victim," who has arterial bleeding from his left wrist. On a signal, the first boy in each team runs to his victim and applies direct pressure to the wound, using his neckerchief as a pad. When his technique is correct (see the *Webelos Handbook*), the judge (Webelos den leader or Webelos den chief) yells, "Off!" The boy removes the pad, runs back to his team, and tags the next member. First team to finish wins.

Poison Treatment Relay. Print each of the following poisons on a slip of paper: (1) furniture polish, (2) half-full bottle of aspirin, (3) kerosene, (4) contents of unlabeled bottle in medicine cabinet. Divide the den into two teams. On a signal, the first player on each team runs to the judge and is given a slip. He must tell the judge the proper treatment for the case, including (1) calling a hospital or poison control center, (2) reading the label on the container, if there is one, and following directions, (3) knowing whether to give water, and (4) knowing whether to cause vomiting.

Rescue Breathing Relay. This relay is run in the same manner as the Pressure Pad Relay except that

the action is mouth-to-mouth resuscitation. Use a mannequin as the "victim."

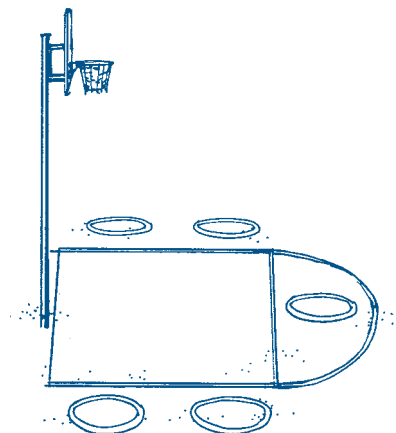
The relay is a fun way to practice this skill, but it is essential for the leader to remember that proper technique is the reason for the activity. Don't allow boys to rush their resuscitation just to win the contest.

In addition, be sure that the judge thoroughly maintains a sanitary environment. The judge must place a clean piece of plastic wrap over the mouth of the mannequin for each boy, or otherwise sterilize the mouth area.

NOTE: Always teach the use of barrier devices such as latex gloves, mouth barriers, and, in some cases, eye protection to prevent possible contamination by blood or other direct contact with the injured person.

First-Aid Baseball. Make a list of first-aid questions based on material in the *Webelos Handbook*. Also have five 3-by-5-inch cards marked as "single," three marked "double," two marked "triple," and one marked "home run."

Set out bases for a small diamond. Divide the den into teams. One team lines up at home plate. A leader asks the first boy a first-aid question. A wrong answer is an out. If the answer is correct, the batter draws a card to see what kind of hit he has made and moves to that base. Runners advance an appropriate number of bases on hits. After three outs, the team is retired and the other team comes to bat.



First-Aid Basketball. Make a list of first-aid questions based on material in *Webelos Handbook*. Make five or six circles on the court with chalk or tape about 10 feet from the basket. Players stand in the circles. In turn, players are asked a first-aid question. If they answer correctly, they score a point and can shoot for the basket for a second point. If the answer is wrong, he gets no points.

Realistic First-Aid Practice

Use the following materials to make make-believe injuries look more realistic during first-aid practice: deep red and light red lipstick; cosmetic blusher; black wax crayon; “blood” mixture of red food coloring, powdered cocoa, and water; blue chalk or eye shadow; white glue or rubber cement; white eye shadow or glycerin and water solution (equal amounts) in an atomizer or squeeze bottle. Have the “victim” dress in old clothes so that his uniform doesn’t get stained.

- Outline a “cut” with deep red lipstick. Fill in the area with heavy lipstick application. Drop “blood” onto the cut.
- To simulate the appearance of a serious cut, first build up the “skin” with white glue. When it has dried considerably, make a groove down the middle and add “blood.” Apply makeup sparingly, as too much can make the wounds appear to be phony.
- Simulate abrasions with a little blue eye shadow. This is the “bruise.” Smear some glue onto the “injured” area. Let it dry a bit, and then rough it up with a dull kitchen knife. Finish off with a little “blood.”
- Simulate a simple burn by applying some blusher to the “injured” area. For a second-degree burn, simulate blisters by applying a little glue onto the area. For third-degree burns, simulate charred skin by applying black crayon to the “injured” area. Now apply a light red lipstick and smear on glue. Let it dry a little, and then roughen it with a dull kitchen knife.
- Simulate the ashen face of a shock victim by applying white eye shadow or white chalk. Work in the color for a smooth, pale complexion. Blend in blue eye shadow lightly over and under the eyes and then more heavily on lips and ear lobes. Simulate clammy skin by spraying glycerin water solution onto the upper lip and forehead.
- You can use makeup for all kinds of cuts and bruises, such as an injured cheek, forehead, or lip. And your first-aid practice will be more effective if the “victims” behave as if they were really in pain or dazed by injuries.

Bicycle Reflector Campaign

Sponsor a campaign to have every bicycle in your pack equipped with reflectors or reflector tape. Talk with someone at a bicycle store or another knowledgeable person about where bicycles are supposed to have reflectors and where on the bike reflector tape might be most useful. Suggest that the chartered organization, police department, or other community group make reflector tape available.



Fire Safety Posters

Boys can make posters to display in the community and at the pack meeting.

RESOURCES FOR READYMAN ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Cub Scout Leader How-To Book*, No. 33832
- *Boys' Life* magazine
- *The Boy Scout Handbook*, No. 34554

Help on the Readyman activity badge can be obtained at the monthly Cub Scout leader roundtable and from other Webelos den leaders. Also check with local health-care and emergency service agencies, the National Safety Council, and the American Red Cross for materials and information on this badge.

SCHOLAR

MENTAL SKILLS GROUP



The Scholar activity badge is an easy one for boys to earn if they are doing satisfactory work in school. More than half the requirements deal with attendance, behavior, grades, and service in school. Unfortunately, some boys don't like school and see it as a place of confinement rather than of learning.

The Webelos den leader may influence a boy's opinion of school by showing his own positive attitude toward this badge, and by voicing his or her feelings on the importance of education and the school system. If you help the boys to see that there is more to school than drudgery and homework, you will have accomplished a major goal of this badge.

Check with the teacher or principal before starting work on this badge. Chances are good that they will be able to suggest other useful projects for Webelos Scouts. A teacher or principal may sign for the first three requirements of the badge.

REQUIREMENTS

Do this:

1. With your parent, guardian, or Webelos den leader, complete the Positive Attitude Character Connection.

And do three of these:

2. Have a good record in attendance, behavior, and grades at school.
3. Take an active part in a school activity or service.

4. Discuss with your teacher or principal the value of having an education.
5. List in writing some important things you can do now because of what you've learned in school.
6. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Language.
7. While you are a Webelos Scout, and if you have not earned it for another activity badge, earn the Cub Scout Academics belt loop for Mathematics.
8. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Chess.

And do three of these:

9. Trace through history the different kinds of schools. Tell how our present public school system grew out of these early schools.
10. Make a chart showing how your school system is run.
11. Ask a parent and five other grown-ups these questions:
 - What do you think are the best things about my school?
 - What could be done to improve it?Tell what you think were the best answers and why.
12. List and explain some of the full-time positions in the field of education.
13. Help another student with schoolwork. Tell what you did to help.

DEN MEETING ACTIVITIES

- | | | |
|---|--|---|
| • Talk about the history of education and how schools developed in America. | • is set up and where children fit in as both students and helpers. | • work by using the Flag Quiz or Scout Badge Quiz (pages 32 and 9–10). |
| • Plan and carry out a den service project for the school. | • Plan a skit or quiz show dealing with education (to be presented at the pack meeting). | • Show pictures of older school rooms and buildings, especially from your community. |
| • Invite an educator to talk to the boys about careers in education. | • Try to stump the Webelos Scouts with some brainteasers, riddles, tricks or puzzles. (See "Razzle Dazzle," <i>Cub Scout Leader How-To Book</i> ; and <i>Boys' Life</i> magazine.) | • Visit the public library. Meet with the reference librarian and have all boys get library cards. (Some libraries may require a parent's permission/signature; check on this before the trip.) |
| • Obtain some old schoolbooks for the boys to look through and to compare with current textbooks. | • Conduct a quiz on Scouting. | |
| • Make a large chart showing how the local school system | • Coordinate with other badge | |

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display a chart of the local school system.
- Display a poster of the extracurricular activities and service projects in which the boys are involved.
- Display a historical exhibit on local schools, including old photographs, textbooks, report cards, etc.
- Have some of the boys give reports on how they completed their badge requirements or tell about a field trip.
- Put on a skit or quiz show about education.

School Service Projects

Boys may want to undertake a den service project for their school. But remember: Don't start any projects until you get the approval of the principal first.

So start with the principal and ask what the den might do. If the principal has no suggestions, check with the school parent-teacher organization for other ideas.

- Plant flowers or shrubs on the school grounds (with permission, of course).
- Assist the custodian in setting up the meeting room for the PTA or other school-related organizations.
- Form a safety patrol or have boys volunteer to serve on a safety patrol.
- Help the school librarian by shelving books or doing other tasks that he or she needs help with.
- Form an honor guard and raise the flag at school over a period of several weeks.
- Act as the stage crew for an assembly program.

Careers in Education

One requirement for the Scholar badge is to list and explain some of the full-time positions open to men and women in the field of education. By discussing these with Webelos Scouts, you can help them see that the field of education goes beyond teaching or being a principal. Review the following with your Webelos Scouts.

Librarians and Media Specialists. Anyone who enjoys books and reading, who likes to be around people, and who needs a variety of activities may consider becoming a school librarian. They are classified as members of the school staff with the same salary, tenure, work schedule, retirement benefits, and sick leave as teachers. There is always a need for specialized librarians with the appropriate background and training to serve in, for instance, schools of medicine, law, engineering, and business, as well as in public and private schools.

Social Workers. Social workers are sometimes known as child welfare workers. Their contributions to the welfare of young people in school and to the whole community are very important. They also try to improve relations between parents and school personnel by helping them communicate and better understand each other.

Health Services. School health services offer many career opportunities. A large school district might have doctors, nurses, audiologists, vision technicians, dentists, dental hygienists, and therapists on its staff. A dietitian, who works on the school lunch program, acts as a consultant in nutrition.

Guidance Counselor. A school guidance counselor works with students to help them understand themselves, to help them set goals, and to give them information about career opportunities and college. Counselors play an essential role in keeping students in school.

What's My Job?

On index cards, write the names of several different jobs in the area of education, such as principal, physical education teacher, kindergarten teacher, bus driver, custodian, cafeteria worker. Pin a card to each boy's back. He must try to determine what his occupation is by questioning the other boys, asking only questions that can be answered "yes" or "no."

PLACES TO GO

- Attend a meeting of the local school board.
- Tour a college campus or local high school.
- Visit with a school principal and talk about the benefits of an education.
- Tour a public library. Find out how it works. The boys can get library cards if they don't already have them.

Your School System

If weather permits, go outside and use chalk to let the boys create a huge chart of your local school system on the driveway. Each boy starts by creating a square for himself and a friend in his class; connect these squares to his teacher. On the same level, create additional squares for the librarian, custodian, school nurse, with all of these connecting to the principal. Continue on up the school system (administrators, superintendent, school board, voters).

Make sure that you discuss how the school board is elected. The boys will be amazed that their parents are at the top of the chart. Be sure to impress on them the importance of voting.

Brief History of Education

When human beings started communicating, they started passing knowledge on to their children. Each generation added new ideas gained from its experience. As contact between individuals, tribes, and nations increased, so did the exchange of knowledge. But this word-of-mouth education was slow and limited.

More formalized education didn't begin until writing was invented about 5,000 years ago. In Asia and Egypt, temple priests taught selected boys the mysteries of their religions. These young men studied to become priests, government officials, scribes, or astronomers.

Also established was the system of *apprenticeship*, through which boys were bound by agreement to work for a master without pay and learn a craft or trade. The master also fed, clothed, and housed the apprentice.

Education took a new turn through the influence of Greek culture. No longer was education confined to the few: All citizens could attend school. The teachings of men such as Plato, Socrates, and Aristotle still influence modern academic studies.

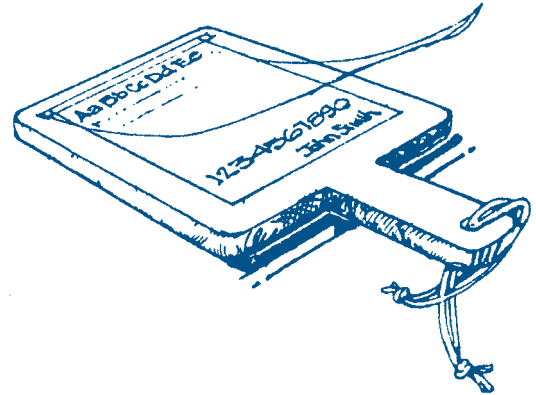
The Renaissance brought a great rebirth of culture to Europe. After the Reformation in the 1500s, church-financed public schools were started. Education was available to all but the very poorest.

In America's colonial days, some boys became apprentices. Others attended elementary schools, many of which were supported by churches or other groups. Secondary and higher-education institutions were mainly for affluent boys.

The United States today has a greater percentage of youth attending school than any other country in the world.

Education Mural

Have den members work together to prepare an education time line mural on a long sheet of butcher paper for display at the pack meeting. Each boy chooses one or more events or eras in the history of education, determines the appropriate place on the time line, and illustrates it.



Hornbook

The hornbook was a paddle-shaped board used in colonial times as a type of studying board. It contained letters of the alphabet and numbers. It was covered with a thin sheet of cow's horn to keep it clean.

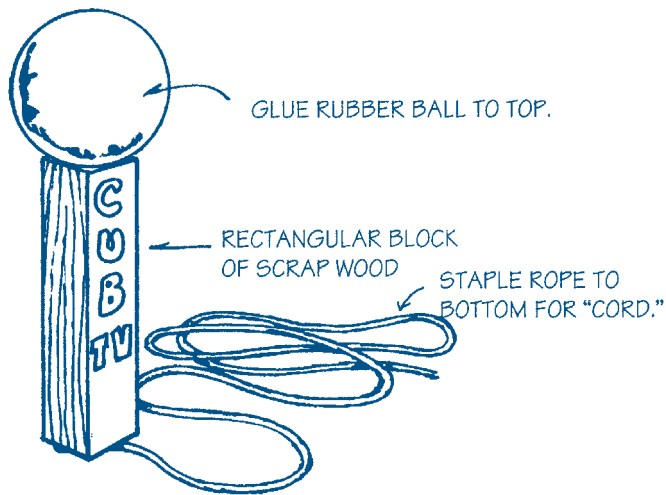
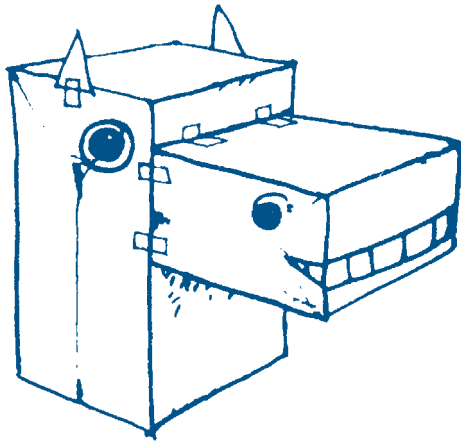
Boys can make their own hornbook by using a $\frac{3}{4}$ -inch-thick board cut into the shape of a paddle. Drill a hole in the handle so you can string a leather thong through it. Draw letters and numbers on white paper. Stain the board, and then place the paper on it. Cover the board with plastic wrap and secure it on the back.

Quill Pen and Inkwell

Make an inkwell from a baby food jar. Cover the top of the jar with a circle of cardboard that has a hole poked in it for the pen to fit through. Cover the jar with salt/flour clay (see *Cub Scout Leader How-To Book*). Let the clay harden and then paint as desired.

Turkey feathers make good quill pens. Trim off the rounded tip of the feather. Using a craft knife, split through the middle of the shaft for about $\frac{1}{2}$ inch. Cut away one side of the split part. Sharpen the remaining part of the tip into a point. Dip into ink, shake off excess, and write. Don't press down too hard or the point will get dull quickly, or perhaps even break. Sharpen the point with a knife.

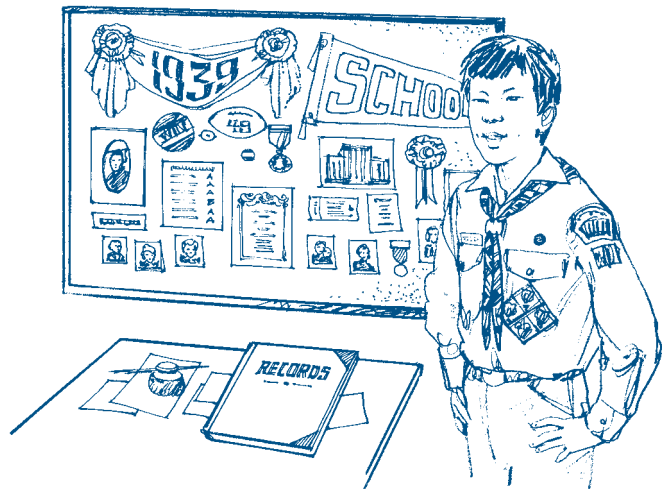
Ideas for Den Skits



Educated Horse. Construct a simple horse costume. The head may be made from paper bags; the body is two boys with a sheet draped over them. Make a microphone as shown, and have one boy be an announcer that introduces the amazing educated horse to the audience. The horse answers questions with “yes” or “no” by moving his head. He gives solutions to simple arithmetic problems by stamping his “hooves” the correct number of times.

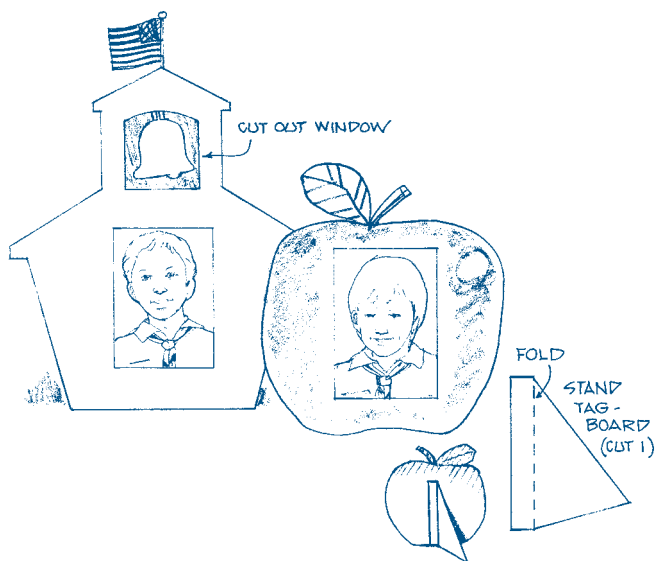
Colonial School. Re-create a colonial schoolroom with boys suffering under a stern teacher who drills them relentlessly in the three R's: Reading, wRiting, and aRithmetic. Students could use hornbooks and quill pens. For humorous finale, have the scholars rebel and chase the schoolmaster offstage.

Teaching Machine. Make a fanciful computer by painting dials, buttons, and levers on a large cardboard carton. Students are grouped around the computer, working on difficult math problems. An old-timer enters and inconspicuously kicks out the computer's plug. He asks the students, “What's 2 plus 2?” One of the students enters the problem in the computer, but it doesn't respond. The students puzzle over the problem until the old-timer puts the plug back in. The computer then comes up with the correct answer. While the students shout, “Isn't that a great computer!” the old-timer shakes his head sadly and shuffles offstage.



Scholar Display

Assemble an historic exhibit on local schools. You could include photographs, old desks with inkwells, report cards, invitations, and programs from school events that happened long ago. Consult with school principals, retired school teachers, and the local historical society for assistance.



Scholar Photo Frames

Make an apple or a schoolhouse frame for your school pictures. If cut from wood, this project would also meet Craftsman activity badge requirements.

Cut the background shape from cardboard. Trace the design onto plastic craft foam and cut out an identical piece. On the back of the foam, draw an

outline of the photo at the spot you would like it to be placed. Then cut out a hole slightly smaller than the area marked, to be sure that the photo is completely covered.

Lay the craft foam on the cardboard, and trace the opening. Glue your picture to the cardboard in the appropriate place, and then glue the foam to the cardboard. Decorate frames with additional pieces of foam as desired—apple leaf, school bell, etc. Cut a stand from cardboard or tagboard as shown and glue to the back.

RESOURCES FOR SCHOLAR ACTIVITY BADGE

- *Boys' Life* magazine
- *Webelos Handbook*, No. 33452

Other help for the Scholar badge may be obtained at the monthly Cub Scout leader round-table and from other Webelos den leaders. Check with the board of education or a school administrator for materials and information on the local school system and career opportunities.



SCIENTIST

TECHNOLOGY GROUP

We live in an exciting age of science that continues to uncover the mysteries of the world—and worlds—around us. Through science, humans have been able to better understand nature and themselves, and help improve the human condition.

The Scientist activity badge offers boys many opportunities for fun and learning—and even a touch of magic. Boys with inquiring minds will love it, and those who are more inclined toward the outdoors or sports will also enjoy it if given plenty of chances to experiment. Learning scientific methods helps a boy develop his power of thinking and deduction. This activity badge is a “doing” badge, not a “watching” badge. For best results, follow this procedure in conducting the den meetings: (1) Demonstrate the experiment, (2) explain the experiment, (3) ask questions to test understanding, and (4) allow boys to do the experiment.

Webelos Scouts can use their scientific knowledge to astound younger boys at the pack meeting with experiments involving Bernoulli’s principle, Pascal’s law, atmospheric pressure, and other phenomena.

Experiments covering all of the badge requirements are found in the *Webelos Handbook*. These additional ideas will help leaders add some spice to den meetings. Be sure to try the experiments ahead of time and have the necessary materials on hand.

REQUIREMENTS

Do these:

1. Read Bernoulli’s principle. Show how it works.

2. Read Pascal’s law. Tell about some inventions that use Pascal’s law.
3. Read Newton’s first law of motion. Show in three different ways how inertia works.
4. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Science.

And do six of these:

5. Show the effects of atmospheric pressure.
6. Show the effects of air pressure.
7. Show the effects of water pressure. This may be combined with atmospheric pressure or with air pressure.
8. With adult supervision, build and launch a model rocket. (Note: You must be at least 10 years old to work with a model rocket kit sold in stores.) Describe how Newton’s third law of motion explains how the rocket is propelled into the sky.
9. Explain what causes fog. Show how this works.
10. Explain how crystals are formed. Make some.
11. Explain how you use your center of gravity to keep your balance. Show three different balancing tricks.
12. Show in three different ways how your eyes work together and show what is meant by an optical illusion.
13. While you are a Webelos Scout, earn the Academics belt loop for Weather.
14. While you are a Webelos Scout, earn the Academics belt loop for Astronomy.

DEN MEETING ACTIVITIES

- Have each boy pick an experiment in the *Webelos Handbook* and show and explain it at the next meeting.
- Make paper airplanes and have a contest for throwing distance and accuracy. Discuss why they fly and turn.
- Have boys respond to roll call by naming famous scientists and saying a sentence or two about what they did.
- Discuss the various branches of science and how they differ and how they are the same.
- Make crystals or crystal candy.
- Make optical illusions and show how the eyes converge.
- Have a slow-motion bicycle riding contest to show balancing skills and demonstrate center of gravity.

Bernoulli's Principle

In 1738, the scientist Daniel Bernoulli discovered an important principle that was later used to design airplane wings. According to Bernoulli's principle, the higher the speed of a moving fluid or gas, the lower its pressure (see the *Webelos Handbook* for more).

Magnetic Table Tennis Balls. Attach a piece of string to each of two table tennis balls. Hold the strings so that the balls are suspended several inches apart from one another. Then blow between the balls. Bernoulli's principle explains why they move together rather than move apart.

The Floating Ball. You can make a table tennis ball float in the air. As Bernoulli proved, when water or air moves, it has less pressure than the air or water around it. The faster it moves, the lower the pressure.

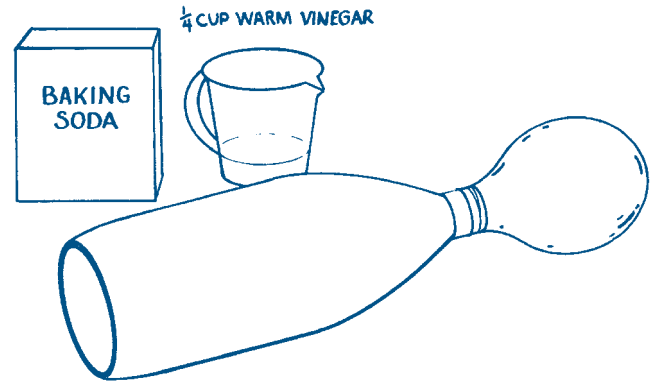
To float a table tennis ball, remove the cleaning tool from the end of a vacuum cleaner hose. Remove the hose from the intake hole, and attach it into the outlet hole near the bottom of the vacuum cleaner. (You might also try this experiment using a hair dryer.) Plug the cord into an electrical outlet and turn the vacuum cleaner on. Point the hose straight up, holding it steady. Gently release the ball into the airstream about 10 to 12 inches above the nozzle. Try balls of different sizes and weights to see what happens. Can you float more than one ball at a time?

Why a Baseball Curves. When a pitcher throws a curve ball, he is using Bernoulli's principle. When he puts a spin on a ball to make it curve, the ball carries a layer of air around with it. The whirling air is moving in the same direction on one side of the ball as the current passing the ball on its flight toward the plate. On the other side of the ball, the whirling air is moving against the air current. The difference in air pressures causes the ball to curve.

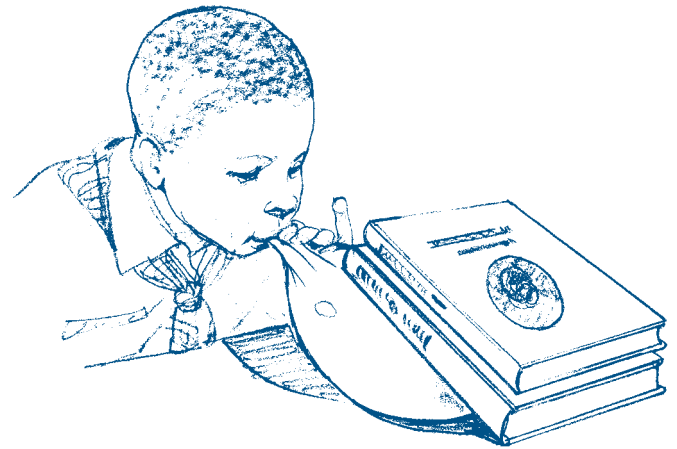
Pascal's Law

Pascal's law describes the effect of applying pressure on a liquid in a closed container. When the pressure of this liquid is increased or decreased at any point, the pressure changes equally throughout the liquid. The principle is used in hydraulic jacks, vacuum pumps, and air compressors.

You can show Pascal's law being applied to air by looking at how air pressure functions in a closed container. Here are some simple experiments.



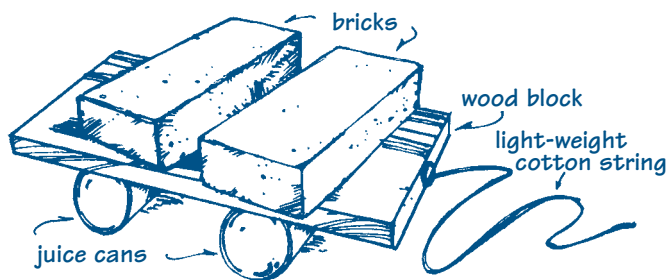
Balloon Blower. You can show graphically how carbon dioxide is formed and builds pressure inside a closed container with this demonstration. Pour 2 teaspoons baking soda into a large, clean soft drink bottle. Add $\frac{1}{4}$ cup vinegar. Now slip a balloon over the mouth of the bottle and tie it tightly with a string. Shake the bottle vigorously. Soon, the balloon will be inflated by carbon dioxide. What happened? The baking soda and vinegar produce carbon dioxide, which increases the pressure inside the bottle and makes the balloon expand.



Simple Pressure Lift. Place a stack of books on a balloon and blow into the balloon. The added pressure inside the balloon lifts the books.

Newton's Laws of Motion and Inertia

According to Newton's laws of motion, an object at rest tends to remain at rest, and an object in motion tends to remain in motion in a straight line at a steady speed unless an outside force acts on it. The property of matter that makes an object resist any change in motion is called *inertia*.



Tow Truck. Construct the “truck” as illustrated. If you pull gently on the string, the truck will move—at least until the wood block falls off the juice can “wheels.” But if you give the string a hard jerk, it will break. Why? Because the inertia of the bricks is too much for the string to overcome.

Lazy Log. Tie two pieces of string of equal thickness to a block of wood or other heavy object. Hang the wood up by one piece of string and pull on the other. Which string will break?

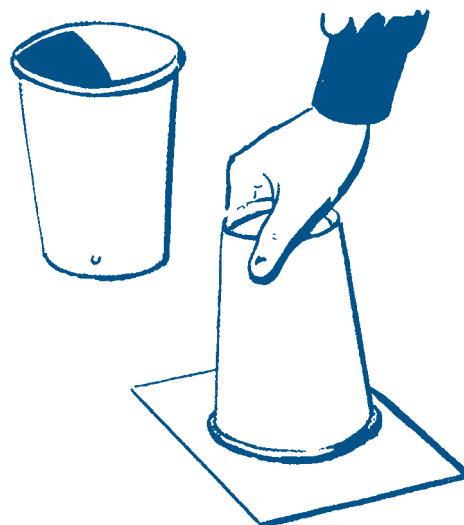
If you pull slowly, the strain and additional weight of the object causes the upper string to break. But if you jerk the string quickly, the inertia of the block prevents the transfer of the total force to the upper string, and the lower one breaks.

Buckle Up. Another example of inertia can be demonstrated at your pack’s annual pinewood derby. Have boys carve a niche in the top of derby cars where a small plastic figure of a person can sit freely. When the cars hit the bumper at the end of the track, the figures won’t stop. They have the same speed as the car and are free to continue moving forward. The faster the cars, the farther the figures will fly. Remind everyone of the importance of wearing a seat belt!

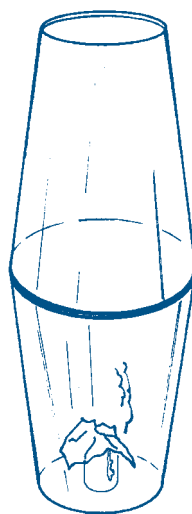
PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display items made during the month—barometers, rain gauges, crystal gardens, etc.
- Perform scientific experiments showing the effects of atmospheric pressure, air pressure, water and air pressure, and inertia.
- Show an optical illusion.
- Show some balancing tricks.
- Have Webelos Scouts demonstrate some of the projects from Bernoulli’s principle, Pascal’s law, and/or Newton’s laws of motion and inertia.

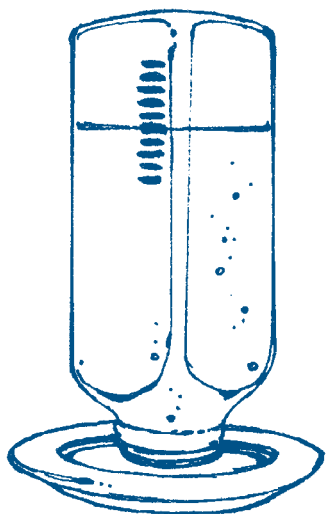
Experiments in Atmospheric Pressure



Hanging Water. Atmospheric pressure pushes on us from all directions. One way to demonstrate this is with a cup or glass of water and a piece of stiff cardboard to cover its mouth. Fill the container to the brim with water, and carefully lay the card over the top. Hold the card firmly in place and invert the container. (Do this experiment over a bowl or sink in case it doesn’t work for you.) Now remove the hand that is holding the card in place. The card stays in place, and the water remains in the container. Air pressure bearing upward on the bottom of the card is greater than the water pressure pushing downward.



Welding Glasses. Show boys how two glasses can be “welded” together—without using any complicated welding equipment. Use two glass tumblers that fit very closely together at the rims. Place wet, thick paper over a lighted candle in the bottom of one glass, as shown. The candle will go out, and the glasses will be stuck together. See if boys can explain why.



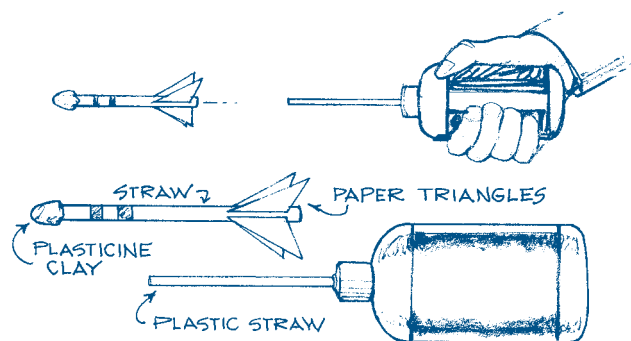
Barometer. A barometer measures atmospheric pressure. Here's a simple one. Use a glass or clear plastic quart bottle. Fill it with water, put a saucer over the top, and flip it over quickly. Allow a little water to escape into the saucer. With a felt-tip pen, draw eight or 10 scale marks on the bottle $\frac{1}{8}$ inch apart. The middle mark should be even with the water level. Check the water level each day. If the water level is higher, the atmospheric pressure is higher and fair weather is coming. If it's lower, look for unsettled weather.

Vinegar Rocket

You should do this experiment outside where you have lots of clear air space.

Materials: 1-quart soda bottle, cork that fits tightly, paper towel, $\frac{1}{2}$ cup water, $\frac{1}{2}$ cup vinegar, 1 teaspoon baking soda

Pour vinegar and water into the bottle. Put 1 teaspoon baking soda in the center of a 4-by-4-inch piece of paper towel. Roll up the paper towel and twist the ends so that the baking soda will stay inside. Drop the towel with the baking soda into the bottle. Put the cork on as tightly as you can and stand back and watch. (Make sure that the "rocket" isn't pointing at anyone!) The baking soda reacts with the vinegar to produce carbon dioxide gas. As the gas forms, pressure builds up and pushes out the cork with the thrust similar to a rocket being launched into outer space. Add streamers to the cork for effect and to see where the cork goes!



Compressed Air Rocket

Launching pad: Drill a hole through the cap of a plastic bottle, large enough for a plastic drinking straw to fit through it; seal the joints with adhesive.

Rocket: Construct the rocket from a 4-inch-long piece of straw that is a bit larger in diameter than the launch straw—the rocket must slide smoothly over the launch straw. Attach colored paper triangles at one end of the straw for tail fins; attach a piece of plasticine clay at the other end for the head.

To launch: Push the rocket over the launch straw until the tip of the launch straw sticks lightly into the clay. If you press hard on the bottle, the rocket will fly a distance of 10 yards or more!

What happens? When you press on the bottle, the air inside of it is compressed. When the pressure is great enough, the plastic launch straw is pushed from the clay plug, the released air expands again and shoots off the rocket.

Fog-Making Machine

Use a plain glass gallon jug, a stopper to fit it, and a bicycle pump with a needle (as used to pump up a basketball). Put a small amount of water or alcohol (alcohol works best) in the jug. Put the stopper on the jug, and the needle of the pump through the stopper. After a few strokes of the pump, remove the stopper quickly. You will hear a loud pop and see a cloud begin to form in the jug. To get "fair weather," all you have to do is replace the parts as they were, and pump air back into the jug.

What happened? When you pumped air into the jug, the air temperature was raised, making it possible for the air to hold more moisture. When you removed the top, the air expanded and cooled. This cool air couldn't hold as much moisture, thereby forming a cloud.

Crystals

Instant Crystals. Heat $\frac{1}{4}$ of a glass of water in a pan. Stir in 3 or 4 teaspoons of Epsom salts (magnesium sulfate) until no more will dissolve. Remove the pan from the burner and add a drop or two of liquid glue; stir until the glue has dissolved. Using a wad of cotton, spread some of the mixture evenly on a piece of glass. In a few minutes, needlelike crystals will begin to appear, and soon the glass will be covered with frosty crystal patterns. When the water dries, you'll have a good sample of magnesium sulfate crystals.

Chemical Garden. Place a small piece of coal, charcoal, or porous brick in a shallow china bowl. Mix together 6 tablespoons water, 6 tablespoons salt, 6 tablespoons liquid laundry bluing, and 2 tablespoons ammonia. Pour this mixture over the coal. Carefully add drops of red ink, merbromin (Mercurochrome), or food coloring on the coal. After several days, you'll find colorful, mosslike growths on the coal.

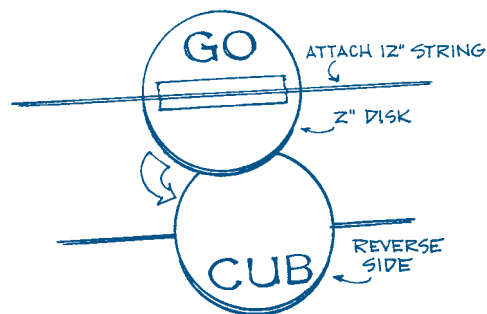
Also see the *Webelos Handbook* for how to make crystal candy that you can eat.

Eyes Right...or Left?

Boys may be surprised to learn that they're either right-eyed or left-eyed, just as they are right-handed or left-handed. They can check by extending a finger toward a distant object while keeping both eyes open. Close the right eye. If the finger appears to jump, this means they are right-eyed. If it doesn't, they are left-eyed, since the left eye is dominant.

Optical Illusions

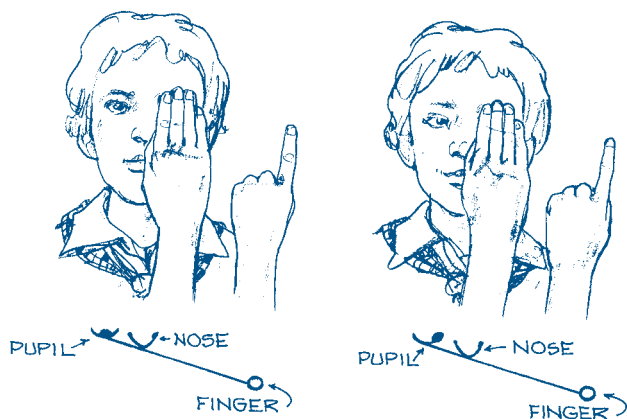
Pendulum Phenomenon. Fasten a $\frac{1}{4}$ -inch-diameter white disk (made out of heavy paper stock or poster board) on a 3-foot piece of white thread like the end of a pendulum. Have someone hold the thread so the disk can swing like a pendulum. Start the disk swinging in a perfectly straight line and view it from a distance of 3 feet against a plain wall. Notice how the disk swings in a line like a pendulum. Now hold a sunglass lens over one eye and observe the path of the swinging object again. The movement will no longer be in line, but in a circle. If you switch the lens to the other eye, the movement will appear to go in the opposite direction. The principle shown here is this: You see best if your eyes see equally well (for instance, they both have 20/20 vision). (See the *Webelos Handbook* for other optical illusions.)



Illusion Spinner. Cut a 2-inch disk out of cardboard. On one side write "go" on the top half; on the other side write "Cub" on the bottom half. With glue or clear tape, attach a 12-inch string across either side of the disk as shown. Twirl the disk and an optical illusion will make it read "Go Cub."

PLACES TO GO

- Visit a high school science laboratory to see the equipment and observe a simple experiment.
- Visit an industrial laboratory.
- Visit an airport and ask an expert to explain the principles of flight.
- Visit an eye specialist and learn how the eyes work.
- Visit the local weather bureau and find out what they do there.
- Visit a museum, a laboratory, an observatory, a zoo, an aquarium, a high school science lab, or another facility that employs people who work in science. Talk to an individual who works there about his or her work.
- Visit a wastewater or water treatment plant.

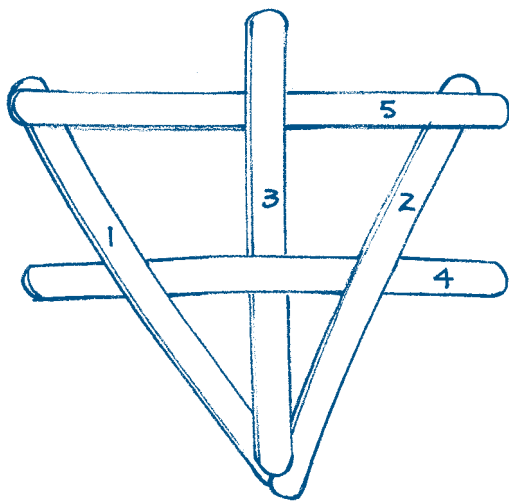


Disappearing Finger. Cover your left eye with your right hand and look straight ahead with your right eye. Raise your left forefinger to your left ear and move it until the tip of the finger is just visible (A). If you now move your eye to look directly at the finger (B), it has disappeared!

This apparent shift of objects due to the angle from which you are viewing them is called *parallax* and is the principle that scientists use to determine the distance of stars from the earth.

Balance

Balancing Bats. Obtain three baseball bats that are all about the same size. Point the handles of the bats together so that they form a “Y.” Slide the handle of the lower bat over the handle of the bat to the left. Slide the handle of the bat to the right under the handle of the lower bat. Because of the interlocking arrangement, each bat supports another, making it a simple experiment not only in balance, but in structural engineering.

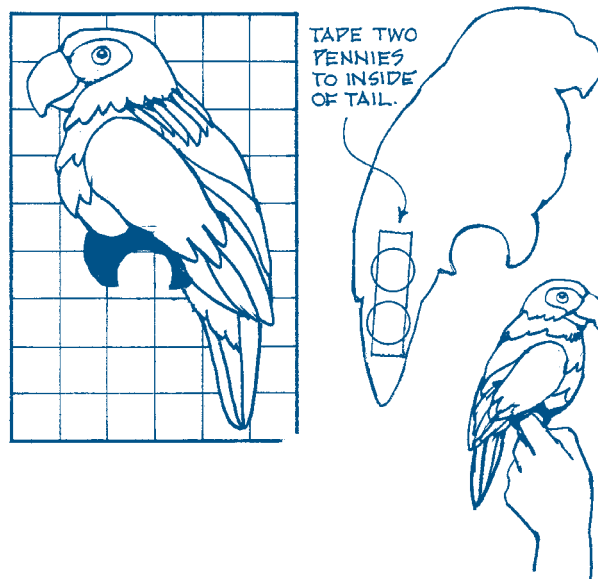


Amazing Flying Machine. This flying contraption is constructed on the same principles of balance and structural engineering as the Balancing Bats. Weave

five craft sticks together as shown. Fly it like an Ultimate disk. The flying machine “explodes” when it hits the ground or other surfaces. Assemble it again and have more fun!



Balance the Coin. Pin a coin with two forks as shown. Now balance the coin on the edge of a bottle or glass.



Balancing Pepito. Enlarge the parrot pattern shown to about 9 by 6 inches. Use the pattern to cut two parrots from cardboard or poster board. Tape two pennies to the inside of the tail as shown, and glue the parrot pieces together. Paint in bright colors. Pepito will balance on a finger and rock back and forth.

RESOURCES FOR SCIENTIST ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys' Life* magazine
- *Cub Scout Academics and Sports Program Guide*, No. 34299: Science

Other help for the Scientist badge may be obtained at the monthly Cub Scout leader roundtable. Also see the “Outdoors” chapter of the *Cub Scout Leader How-To Book* for activities related to weather.



SHOWMAN

MENTAL SKILLS GROUP

The Showman activity badge has something for every boy and allows boys to develop their natural abilities. For the boy who likes to be in front of an audience, there's drama; for the more reserved boy who likes to be behind the scenes, there's puppetry; and for every boy who enjoys the beat of rhythm, there's music. To qualify for the badge, the boy must complete six activities of his choice from any area (puppetry, music, or drama). In addition, he must complete one additional project from puppetry, music, AND drama. The aim of the badge is not to produce skilled entertainers, but to expose boys to theater and music arts, to help them build self-confidence, and of course, to have fun.

Since boys can choose activities from three areas, give them a taste of activities from all three areas during den meetings.

Boys must complete a total of nine activities (six for requirement 1, plus one from each of the Showman areas).

REQUIREMENTS

Do this:

1. Complete six activities of your choice; these can be from any area (puppetry, music, or drama). Webelos den leader or activity badge counselor: Be sure to sign approval both here and for each of the three requirements completed to fulfill requirement 1.

Puppetry

And do one of these not already done for requirement 1:

2. Write a puppet play about one of your Webelos den activities or a subject of your choice.
3. Make a set of puppets or marionettes for the play you have written or for another play.
4. Build a simple stage for marionettes or puppets.
5. Alone or with the help of others, put on a puppet show for your den or pack.
6. Make a set of four paper bag puppets for a singing group. With the help of three other den members, sing a song with the puppets as the performers.
7. There are sock, stick, and finger puppets. There are paper bag puppets and marionettes. Explain their differences and show any puppets you have made for this badge.

Music

And do one of these not already done for requirement 1:

8. Play four tunes on any band or orchestra instrument. Read these from music.
9. Sing one song indoors and one song outdoors, either alone or with a group. Tell what you need to do differently when singing outdoors.
10. Make a collection of three or more records, tapes, or music CDs. Tell what you like about each one.
11. Tell what folk music is. Hum, sing, or play a folk tune on a musical instrument.
12. Name three American composers. Name a famous work by each.
13. Draw a staff. Draw on it a clef, a sharp, flat, natural, note, and rest. Tell what each is used for.
14. Show the difference between 2/4, 3/4, and 4/4 time by beating time or playing an instrument.
15. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Music.

Drama

And do one of these not already done for requirement 1:

16. Give a monologue (a talk) on a patriotic, humorous, or holiday subject or another subject of your choice.
17. Attend a play. Describe the story. Tell what you liked about it.
18. Read a play. Make a model stage setting for one of the acts.
19. Write, put on, and take part in a one-act play.
20. Make a list of stage directions. Tell what they mean.
21. Describe a theater-in-the-round. What are its good and bad points?
22. Explain the difference between grand opera and light opera. Explain the difference between a musical and a play.
23. Read about William Shakespeare. Draw a picture of his Globe Theatre.

DEN MEETING ACTIVITIES

- Invite a drama coach to discuss stage directions and what they mean.
- Invite a clown or makeup artist to demonstrate stage makeup suitable for boys.
- Learn how to make sound effects for skits. (See the “Razzle Dazzle” chapter of the *Cub Scout Leader How-To Book*.) Use a tape recorder to record them.
- Learn how to make other special effects. (See the “Razzle Dazzle” chapter of the *Cub Scout Leader How-To Book*.)
- Use a tape recorder to record the boys’ voices so they can hear how they sound.
- Write a one-act skit for the pack meeting and make costumes. (See the “Razzle Dazzle” chapter of the *Cub Scout Leader How-To Book*.)
- Write and film (using a camcorder) a short (3 to 5 minutes) movie and show it at a pack meeting.
- Make a puppet stage from cardboard boxes. (See the “Razzle Dazzle” chapter of the *Cub Scout Leader How-To Book*.)
- Write a puppet play and make puppets to go with it. (See the “Razzle Dazzle” chapter of the *Cub Scout Leader How-To Book*.) Present your play at the pack meeting.
- Make a shadow puppet screen and shadow puppets. (See the “Razzle Dazzle” chapter of the *Cub Scout Leader How-To Book*.)
- Make bib puppets. (See the “Razzle Dazzle” chapter of the *Cub Scout Leader How-To Book*.) Perform a song and dance act with them.
- Ask a music teacher or professional musician to come to a den meeting to discuss musical careers and perhaps play an instrument for the boys.
- Make homemade musical instruments. (See the “Crafts” chapter of the *Cub Scout Leader How-To Book*.)
- Ask boys to bring their favorite CDs to play for the den.
- Have a den songfest. (See the *Cub Scout Songbook*.)
- Plan and hold a den family night of entertainment, such as a variety show with musical numbers or a puppet show.
- Take your show “on the road” to a children’s home or hospital as a Good Turn.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display costumes, props, or scenery.
- Display puppets, puppet stage.
- Display a CD collection or homemade musical instruments.
- Demonstrate sound effects and other special effects for skits.
- Demonstrate how to apply stage makeup.
- Put on a skit or puppet show or show a home movie made by den.
- Put on a musical talent show.
- Lead a pack songfest.

Prepare a Show

At the end of a month of activities on this badge, you may have a fairly accomplished group of young puppeteers, musicians, and actors. Why not share them with other people by putting on a show?

Because of time limitations, a long show isn’t possible at a pack meeting, but some short acts could be presented: short skit, a puppet show, a couple of musical selections, a comedy monologue, or a movie or videotape made by the den. If the entertainment is good and you want more time, you might want to set aside a special time for the show, other than pack meeting night.

Make a Movie

One way to handle the play-writing phase of this badge is to let Webelos Scouts produce a film, using a home camcorder to record the action. This is a unique opportunity that should excite the boys. Let the boys write the script, choose someone to direct and film it, and act in it. You’ll find that ideas for the plot will come easily.

Boys will enjoy acting in the film, but also consider filming puppets or marionettes that the boys make.

Puppets Galore

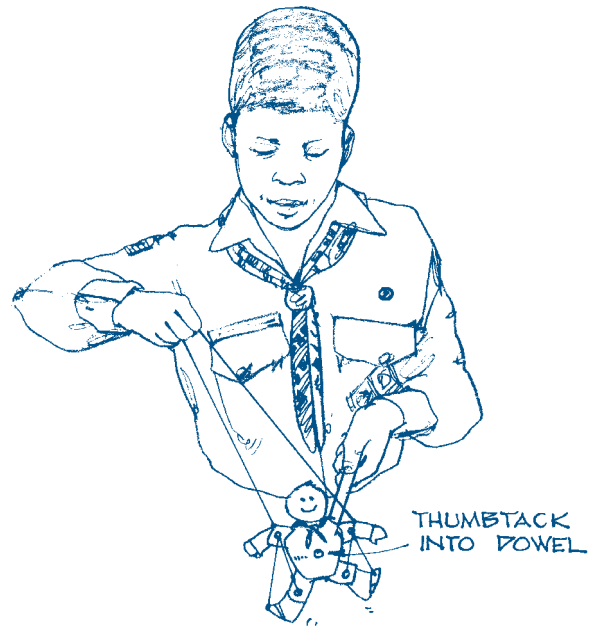


Finger Puppet. The Finger Puppet is a good introduction to puppetry because it's so easy to make. Cut it out from construction paper or other heavy stock, and then paint or decorate with colored markers. Also use yarn for hair, buttons for eyes, and ribbon for bow ties. Use a felt-tip pen for additional features. Attach to fingers with a rubber band. Your fingers form legs.

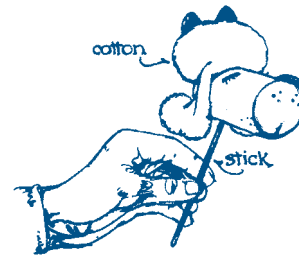


Egg Carton Finger Puppets. Cut the cups from a cardboard egg carton. Decorate as desired. To help the puppets stay on your fingers, wind a 3-inch piece of cellophane tape around your finger, sticky side out. Tuck this tape inside the puppet. When you put the puppet on your finger, it will stay in place.

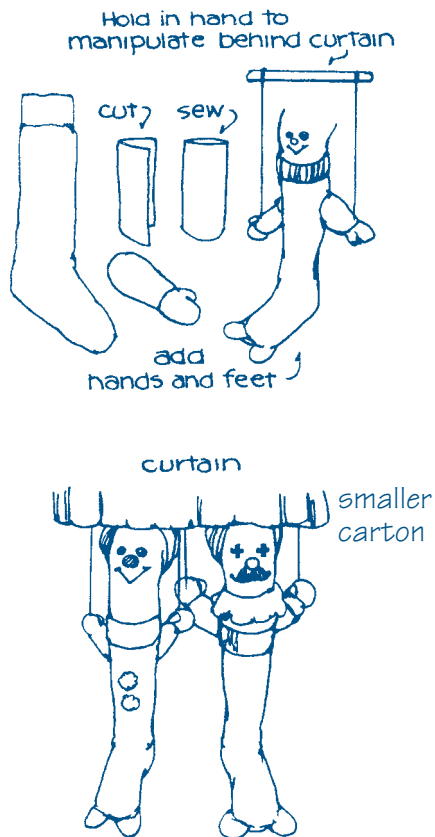
Animal heads can be made by using two cups glued together. Use pieces of the egg carton lid to make ears or antlers.



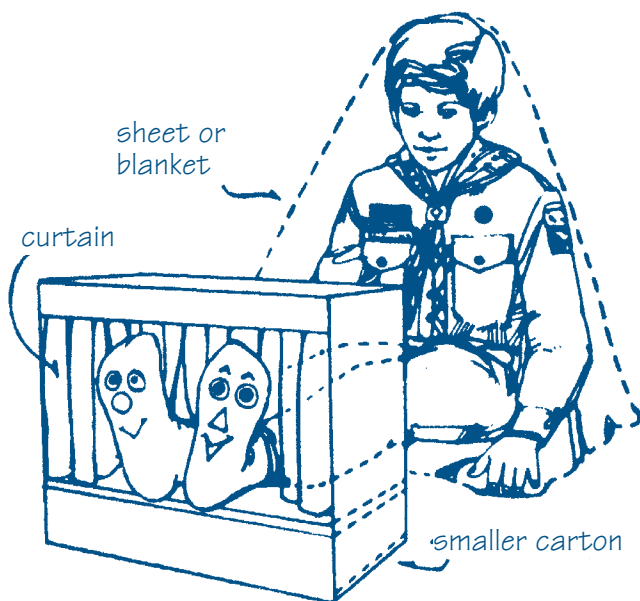
Dancing Stick Puppet. Cut parts from heavy cardboard or plastic. Decorate with marking pens. Punch holes for joints and assemble with heavy brass paper fasteners. With a needle, run heavy thread between the right elbow and knee and between the left elbow and knee; tie each. Have one loop of thread tied at the elbow and feet for the operator to use to work the puppet. Attach a dowel to the puppet's back for support.



Cylinder Hand Puppets. Use cardboard toilet tissue cores to make these puppets. Features can be made with cardboard, construction paper, yarn, cotton, paint, and other materials.



Kneesie Puppets. The puppet's body is a sock coming up to the knee. Draw the puppet's face on the knee with lipstick and eyebrow pencil. For the arms, cut a second sock as shown and sew to the body. Hands and feet are pieces of felt. String arms to a stick so the puppeteer can manipulate them.

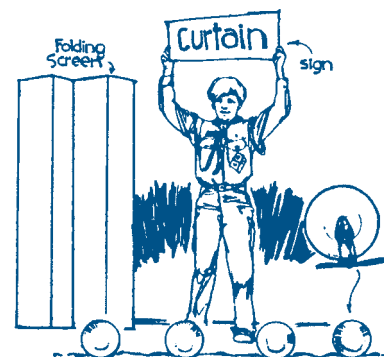


Footsie Puppets. Create puppet faces on the soles of socks. Sew or glue scraps of felt for facial features, or use construction paper, yarn, and other materials.

Make the footsie theater from a cardboard carton. The curtain is made of crepe paper strips affixed along the top. Put a smaller carton underneath as a resting place for legs. The puppeteer can stay out of sight beneath a sheet or lightweight blanket.

Glove Puppets. Supply each boy with a work glove to decorate as a puppet; gloves come in assorted styles and textures and can be decorated with pieces of felt, pom-poms, glitter, etc. Insert the glove through a hole in a large cardboard box that is decorated to match the style of the puppet (for instance, decorate the box as a jungle for a tiger glove puppet). To animate the puppets, boys can insert their hand into the glove or move the puppet with a stick inserted into the glove.

White gloves decorated with black dots make great Dalmatian puppies in a basket. A green glove could become a family of caterpillars on a tree limb. An orange glove could become a family of tigers or giraffes if you add strips or spots. Brown gloves can be used as reindeer with brown chenille stick antlers; have the glove peek out of a chimney, or make a cardboard sleigh.



Improvised Stage Equipment

If your pack meeting place has no curtain for your pack performance, you can improvise. On one side of your stage, set up a folding screen backdrop made of a large sheet of cardboard. Use a sign to announce "curtain," names of acts, etc. For footlights, string Christmas tree lights in front of disposable aluminum plates.

Stand-Up Comedy

Stand-up comedy is when someone delivers a humorous *monologue*—which is when a solo actor recites or acts out a play or gives a talk on any topic. Let your boys warm up your next den meeting by preparing a series of jokes or stories to entertain their den mates. *Boys' Life* magazine is an excellent source of fresh humor every month.

Ventriloquist Act

Have boys write a dialogue that takes place between themselves and a hand puppet they use as a ventriloquist's dummy. It is not very likely that a 10-year-old boy will be a very good ventriloquist, but if he makes wide, exaggerated actions with the puppet, the audience's eyes will be on the puppet rather than the boy. Other alternatives include having another boy off-stage speaking for the dummy, or having the dummy's dialogue recorded on tape. Both of these methods work well, particularly if you have a microphone available.

Den Games for Musicians

Song Stumpers. The first player sings the first line of a familiar song. In turn, the other players try to complete the first verse. If one is successful, he becomes the new leader. If not, the first leader starts a new song.

Musical Chairs. Place several chairs—one less chair than the number of players—in a line or circle. Start a record or tape recording of music and have the players march around the chairs. When the music suddenly stops, all players will scramble to get to a chair. The one who fails, steps out of the game. Remove one chair and start the music again. Continue until only one player—the winner—is left.

Variation: Instead of having players eliminated from the game, score a point against them. At the end of a specified time, the player with the fewest points is the winner.

Invisible Band. The leader assigns an imaginary musical instrument to each player and names a popular tune. The leader starts to “play” his or her instrument, making the proper sounds and gestures. All others join in with their “instruments.” At any time, the leader may switch to the instrument of another player. That player must immediately switch to the instrument the leader had been playing. The leader should make rapid changes.

Sing-Along Down. Players are seated in a circle.

The first player chooses any song he likes and sings the first line. The player to his left tries to sing the next line, and so on around the circle, with each player adding one line. If a player doesn't know the line, a point is scored against him, and the next player tries. When the sing-along gets back to the player who started the song, that song ends and another player starts a new one.

PLACES TO GO

- Attend a professional puppet show.
- Attend a music recital or concert.
- Attend a live performance of a community theater.
- Visit the rehearsal of a high school or community theater group.
- Attend a high school play or concert.
- If possible, visit a film studio.
- Visit a recording studio.
- Visit a costume shop.

RESOURCES FOR SHOWMAN ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys' Life* magazine
- *Cub Scout Songbook*, No. 33222
- *Boy Scout Songbook*, No. 33224
- *Group Meeting Sparklers*, No. 33122

Other help for the Showman badge may be obtained at the monthly Cub Scout leader roundtable. The “Razzle Dazzle” chapter of the *Cub Scout Leader How-To Book* will also be helpful. Get additional help from local community theater groups or high school drama teachers.



Sports are usually high on the list of favorites for Webelos Scout-age boys, so most boys will show an instant interest in the Sportsman activity badge. Chances are some of them will already know enough about the rules, techniques, and scoring of several sports to pass the requirements quickly. But that isn't enough.

We're not as concerned with athletic *skills* as we are with *fitness* and *good sportsmanship*, which help fulfill the purposes of Cub Scouting. Your own example will help to achieve these goals. Be sure that the least-skilled boys get just as much instruction and encouragement as the best athletes. See that the better athletes learn not only to tolerate more awkward boys but to help them, and that all boys learn to win and lose with grace. Stress the fun of the game, not just winning.

To earn the badge, boys must earn Cub Scout Sports participation awards for two individual and two team sports. This means that a variety of opportunities should be available to them in den meetings.

REQUIREMENTS

Do these:

1. Show the signals used by officials in one of these sports: football, basketball, baseball, soccer, or hockey.
2. Explain what good sportsmanship means.
3. While a Webelos Scout, earn Cub Scout Sports belt loops for two individual sports (badminton, hiking, horseback riding, bicycling, bowling, fishing, golf, gymnastics, marbles, physical fitness, ice skating, roller skating, skateboarding, snow ski and board sports, swimming, table tennis, or tennis).
4. While a Webelos Scout, earn Cub Scout Sports belt loops for two team sports (baseball, basketball, hockey, kickball, soccer, softball, volleyball, flag football, or ultimate).

DEN MEETING ACTIVITIES

- Learn and practice one or more of the sports in the Cub Scout Academics and Sports program.
- Invite a local sports figure, coach, or referee to a den meeting to teach signals and talk about teamwork, fair play, and sportsmanship.
- Practice the officials' signals of the five sports shown in the *Webelos Handbook*.
- Introduce a new sport—one that none of the boys has played before, if possible.
- Play some lead-up games (page 108).
- Play some of the ball games found in the "Games" chapter of the *Cub Scout Leader How-To Book*.
- Let boys practice casting with a fishing rod.
- Play table tennis or horseshoes.
- Have a parent/son volleyball game.
- Have the boys make lists of the sports in which they participated during the past year.
- Select a sport to demonstrate at the pack meeting and practice it.
- Have a parent/son fishing trip.
- Have a parent/son bowling night.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display sports equipment.
- Demonstrate officials' signals for football, baseball, basketball, soccer, or hockey.
- Demonstrate the proper care of a piece of sports equipment (such as ice skates, a tennis racket, skis).
- Demonstrate the proper form or technique of a sport.

Cub Scout Sports

The Cub Scout Sports program fits perfectly with this activity badge. Your pack may select one or more of these sports for dens to learn and practice, leading up to a pack tournament, or you may use them only at the den level for this activity badge.

Badminton	Kickball
Baseball	Marbles
Basketball	Physical Fitness
Bicycling	Roller Skating
Bowling	Skateboarding
Fishing	Snow Ski and Board Sports
Flag Football	Soccer
Golf	Softball
Gymnastics	Swimming
Hiking	Table Tennis
Hockey	Tennis
Horseback Riding	Ultimate
Ice Skating	Volleyball

Your Webelos Scouts may earn several recognition items, in addition to the Sportsman activity badge, through participation in sports. These include belt loops for each sport, and Sports pins for boys in each sport.

Teaching Officials' Signals

Webelos Scouts who have been on organized teams will have no trouble showing and explaining the basic officials' signals in basketball, football, baseball, soccer, or hockey.

Signal Game. Split the den into teams and have the boy being tested be umpire or referee. The teams run a play with fouls or violations. The "official" must make the call, give the proper signal, and explain the penalty.

Name That Sport. Divide the den into two teams. The leader gives an official's signal in one of the sports and calls on a boy to name the sport and tell what the signal means. If the boy gets both the sport and the signal right, he scores four points for his team. If only one answer is right, he scores two points. Any other member of his team can try to correct a wrong answer to earn one point. If no one on the team can answer, the opposing team can earn one point for the correct answer.

Broom Hockey

Give each player an old household broom. The puck is a small ball. Play on any size field. Goals are marked by rocks about 6 feet apart centered on the end lines of the playing field.

Lead-Up Games

If your den has six to eight members, you may have trouble arranging games in team sports such as baseball, softball, volleyball, and soccer. If this is the case, modify the game for fewer players than normally required. We call these modifications Lead-Up Games. See the "Games" chapter of the *Cub Scout Leader How-To Book* for other lead-up ball games ideas.

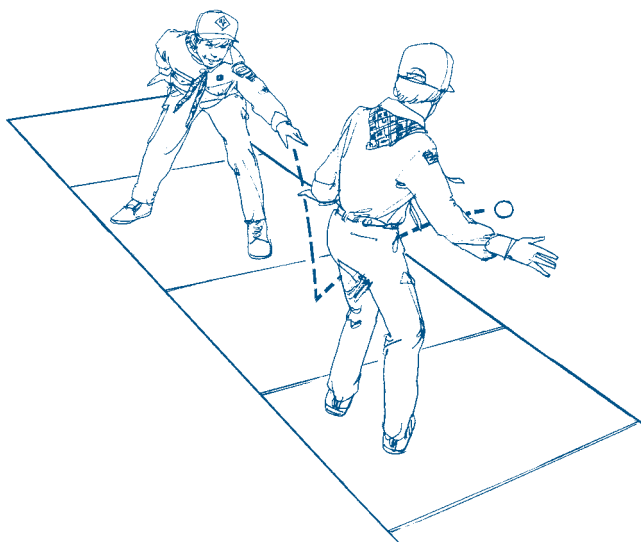
Baseball or Softball. Play Five Hundred or One O'Cat (*Cub Scout Leader How-To Book*).

Basketball. Play one-on-one, two-on-two, etc., using only one basket. After a score, the team scored against gets the ball behind the free-throw line.

Volleyball. Cut down the size of the court depending on the number of players. For two-person teams, make the court 15 feet wide and 30 feet deep. Play regular volleyball rules.



Soccer Dodge Ball. This is played like regular Dodge Ball (see the *Cub Scout Leader How-To Book*), except that the players around the circle kick the ball at the player inside the circle instead of throwing it. If your boys have never played soccer, have a short period of instruction in soccer-style kicking.



Sidewalk Tennis

The court is four squares of a sidewalk in a row. Use a tennis ball or sponge rubber ball. The “rackets” are the players hands.

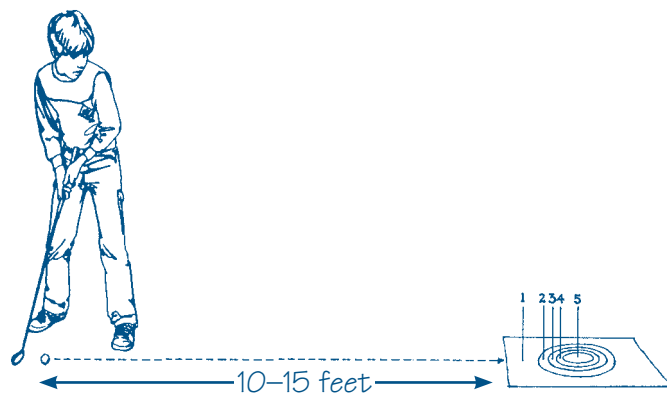
To begin, the players stand in the outer squares, or back courts. In serving, they must not step over the back line of their back court. A served ball must bounce once in the opposite service court before being returned. Thereafter, it may be returned on the first bounce or with no bounce. Only the server may score, and he continues to serve as long as he scores. Games are 11 points, except that the winner must be two points ahead, as in regular tennis.

Dribble the Circle

Divide the den into two teams. Mark two circles of about an 18-foot diameter on the ground. Players scatter on the perimeter of their team’s circle. On a signal, the first player on each team dribbles a basketball all around the circle. When he gets back to his starting point, the next player repeats the action, and so on until all have dribbled the circle. The first team to finish wins.

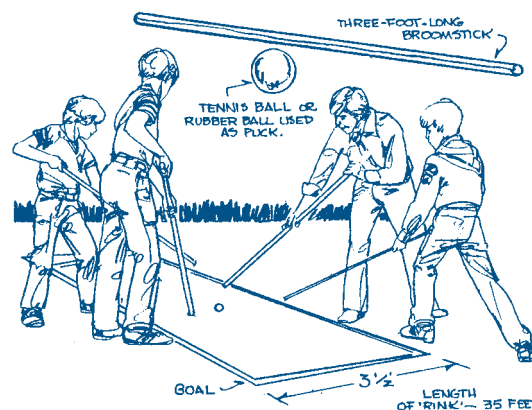
Soccer Ten Kicks

Divide the den into two teams. Each team tries to kick the ball between teammates 10 consecutive times while the opponents try to intercept and start their own sequence of kicks. As a player kicks the ball, he calls out the appropriate number of kicks (1, 2, 3, etc.). Hands may not be used. The team making 10 kicks in a row without interception wins.



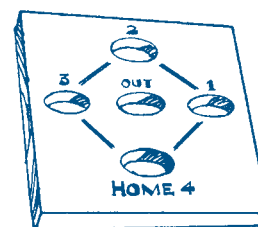
Home Golf

Draw a target on a large sheet of paper and place it on the floor. The player uses a real golf club, a hockey stick, or a broomstick to putt a golf ball or marble at the target from a line 10 to 15 feet away. Score shots as indicated in the illustration. A ball stopping on a line earns the lower score.



Backyard Hockey

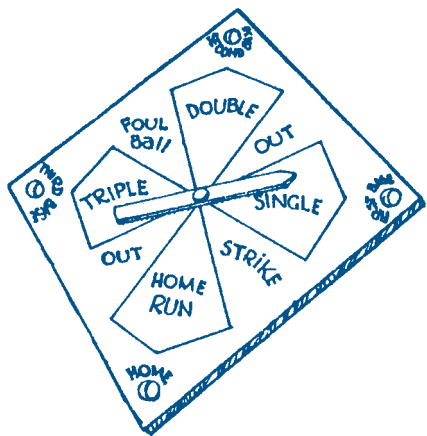
Lay out a backyard hockey rink on a driveway or in the grass. Play parents against sons, or divide boys into equal teams. Teams stay outside the rink along their sideline and defend the goal to their right. Sticks may not be swung above knee height. When the “puck” goes out of bounds, have a face-off between opposing players who were nearest to it.



Button Baseball

Draw a baseball diamond on a box lid that is about 12 by 10 inches. Cut circles as shown so that small

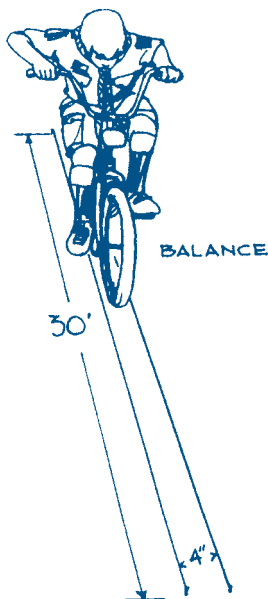
muffin cups or nut cups will fit in them. Each player has three buttons for each turn “at bat.” Standing about 6 feet away, he tosses the buttons at the holes. A miss is a strike. If this game is played as a team game, “base runners” advance the appropriate number of bases for each hit by walking to designated spots in the room. If played by individuals, a player scores one run for a single, two for a double, three for a triple, and four for a home run.



Dial Baseball

On a piece of scrap wood about 8 inches square, mark the diamond layout with paint or a felt-tip marker. Drill small holes on the bases to hold the “runners” (marbles). The spinner is a craft stick with a whittled point. Mount it on a washer.

Bicycle Confidence Course

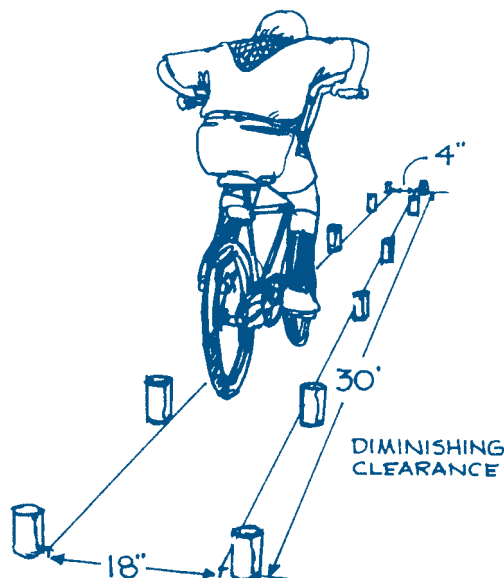


Balance Event. Using either chalk or two lengths of string, mark a lane 30 feet long and 4 inches wide. On the string or chalked lines, mark 15- and 20-foot points. In turn, each bicycle rider tries to cycle the course without touching the lane lines. If a cyclist

succeeds, he scores 25 points. If he makes it only to the 20-foot marker without touching the lane lines, he scores 20 points; for the 15-foot marker, 15 points. If he leaves the course before reaching the 15-foot mark, he gets no score.

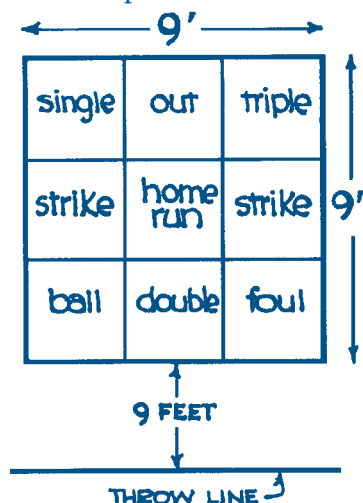


Maneuvering Event. The course is made of seven tin cans, 10 feet apart along a straight, 60-foot-long line. The bicycle rider weaves on his bike to pass on alternate sides of the tin cans. Score 25 points if he does not hit a can or put his foot on the ground. Deduct five points for each time he hits a can or has to put his foot on the ground.



Diminishing Clearance Event. The course is two 30-foot-long lines converging from 18 inches at the beginning down to 4 inches at the end. Set tin cans along the outside edge of each line in pairs about 6 feet

apart. The bicycle rider tries to cycle the course without touching the lane lines or cans. Score 25 points for a perfect ride. Deduct points for each mistake.



Beanbag Baseball

Mark target as shown on the ground or floor. Divide players into two teams. One team goes to bat first. In turn, the players toss beanbags at the target from a distance of about 9 feet. Each player remains at bat until he has reached base or made an out. A beanbag that lands on a line or outside the target area is an automatic out. When a team has three outs, the other team comes to bat. Have a den chief act as umpire and keep score.

Sportsmanship

You hear a lot about being a good sport, but just what does that mean?

- A good sport knows the rules and doesn't break them.

- A good sport competes with all his heart, striving to outclass his competitor. If he wins, he doesn't act smug, but instead compliments the losers for the fine job they did. If he loses, he accepts defeat gracefully and tries to figure out why he lost so that he can do better next time. He doesn't blame losing on the other players or his coach, but looks within himself for the answers.

PLACES TO GO

- Attend any sports event—football, baseball, soccer, hockey, tennis, etc.
- Attend a practice session of a high school football, basketball, or baseball team.
- Go roller skating or ice skating (if weather permits or an indoor rink is available).
- If weather permits, hike around a golf course, with permission.

RESOURCES FOR SPORTSMAN ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys' Life* magazine
- *Cub Scout Leader How-To Book*, No. 33832: specific sports activities

Help for the Sportsman badge may be obtained at the monthly Cub Scout leader roundtable and annual pow wow or University of Scouting. Check with high school and college athletic departments or local recreation departments for other information and resources.



TRAVELER

MENTAL SKILLS GROUP

The word “traveler” suggests faraway places and long trips. Some of the Webelos Scouts may have enjoyed such travels, and they won’t add much to their mileage while working on the Traveler activity badge. They will, however, learn something about planning and scheduling trips, and they should have a chance to take a short trip or two to practice what they have learned.

In earning this badge, Webelos Scouts will learn to read maps and timetables of buses, railroads, or airlines serving your area. They will learn the comparative costs of transportation by car, rail, bus, boat, and air. They will also learn how to use highway maps and plan trips.

The two trips required for the badge are family trips and not Webelos den activities. But there is no reason why all den families can’t go together on a bus, train, or boat trip. What the boys learn in the den should help them in planning with their families for these trips.

REQUIREMENTS

Do five of these:

1. Get a map or timetable from a railroad, bus line, airline, subway, or light rail. The line should serve the place where you live or near where you live. Look up some places it goes.
2. Use a timetable to plan a trip from your home to a city in another state by railroad, bus, airline, or ferry.
3. With the help of your parent, guardian, teacher, or librarian, use a map site on the Internet to plan a trip from your home to a nearby place of interest. Download and/or print the directions and a street map showing how to go from your home to the place you chose.
4. With your parent or guardian, take a trip to a place that interests you. Go by car, bus, boat, train, or plane.
5. Figure out what it costs per mile for the trip you took or planned to fulfill requirement 2, 4, 6, or 7. (Don’t forget to include getting back to your starting point!)
6. Decide on four nearby trips you would like to take with your parents or guardian. Draw the route of each trip on a highway map. Using the map, act as navigator on one of these trips. It should start at your home, be at least 25 miles long, and have six or more turns.
7. Decide on a trip you would like to take that lasts at least two days. Pack everything you would need for that trip.
8. Check the first-aid kit in the family car to see if it contains what is needed. Explain what you found.
9. Look at the map legend on a road map of your area. Learn what the symbols mean. Show your den members what you have learned.
10. On a road map of your area, find a place of interest and draw two different routes between it and your home. Use the map legend to determine which route is shorter in miles.
11. Make a list of safety precautions you, as a traveler, should take for travel by each of the following: car, bus, plane, boat, train.
12. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Geography.
13. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Map and Compass.

PACK MEETING DEMONSTRATIONS AND EXHIBITS

- Display railroad, bus, and airline timetables, travel folders, and posters.
- Display a neatly packed suitcase.
- Display a travel first-aid kit or travel tool kit.
- Display the boys’ travel logbooks.
- Demonstrate how to read a timetable and a map.
- Explain how to figure cost per mile.
- Show how to pack a suitcase properly.

DEN MEETING ACTIVITIES

- Discuss timetables and how to read them.
- Using maps and timetables, calculate the cost and speed of a trip to the same location by bus, train, and air.
- Have a speed contest of locating specific destinations and how to get there, using maps and timetables.
- Locate points of interest on city and state highway maps. Visit some of them.
- Make car first-aid kits.
- Discuss the importance of using seat belts while traveling.
- Learn how to pack a suitcase properly. Afterward, have a contest, stressing neatness as well as speed.
- Make a list of travel agencies and transportation facilities in your area.
- Play some car games.
- Make travel logbooks, including trip destination, date, and activities.
- Develop a travel code for car passengers (page 115).
- Learn traffic sign shapes and what they mean.
- Make a travel tool kit.
- Demonstrate using a home computer to find a place, including how to locate and use map sites.

PLACES TO GO

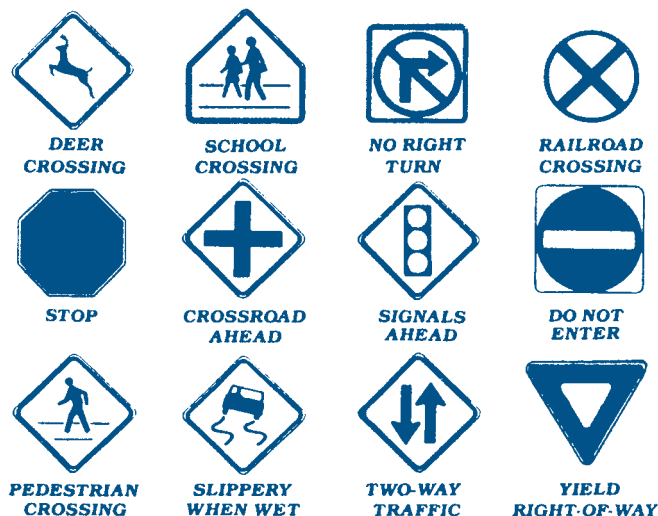
- Visit a travel agency or automobile club office. Find out what they do. Arrange ahead of time to get some timetables, travel folders, and posters for each boy.
- Visit an airport. Make arrangements beforehand so the boys can board a plane and see the instrument panel and talk with a pilot.
- Visit a railroad depot or bus terminal.
- Ride on any form of public transportation.
- Visit a county, state, or national park with den families.
- Visit a nearby historic site.

Plan a Trip

If there is an interesting attraction not far from your community that is served by public transportation, plan a trip to it. The main factor to consider is expense: Can the boys' families or the pack treasury afford it? The trip might be to a historic site, national park, zoo, nature center, or sports event. Part of the purpose would be planning and preparing for the trip.

Have the boys choose the destination, figure the costs, set the schedule, make decisions about meals, read the timetables or road maps, and secure their own tickets. They may need some guidance if their plans become elaborate or too costly. Suggest that they select a form of transportation that will be new to most of the boys. For example, if some den members have never ridden a train, a train trip would be a good choice if there is train service in your area.

For the purpose of earning the badge, using public transportation is better than cars because it requires the boys to do some planning that isn't necessary otherwise.



Road Sign Quiz

Use the illustrations as flash cards to teach the meaning of road signs. Photocopy and enlarge the illustrations, glue them on cardboard, and write the meaning of each sign on the back. Practice learning the signs and then conduct a quiz.

Suitcase Packing Race

Run a competition for speed and neatness in packing a suitcase. Have enough boys' clothing, shoes, and toilet articles so that when a suitcase is properly packed, it will be full. Let each boy try his skill at packing. Award 10 points for speed and 20 points for neatness.

Car Games

License Listing. Make a list of license plates (U.S. states and foreign countries) spotted while on a trip. See if anyone can name the state capitals.

Signs. Players take turns looking for specific signs, such as a railroad crossing sign, an arrow on a sign, a "No Parking" sign, a "No Vacancy" sign, a fire prevention sign (such as Smokey the Bear), an ice cream store sign, a reduce speed sign, etc.

License Language. All players look for a license plate containing three letters. When one is spotted, the player whose turn it is has 60 seconds to make a sentence using words starting with each of the three letters. The sentence may be longer than three words, but three of the words must start with the three letters. Some of the sentences may not make sense, but that will add to the fun of the game. You can set your own point system.

Sight Search. Before leaving for your trip, give each person a list of things to look for while on the road. Some of the items could be very common, but some should be unique or rare. The boys can check items off as they see them. Favorites to look for are convertibles, red Volkswagens, school buses, police motorcycles, or various animals (white horse, buffalo).

Criss-Crossing the Country

Divide the boys into two teams. Give each team a destination in another part of the country. Using airline, bus, and train schedules that they have collected, the boys plan a journey to their assigned destination. You can have several winners: Most Direct Route, Most Scenic Route, etc. The important thing in this game is not winning, but rather to gain experience in using maps and timetables.

Road Map Race

Each player needs a road map. (They need not be alike.) Prepare for the game by writing on a slip of paper the names of two cities or towns that can be found on each of the maps. Cities should be roughly the same distance apart for each map.

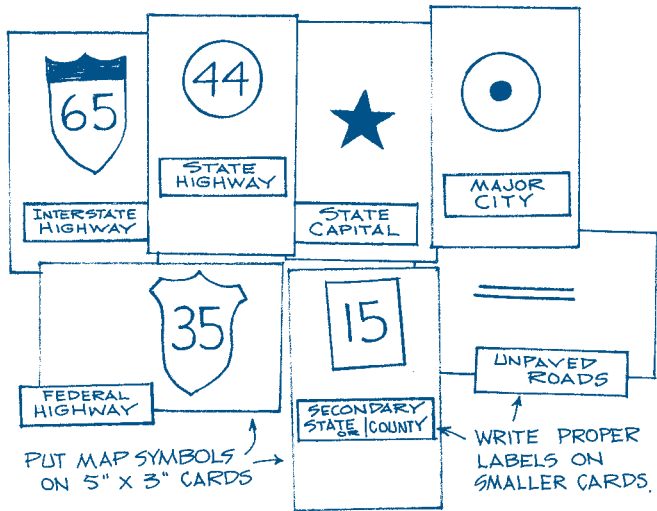
Give each player his map and the folded slip of paper with the names of the two cities. On a signal, all players unfold their slips, find their cities on the map, and find out the distances between them by the shortest route. They may do this by using a mileage chart, if there is one, or by adding up the mileage notations on the map. The winner is the first player to determine a correct distance. Allow a 10-mile error for mistakes in addition.

Map-Reading Games

Name That State. The player holding the map calls out the name of a state capital. The other players try to correctly name the state. The player who first gives the correct answer takes the map and calls out the next capital.

CB Rescue. You're on a trip, out of gas, and stranded. But luckily, you have a CB (citizens band) radio with you. Hoping for assistance, you broadcast your location using map coordinates to tell other CB radio users where you are. For example, you might say, "I'm at F-15." The other players use a duplicate map to find the coordinates, and then call out the name of the location. The first player to name the correct location calls out the next spot.

Interstate Vacation. Your family has decided to take a cross-country vacation. Find your home state on the map. Then decide where you want to go. Try to pick the shortest route between your home and the place you want to visit. There is only one rule: You must drive on the interstate highway system as much as possible. Begin your journey at the interstate highway located closest to your hometown. End on the interstate highway closest to your destination. You may have to use a ruler to help you plan your route.



Map Symbol Relay

On separate 3-by-5-inch cards, paste road map symbols taken from a standard road map, or enlarge the ones shown with a photocopier. On smaller cards, write the proper meanings. Divide the den into two teams, which race separately. Make a jumbled pile of all cards right side up, some distance from the first team.

On a signal, the first boy on the first team races to the pile and matches any symbol card with the proper meaning card. Record his time. He then runs back and touches off the second boy, who repeats the action. Continue until the team has finished with all symbols and meanings properly matched. Record the team's elapsed time. Scramble the cards again, and the second team does the same. Deduct one second for every improperly matched set. The winning team is the one with the fastest time.

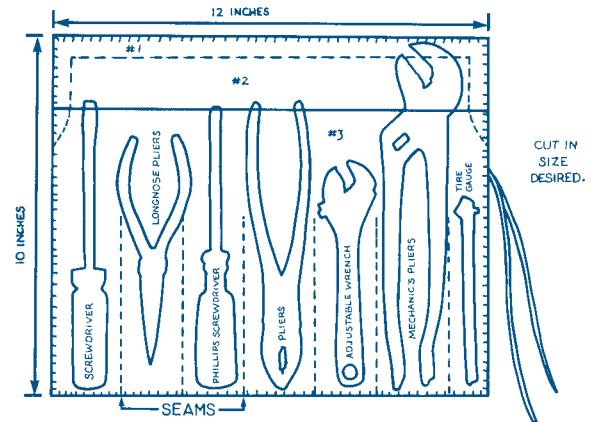
Car Passenger Travel Code

Rules, discipline, and good conduct are essential for a successful trip. Have the boys develop a set of rules and standards for their family and den trips this month, subject to family approval, of course. The rules might include such things as:

- Always wear your seat belt.
- Keep your hands away from door handles, the gear shift lever, the ignition key, and the driver.
- Don't put arms or head out the window while the car is moving.
- Don't throw things out the window.
- Use a car litter bag.
- Always get out of the car on the side away from the traffic.

Den Travel Map

Mount a map of your community or county on thin wood or heavy cardboard. Make small pennants with den members' names on them and glue them to bead-headed pins. Place the pins on the map where den members have visited. Display at your pack activity.



KIT ROLLED



Travel Tool Kit

Almost any kind of sturdy material is suitable for this tool kit. Denim or canvas works well. A water-proof fabric is even better. Enlist the help of someone who likes to sew to stitch the seams.

1. Cut pieces 1, 2, and 3 in the size desired. (About 10 by 12 inches is a good size for the kit.)
2. Sew No. 2 to No. 1, as shown.
3. Sew No. 3 to No. 1.
4. Sew cord or shoelace to edge for tie.
5. Make seams as desired for tools or other items.

This kit can be adapted to a bicycle, boat, or home handyman's kit. It is also useful for carrying large cooking forks, spoons, and other implements on a camping trip.

Travel First-Aid Kit

One of the optional badge requirements asks the boy to check the first-aid kit in the family car. If the family doesn't carry one, suggest that the boy assemble one. See the recommended list of supplies found in the Readyman section of the *Webelos Handbook* or this book (page 88–89).

In addition, these emergency supplies could be carried in a car:

Two 3-by-17-inch splints, ¼-inch thick

Fire extinguisher

Tow chain or rope

Flashlight

Flares or red flags

Travel tool kit

Travel Logbook

Webelos Scouts can keep a travel logbook to record the interesting and amusing things that happen on a trip or to describe the things they see. Postcards, pamphlets, and menus will help fill out the story of the trip. Snapshots can be added, along with copies of travel folders, timetables, and anything else that tells the story of the trip. Snapshots can be added, along with copies of travel folders, timetables, and anything else that tells the story of the trip.

RESOURCES FOR TRAVELER ACTIVITY BADGE

- *Webelos Handbook*, No. 33452
- *Boys' Life* magazine
- Travel magazines and folders
- *Cub Scout Academics and Sports Program Guide*, No. 34299: Geography and Map and Compass

More information on the Traveler activity badge may be obtained at the monthly Cub Scout leader roundtable. Also check with local travel agencies and automobile clubs for information, resources, and materials such as travel guides, maps, and posters.

Do Your Best: What does it mean for a

CUB SCOUT

LEADER?

Be Prepared
(with the right leader resources at the right time)

Be Trained

Den & Pack Meeting Resource Guide

Immediately
(before your first meeting with boys)



Youth Protection*
Cub Scout Fast Start*

As You Advance
(within 2-3 months)

Leader Book



Webelos Leader Guide

This Is Scouting*

Leader Position-Specific Training



As Needed
By Den and
Pack Plans

Leader How-To Book



Academics and Sports

Basic Adult Leader Outdoor Orientation



*Offered through the Online Learning Center at <http://olc.scouting.org>



CUBCAST



Need a great idea
for your den or pack that really works?

Want to share a great idea
that worked in your den or pack?

Then, check out CubCast at
www.scouting.org/ScoutCast



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Irving, Texas 75015-2079
<http://www.scouting.org>

