

WEBELOS



Webelos Virtues

Virtues are good character traits.

As Webelos, we will make take advantage of opportunities to build these Webelos and Boy Scout virtues in ourselves.

Webelos Virtues

Virtue	My Opportunities
Wisdom	I will listen, watch, and learn. I will use what I learn to help others and set a good example.
Courage	I will lead group activities, go places with my den without a parent, and sleep outside.
Self-Control	I will be responsible for my actions and not blame others. I will stop playing when it is time to work. I will treat others with respect.
Justice	I will not lie, cheat, or steal. I will include everyone when I play and I will play fair.
Faith	I will say Grace before each meal.
Hope	I will look forward to tomorrow and new adventures.
Love	I will show love by obeying my parents, helping my friends, and respecting others.

AQUANAUT

Activities:

- ❖ Discuss the importance of the buddy swimming system.
- ❖ Have a demonstration of mask, fins, and snorkel by an expert.
- ❖ Take the den swimming. Let them try to pass the 100-foot requirements, and surface dive and snorkel optional requirements.
- ❖ If a rowboat is available, have boat safety methods and rowing techniques demonstrated by an expert. Have an experienced boater, or member of the Red Cross explain the rules of small boat safety at an indoor den meeting or show a film.
- ❖ Give boys a chance to practice the methods. Invite parents to come along.
- ❖ Teach the four basic rescue methods. Let boys’ practice reaching and throwing a lifeline for rescue.
- ❖ Practice rescue breathing on dummy.
- ❖ Go to a swim meet or diving exhibition.
- ❖ Go to a canoe or sailboat race.
- ❖ Invite an expert to explain how to handle emergencies in the water. (Contact a swim instructor, the YMCA or Coast Guard)
- ❖ Visit a boat yard.
- ❖ Have a quiz on boat safety rules.
- ❖ Study the safe swim defense plan.
- ❖ Learn about water pollutants in lakes and rivers in the area. How do they affect water consumption and recreation?
- ❖ Basic water rescue methods REACH and THROW can be demonstrated in your own yard. Teach the boys all of the basic water rescue methods demonstrating REACH and THROW in your yard and ROW and GO later at a lake or pool.

Basic Water Rescue Methods

Simple rescue procedures an adult can carry that out or boy can save a person in trouble when no one else is around. The order of methods to choose is: Reach - Throw - Go



1. REACH with whatever is available or at hand. Stay on shore and reach out with a branch, a stick, or a pole. Then pull the victim to shore.
2. THROW a line, a buoy, a floating object to provide support. Take off your shirt, kneel down, hold one sleeve and throw out the other sleeve. Or take off your pants and tie one leg to a sleeve if you need a longer "line."
3. ROW when the victim is further out, use a boat to save him. In a rowboat, approach the victim with the stern of the boat. In a canoe, pull up so that he can grasp the side. (Kneel in the canoe).
4. GO if the first 3 steps can't be used as a last resort swim to the victim. Keeping your eyes on the victim, kick off your shoes and disrobe. Jump, do not dive, into the water. Carry your shirt or towel in your teeth. Keep your eyes on the victim. Swim out near enough to extend your towel or shirt to him and tow him in by it. If you have nothing to extend to him, approach him from behind and tow him to safety by his hair.
5. Don't allow the victim to latch onto you. Don't attempt a rescue beyond your swimming ability.

Quiz

1. Water is made up of two parts hydrogen and one part _?
2. A cubic foot of water weighs about _ pounds??
3. An aquifer is an underground _?
4. The main users of water today are agriculture and _?
5. The world's total supply of water is increasing, decreasing, or unchanging?

Answers: (1.) oxygen (2.) 62 (3.) water deposit (4.) industry (5.) unchanging

CPR

Learn Cardio Pulmonary Resuscitation through the Red Cross.

Search and Rescue

Visit your local police station and talk to the water search and rescue team. How often are they called out? What are some of the circumstances? What equipment do they take along?

Sing and Swim

Divide den into two teams. Assign an easy song to each team. On signal, the first boy dives in the water and begins to swim...while singing his song out loud and clear. He swims to the other side and gets out of the pool. Repeat with all team members.

Nuts And Bolts

A good way to get used to being underwater is to play this game. Toss a large bolt with a nut on it into waist-deep water. Bend down to find the bolt and unscrew the nut while you are under the water. If you can't finish the job, you must drop the bolt, come up for air and go down again until you have separated the two. When they are separated, straighten up to show them, throw them in again, and go under to replace the nut on the bolt. This may be played individually or as a team relay game.

Note: Be careful of throwing these bolts into a plastic lined swimming pool so you do not damage the liner. Be sure to remove all nuts and bolts after the game so they do not rust and stain the lining of the pool.

Find The Number

About twenty large, flat rocks are plainly marked on both sides with numbers ranging from one to five. These are thrown into water that may be from two to six feet deep, depending on the swimming ability of your group. On a signal, everyone dunks to try to bring back as many numbered rocks as possible to his station on shore. Only one rock may be carried at a time. The player who collects the highest total when the numbers on his rocks are added up is the winner. Any flat, non-floating objects may be used instead of rocks.

Table Waiter Race

Divide den into teams and line up in the water at poolside. Each swimmer has to swim to a specified point and return with a paper plate containing a code on it, held above the water. If the cork falls off, the swimmer may replace it. Repeat until the whole team goes.



Balancing Act

The egg and spoon race will test the swimmer's skill balance, and patience. Boys jump into water. Hand them a spoon to hold in their teeth, then balance a hard-boiled egg on it. Practice treading water for one minute without dropping the egg.

Yacht Race

Line up your den at one end of the swimming pool, giving each racer a straw and a small sailboat. (Make the sailboat out of a flat piece of thin board, upright stick, and a paper sail) Make the sailboats as much alike as possible so that everyone has the same chance of winning. On signal, the swimmers must begin to blow their craft forward by puffing through the straw. No hands! Blow the boats across to the finish line.

Lifeline Throw

Tie a beanbag onto a 25-foot rope. Mark a circle on the floor with chalk. Throw for accuracy.

Rules for a Safe Swim

Match the phrase to the word that completes it:

- | | |
|------------------------------|------------|
| 1. Secure adequate _____ | methods |
| 2. Teach the Buddy _____ | rules |
| 3. Maintain _____ discipline | System |
| 4. Follow pool _____ | qualified |
| 5. Teach rescue _____ | good |
| 6. Use a _____ instructor | facilities |

Do's and Don'ts In and Around Water

Fill in the blank with DO or DON'T for each statement.

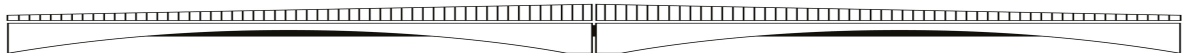
- _____ learn how to swim from a qualified instructor.
- _____ heck with your buddy to see if he knows how to swim.
- _____ be a "show off" or bother others.
- _____ swim with a buddy.
- _____ dive into water without knowing its depth.
- _____ get out of the water when you are tired or cold.
- _____ swim alone.
- _____ beware of sunburn. Cover up and use sun screen.
- _____ dive into water without knowing what is under the water's surface.

Swimming & Rescue

Using words from the list below, fill in the correct answer for each description.

- Surface Dive Crawl Stroke Backstroke Go
Sidestroke Reach Buddy System Throw

- _____ Swimming with a buddy is good common sense because you can help each other if one gets in trouble or help each other to improve swimming skills.
- _____ This stroke begins with floating on your back.
- _____ This stroke is done on either your left side or your right side.
- _____ In this stroke your head changes from facing down to facing to the side so you can take a breath of air.
- _____ This skill involves floating face down, then bending sharply at the waist and aiming toward the bottom.
- _____ Rescue method where you extend something for the victim to grab onto.
- _____ This rescue method involves providing a floating device to the victim.
- _____ This is the last rescue choice where you must get to the victim, preferably in a boat or other



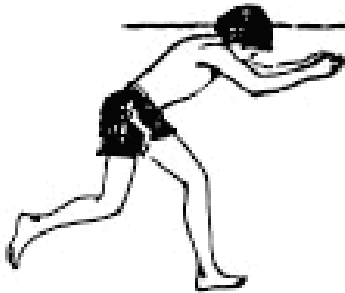
Drown Proofing

This technique for staying afloat indefinitely may give confidence to boys who fear the water and do not believe they can float. The steps are:

1. Relax completely. Be lazy. With lungs full of air, float face down, with back of neck on the surface. Rest for 3 seconds. This is not a test to see how long breath can be held under water.



2. Get ready to raise face above the water surface. Extend arms forward slowly. Get ready to thrust downward with arms and legs.



3. As head is raised to surface, exhale through nose and mouth. Shoulders should stay under the water.



4. Keep head straight and push downward with hands to keep head above water. Inhale slowly - there is no rush. With lungs again full of air, drop head forward and thrust downward and backward with arms and legs.



5. Relax. Hold breath. Let arms and legs dangle while floating forward and

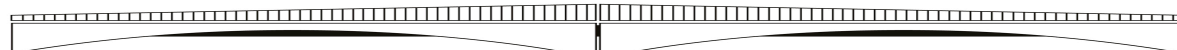


upward. Beginners should rest 3 seconds before doing Step 1 again. Experts rest 10 seconds. Avoid bobbing above or below surface.

ARTIST

Activities:

- ❖ Attend an art exhibit or visit a museum.
- ❖ Hold an "Art Can Be Fun" night.
- ❖ Have each boy prepare a color scheme for his own room.
- ❖ Make drawings from nature: birds, animals, flowers, trees.
- ❖ Start simple sculptures to be finished at home.
- ❖ Study a color wheel and practice combining paints.
- ❖ Collect things of various textures and create a collage
- ❖ Make soap carvings
- ❖ Visit a graphic design class
- ❖ Visit a print shop where graphics are created and printed
- ❖ Ask a computer design specialist to demonstrate the techniques used in computer drawing
- ❖ Use Sculpey to mold an object. Available at craft stores. Sculpey is soft and pliable. The object made can be baked, glazed or painted. It can be carved, sanded or drilled. Use it over wire, aluminum foil or Styrofoam
- ❖ Let the boys study a color wheel and practice-combining paints making shades and tints with tempera or watercolor. Ask the boys to make a profile of a family member and an original picture at home.



- ❖ Have each boy prepare a color scheme for his own room.
- ❖ Do sand castings, sand paintings or sand sculptures.
- ❖ Demonstrate a color wheel. Using poster paint, start with the 3 primary colors of red, yellow and blue, mix a little blue with the red to make violet and gradually mix in more blue to make blue violet. Then do the same with yellow and red, and red and blue.
- ❖ If you have access to a computer with the painting software give the boys a "show." Invite people from an Art Organizations to your meeting. Talk about how they got involved with the Arts. What does the club do, etc.?
- ❖ Visit an art shop
- ❖ How about a book and stationery or an office supply store to see the variety of art supplies available.
- ❖ Visit a music or a piano store for a demonstration.

Hints:

- ❖ Obtain some water colors with brushes that will be easy for the boys to use, and will not create the hazard to clothes that other forms of paint might.
- ❖ If you decide to use the string art for your design segment, you will need: Hammer, small nails or brads, scrap wood, felt; colored thread.
- ❖ For sculpturing, purchase the oil-base modeling clay, which will not dry out.
- ❖ A simple construction consists of collected "garbage," from around the yard, put together to form a collage. For this, you will need: 1/2 size poster paper, Elmer's glue; scissors.
- ❖ For a mobile, you might use plastic straws as the supporting bars.
- ❖ For an original painting, you might like to try water color blot pictures, made by folding a paper in 1/2, opening it out and applying small dots of paint, then quickly folding the paper and smoothing it together from the center out, then opening it up to dry.
- ❖ The best glue for plastic (such as bleach bottles and milk cartons) is clear silicone. Scotch contact cement is good for bonding rubber or plastic to wood. Egg whites make a bond adhesive to glue the paper of egg cartons. Tacky white glue works best on Styrofoam. Wallpaper paste is good for paper mache' because it doesn't mold.
- ❖ You can color salt with food coloring or tempera to use as a substitute for sand.
3. Soak logs and chips in a solution of water and salt and you get yellow flames when the wood is burning; soaking in borax and water produces green flames. Try throwing salt or borax into your next campfire and see the flames change colors - don't throw in the whole box, ½ cup will get you started.
- ❖ Combine liquid skin cleanser with powdered sugar for thickness and add food coloring. This wipes right off.
- ❖ To make holes in plastic, use the heated tip of your hot glue gun. It is easier and safer than using a heated nail and pliers.
- ❖ Apply a liberal amount of black or brown paste shoe polish to an object to be "antiqued." Wipe off excess polish before it dries. This gives an especially good effect when used with tin foil or masking tape.

Leaf Scapes

Using leaves, paint and your pen or pencil, you can make an interesting landscape. Diversification of leaf form is the key to the basic formation of these designs. Select many leaves and press until partially dry. Place on a sheet of construction paper until the design and pattern fits the individual taste and need. Hold various leaves in place with a straight pin. Lightly spray with various colors as your own individual creativity dictates. Remove leaves that have provided a stencil effect for the leaf scapes. Additional artistic effects may be obtained by using a brush or pen and appropriate colors. Mount and frame as desired. This activity would be a good way to study complimentary colors or shading and blending from the color wheel. It is also a way to make a design using both straight and curved lines. Press and dry many leaves of various species of trees. (Leaves can be dried between sheets of wax paper, weighted down with heavy books.) These leaves are carefully glued to construction paper and are again pressed to insure their adhesion to the paper. As leaves dry, their colors are frequently lost.

Which Color Holds Heat Longest?

Materials needed:

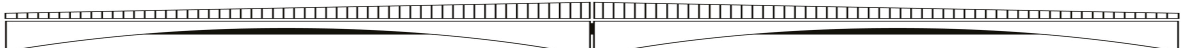
4 juice cans

Poster paint: white, black, green and red

Hot water, close to boiling

4 thermometers

Food coloring



Paint each can a different color, then fill each can with equal amounts of hot water. Add food coloring to the hot water, mixing drops of all the colors together to get black. Put a thermometer in each can then record the temperature every three minutes until the water cools. Make a graph showing your results. Which color held heat best?

No Mess Plaster Or Clay Sculpture

Materials needed:

1 plastic bag (grocery or freezer are ideal) 2 cups of water
5 cups of Plaster of Paris or clay of your choice twist tie medium size mixing bowl scissors
plastic knife measuring cup

Before making your sculpture, decide if you want it to be a “representational” sculpture, meaning it looks like an object or figure, or if you want it to be an “abstract” sculpture, which is based on the real thing but does not look exactly like it. Set your bag in the plastic bowl and pour 2 cups of water into it. Slowly add Plaster of Paris. Hold the top of the bag closed with one hand while squishing and squeezing the bag with your other hand until all the lumps of plaster are mixed with the water. Then, squeeze out all the air and use a twist tie to close the bag. Lay the bag down on a smooth surface. At this point, the mixture will seem to be runny and won’t hold a shape. Suddenly it will begin to harden and feel warm. Quickly form your sculpture by pulling and pressing the mixture inside the bag. Important - as you work, keep pulling the bag up from the plaster so it doesn’t become stuck in the plaster. Let your finished sculpture dry for 30 minutes. Carefully cut the plastic bag open and peel it away from the plaster sculpture you have made. If you wish, you can use a plastic knife to draw lines or other designs on your sculpture. Let harden for 24 hours. Use sandpaper to smooth any rough spots. If you wish to paint the sculpture, you will need to seal it with a clear acrylic spray first or the paint will not adhere well. Instead of painting, you can glue on leaves, seeds, shells or other natural objects. Use your imagination!

Creating Critters

Preparation: 8 or more people in small groups; scissors, construction paper, glue.

Divide the players into small groups and give each group a pair of scissors, glue and a variety of colors of construction paper. Within a given time limit (15 minutes to half an hour) each group designs and constructs a new species of animal. They must decide on a name for their critter, where it lives and what it eats. When all groups are finished, a spokesman for each group introduces their critter to everyone.

Crayon Copier

Materials needed:

paper crayons
pencil, tape

Scribble with a crayon until the paper is covered completely with a solid color. Don’t get too concerned if there are small gaps of white space; the main thing is to provide a consistent coat of color that will transfer to another sheet of paper. Place the paper, colored side down, onto a clean sheet of paper of the same size or slightly larger. You may need to tape the sheets in place, if the papers shift while the boy is drawing. On the clean side of the colored upon paper, have the boys draw a picture. When done, lift the paper up and the drawing will have transferred to the clean sheet.

Line Designs

Using manuscript or cursive writing, write your name on a large sheet of paper. Use crayons or markers to trace around the shape of the name. Continue drawing the shape until the paper is filled. For variations, try using a color scheme, such as complementary colors, primary colors, rainbow colors, etc. You may choose to vary the thickness of the lines or incorporate other shapes into the drawing.

Five Dots

Give each player a piece of paper and pencil. Each player is to place five dots on his paper wherever he pleases. Players exchange papers. Each player then tries to fit a drawing of a person with the head at one of the dots, the hands at two of the dots, and the feet at the other two dots.



Primitive Painting

Make your own paintbrush by pounding the end of a twig, turning as you hammer. It will fray into many thin fibers like the bristles of a brush. Use natural paint made from berries, etc. and draw on homemade paper.

Natural Wonders

Take your den for a hike in the woods. Look at textures, colors, and patterns in nature. What color is the sky or sunset? What shape are the leaves? How are flower petals arranged? Stop along the way and allow time for each Scout to sketch with pencil. It can be anything from a flower to a landscape. Show each other and tell why you picked that particular item to sketch.

Home Tour

Ask for a den parent to volunteer to take the Scouts on a tour of their home, pointing out the styles of pictures, color combinations, and other decorating principles.

Library

Visit the library and browse through the Arts section (call numbers in the 700's.) Let each boy pick out a book that interests him. At some libraries you can check out framed art. Let den members choose a painting to "decorate" their den meeting place this month.

Rainbows

Catch a rainbow in the backyard during your den meeting! Set the garden hose nozzle to a fine spray and stand with your back to the sun. Move the spray around until you find just the right angle with the sun to form a rainbow.

Living Mural

Sketch a scene on large mural-size paper. Plan some spots in the scene where you can use your own arms, legs, or head as part of the picture. Paint the scene, then cut out the holes you planned. Make up a short skit to go along with the picture. Hang the mural on a frame, or on a 2x4 between two ladders. Stand behind it and put your head, etc. through the holes while the narrator is telling the story. Settings could include a den leader standing beside several Scouts, a family portrait with mom and dad sitting on chairs and children standing behind, a wacky looking artist teaching a student, animals in a parade.

Paper and Crayon

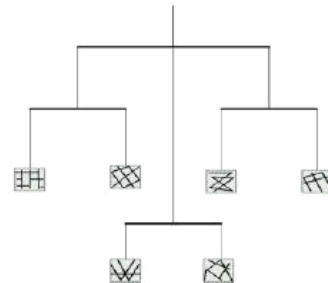
Divide den into teams. On signal, the first player runs up to the leader, who whispers the name of an object they must draw. They receive a paper and crayon, and run back to their team and begin to draw. The first team that correctly identifies the object scores two points. Continue until each player has drawn an object, then add up the points for the "most artistic" team.

Out of Sight!

Have Scouts sit up to a table. Give each a piece of construction paper. Blindfold everyone and give them each a crayon. Ask them to draw a picture of a clown. When all are finished, collect the papers before removing the blindfolds. Hang the picture up and ask boys to guess which is their own drawing. (You may want to write initials on the backside when you collect them. It's harder than you think!)

Stained Glass Mobile

Materials:
Glass Blanks (1"X 2")
Colored Glue Mixture
Elmer's Glue
Wire
Chord
Braid or colored tape
Gold or Silvery Paint
Patterns or Stencils



1. Place glass over the pattern and paint with colored glue mixture. Paint on mixture in even coats.
2. Glue a loop of cord to the top of the glass and tape the edges of the glass with colored tape.
3. Cut four pieces of wire in the following lengths: One 18", one 9", two 12". Bend each length of wire in a curve and spray paint. Use cord to attach glass pieces to mobile.

Gummy Worm Mosaic

Make orange Jell-O according to the directions on the package. Fill clear plastic tumblers with Jell-O and let cool. Let the boys make mosaics by placing the gummy worms on the top. Then they can really enjoy their artwork. This can be done with other types of chewy candy or fruits.

Slippery Finger Paint

Put on OLD clothes and cover your work-table well with old newspapers when you try this colorful project.

Materials:

- 1 envelope of flavored gelatin
- 1/2 cup cornstarch
- 2 cups hot water
- A small bowl
- A large spoon
- A stove
- 1/2 cup cold water
- 3/4 cup cold water
- 1/2 cup mild soap flakes or detergent
- A medium-size saucepan
- Heavy paper to paint on
- Powdered or liquid clothing dye (if liquid dye is used, increase cornstarch to 3/4 cup)

1. In a small bowl, soak gelatin in 1/2 cup cold water. In saucepan, combine cornstarch and 3/4 cup cold water. Stir 2 cups hot water into starch mixture and cook over medium heat, stirring constantly till mixture comes to a boil.
2. When mixture becomes smooth and creamy looking, remove from heat. Blend in softened gelatin. Add soap flakes or detergent and stir till mixture is thoroughly dissolved.
3. If you want different colors of paint, divide mixture into portions in jars or bowls before you add dyes.
4. Stir in about a teaspoon powdered dye or a tablespoon liquid dye for each cup of mixture. Paint should be cooled before you use it.
5. Rub, smudge, or blend paint on paper. To keep paper from curling, weigh edges down while paint dries.

ATHLETE

Activities:

- ❖ Have a health care professional lead a discussion of the harmful effects of today's "recreational" drugs (you might check with the school nurse or a member of the PTA or the DARE officer could come to your den meeting for the discussion.)
- ❖ Make and eat nutritious snacks
- ❖ Have boys make posters showing nutritious food and balanced diets. Have a discussion on nutritious food and why a balanced diet is important.
- ❖ Visit a dentist for a talk and a demonstration on dental health. If you cannot visit a dentist, see if a dentist could visit your den meeting. Or maybe a dental hygienist
- ❖ Have boys bring ingredients for nutritious snacks and prepare them for pack meeting.
- ❖ Lead a discussion on the effects of alcohol, on how to "Just say no to drugs", and how drugs could affect your ability to think clear.
- ❖ Invite a specialist to your den meeting or visit them at their place of work. This could be a dietitian, physical therapist, school counselor, gym teacher or someone else in the fitness field.
- ❖ Attend a pro baseball game
- ❖ Go to a health club and talk to one of their trainers.
- ❖ Attend high school track and field meets, football games, etc.



- ❖ Use a local gymnasium for a den or pack Olympics
- ❖ Attend a professional sports event.
- ❖ Invite a high school athlete to discuss his training, including the importance of diet and rest.
- ❖ Set up and run a physical fitness obstacle course and run it as a race.
- ❖ Attend a gymnastics exhibition or meet.

Muscle Building Champs

CAST: 6 boys in uniform holding props as described below.

Setting: All boys come on stage and one at a time step forward and speak their lines.

All Together: We all excel in building muscles

We're champs at that, you see;

Just listen to our stories

And we're sure you will agree.

1st Boy: I hold the title of strongest in my den, do you suppose it's because of my friend? (Holds up toy skunk. Other boys hold their noses.)

2nd Boy: I'm known as the den's muscle man this year, Most of my muscle is between my ears. (Pulls out small hat from behind his back and tries desperately to fit it on his head.)

3rd Boy: I hold the title of fastest of all, I'm first in line for the chow basket call. (Pulls out bag of cookies and begins eating.)

4th Boy: I'm known as the champion of the high jump, one time I missed and got a big lump. (Rubs head, with painful expression on face.)

5th Boy: To keep in shape, I exercise each day, I wonder why my muscles turned out this way. (Removes sweatshirt to show colorful padding on arms and legs.)

6th Boy: I'm the champ at making things disappear, you see, watch us all disappear, as I count to three. (He counts slowly 1-2-3 as curtain closes.)

Mini-Olympics

This can be done with a den, between dens and even as a pack activity. Here the Scouts compete through the course outlined below - record each Scouts score. Be sure to have them do some warm-up exercises before starting (ex. ten toe touches, deep knee bends, and jumping jacks and body twists). Afterwards, discuss a balanced diet and the effect exercise may have on their performance. Then challenge them to do their chosen Fitness badge exercises for thirty days and have them redo the course. Ask them how they think their performance will change. This will complete #5 of the Fitness badge and helps them to complete #2. If time is available #3, #4, and #6 of the Fitness badge should be discussed.

The following is an example of a course:

Station #1 - Curl Ups (adult holds feet) - Do as many as possible. Record time and number. .

Station #2 - Pull Ups - Do as many as possible. Record time and number.

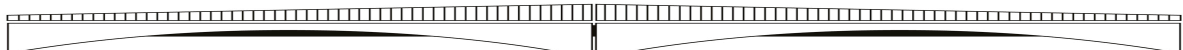
Station #3 - Push Ups - Do as many as possible. Record time and number.

Station #4 - Standing Long Jump - Mark off six feet in one-half foot increments (highlight the five foot mark). Begin with toes at the start line and measure at the heel after the jump. Record the distance jumped.

Station #5 - Vertical Jump - Set up a post or a board. Mark the post starting from the bottom with a scale, in inches from 0 - 15 inches. Attach a ball to a string and hang it over the post. Have an adult hold the end of the string. The adult will need to adjust the height of the ball on the jump side, according to each Scout's height - about a foot above the tips of their fingers when their arm is stretched above their head. They then try to jump up and touch the ball. The adult watches to see how high they jump - the height of the jump is measured from the bottom of the post to the bottom of their feet at the height of the jump. Record height of jump

Station #6 - Tire Run - Scout must run through a series of tires, being sure to put one foot in each tire with alternating feet.

Station #7 - Hopping on One Foot - Scout has to hop on one foot through a set of cones. One foot must be help behind their back through the entire course. Record the time to complete the course.



Station #9-50 Yard Dash - Mark off course of 50 yards. Have one person at the end with a stop watch. They tell the runner when to start and record time when finish line is crossed.

After the Scouts have completed the course the second time (after a month of exercise) sit down with them and compare the two sets of results. Ask them why the difference? Discuss again what it means to be physically fit.

How Does Your Den Measure Up?

Have each Webelos remove shoes and stand on two pieces of paper. Use a pen to draw the outline of his feet, then cut out. Write names on them. Lay out a trail of feet, heel to toe, in a straight line. Do this out in the yard, (If it's not windy) down the hallway, or leading into the kitchen. (For snacks!) Now, see how the den measures up... in feet, of course! Use a 50 foot tape measure. Keep the footprints and each week, line them up again using only the boys present. How do you measure up over the month?

Barbell

Materials needed: two 20mm wooden beads, 5/16" dowel (Or size to fit inside the beads), hot glue, black, silver, and white paint, thin strip of vinyl for the slide itself.

Directions: Measure and cut the dowel rod about 2 1/4" long. Paint it silver. Paint the beads black. Put a dab of glue in the bead and insert the dowel. Paint the ends to match the bead. Paint a weight number on each barbell with white paint. Hot glue a narrow strip of vinyl to the back of each barbell to make the loop.

Three Man Tug of War

Tie the ends of a long rope together. Three boys hold onto it in the form of a triangle. Place a neckerchief at an equal distance from each corner. On signal boys try to pull so they can touch their neckerchief first.

High Jump

Make a bar with three straws. Cut straws at the ends to help hold them together. Put the legs into two egg carton sections. Use tiddly winks for the "athletes." Make up your own rules for how many chances, etc. trying to get the athlete over the bar in tiddlywink style.

Mission Possible

(Obstacle Course ideas)

Ask the Webelos to help with this project. They will have fun picking out a theme to use and making up stories for each station. Mix and match these ideas, and add more of your own.

Have lots of fun!

1. Elephant Walk: you must step in four buckets in a row.
2. Climb over two sawhorses.
3. Swing across a stream: hang a rope on a tree limb and mark the banks of the stream with string.
4. Caves: crawl through several cardboard boxes in a row.
5. Crocodile River: lay a ladder flat on the ground. Boys must step on each rung to cross.
6. Under the falls: Spray a garden hose (On fine mist) from behind a bush.
7. Whirlpool: low garden edging stuck in the ground in a pattern.
8. Pretzel shot put: just what it says!
9. Carry a (chair) from one station to the next.
10. Fill up a small cup with water, using only a sponge to dip water out of a pail.
11. Ring toss: Clamp clothespins around the top of a can and throw jar rings at it.
12. Lift a small 5 pound barbell three times.

Fun Walking

until the whole group is moving before announcing the next type of "walk."

1. Hop along.
2. Make yourself as small as possible and still keep walking.
3. Bend your knees and grasp your ankles and keep walking.
4. Walk stiff-legged and stiff-armed.
5. Walk forward rapidly, but not running.
6. Lift your knees up high on each step.
7. Swing the same arm out as the foot, not opposite like usual
8. Tiptoe quietly back to your seat.



Homemade Exercise Equipment

Bicycle Inner Tube Exerciser

This makes an excellent exerciser for building leg, arm, back and chest muscles. If the tube is too hard to stretch, it may be necessary to slit the tube lengthwise.



Barbell

Use a 3 foot dowel or broomstick with 3/4" pipe caps on the ends. Imbed the ends in 46 oz. cans filled with cement. Allow the cement to set overnight.

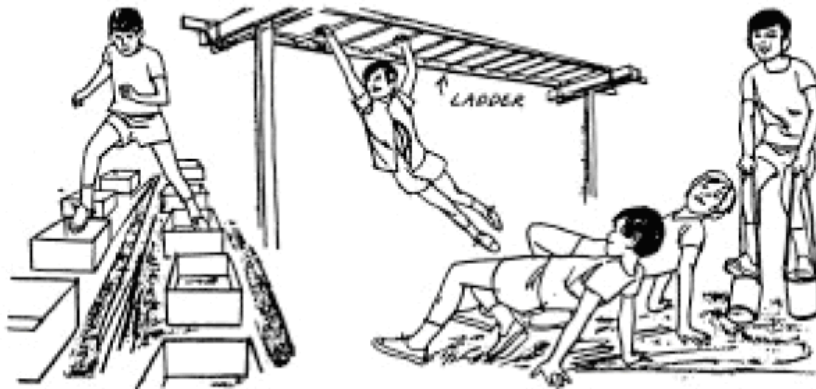
Dumbbell

Use a 12" dowel and two #2 cans filled with cement placed on each end of the dowel. Plastic quart containers filled with sand also make good dumbbells.



Tin Can Walkers

Walkers are made from 2 lb. coffee cans and short lengths of rope. Puncture the cans on opposite sides just below closed ends. Thread a

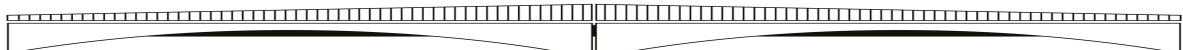


length of clothesline through the holes and tie the ends together so the loop reaches slightly above a boy's knees when standing on the cans. Walk 25 feet and return.

CITIZEN

Activities:

- ❖ Invite a guest speaker from a local community board to explain his/her duties and tell the Scouts why he/she volunteers time.
- ❖ Obtain a pack of US commemorative stamps. Pass out several to each Webelos and challenge them to discover the story behind the stamp.
- ❖ Plan and carry out a citizenship project or litter campaign, complete with posters, etc.
- ❖ Visit a city council meeting, police station, fire station, etc.
- ❖ Tour city hall or your county court house.
- ❖ Fly a flag at home, particularly on appropriate occasions.
- ❖ Learn more about your community. Your local historical society can help with this.
- ❖ Make a chart that shows the responsibilities of a citizen and discuss this with the parents and younger Cub Scouts at a pack meeting.
- ❖ Make and hand out small posters showing how to raise and lower the flag; give a demonstration on folding the flag.
- ❖ Make posters and hand out voter registration cards; tell everyone why it is important to vote.
- ❖ Make and hand out litterbags. Tell why litter hurts all of us.
- ❖ Invite a new citizen to speak to your den on what becoming an American citizen means to him or her.
- ❖ Plan and make a citizenship display for the pack meeting.



- ❖ Make “GET OUT AND VOTE” door hangers and help the pack place them on every door in your neighborhood. Remember - DO NOT put them in the mailbox. It is against the law!
- ❖ Visit a historic site in or near your community, learn your state's bird, tree, flower, and flag, or take part in a Veteran's Day ceremony in your community. Take photos and prepare a report for the pack meeting.
- ❖ Make a pack meeting display of magazine pictures of places of historical interest or great beauty in America.
- ❖ Using cardstock, weight paper, make door hangers with messages for people to vote. The day before the election, take the boys around their neighborhood to hang the reminders on their neighbors' doorknobs.

Heads Of Government Game

Material needed: Pictures of government officials from newspapers or magazines, nametags with the officials' names written on them. Have Webelos match the correct name with each official. You may wish to try this at the local, state and federal government levels.

Newspaper Study

Material needed: One current newspaper per team. Divide boys into teams. On signal, each team starts a search for news items that illustrate good citizenship. Team with the most clippings in a given time period is the winner.

DO YOU KNOW YOUR STATES?

1. Which state has a ton?
2. Which state starts with a pen?
3. Which state has an Indian?
4. Which state has a tuck in the middle?
5. Which state has a ham?
6. Which state is cut on the end?
7. Which state has a tan?
8. Which state is a color?
9. Which state has ore in it?
10. Which state is an island?
11. Half of which state is land?
12. Which state starts with ten?
13. Which state greets you with “Hi”?
14. The first thing you see in two states is a “Miss.”

ANSWERS:

- | | |
|------------------|----------------------------|
| 1. Washington | 8. Colorado |
| 2. Pennsylvania | 9. Oregon |
| 3. Indiana | 10. Rhode Island |
| 4. Kentucky | 11. Maryland |
| 5. New Hampshire | 12. Tennessee |
| 6. Connecticut | 13. Ohio |
| 7. Montana | 14. Missouri & Mississippi |

Build A Flag

Materials needed:

For each team, 1 set of the five US flags shown in Citizen section of the Webelos handbook. With a color copier, copy each flag to fit onto a standard sheet of card stock. If preferred, draw a set of the flags for each team. When the flag sets are copied, cut each flag picture into 2 pieces, the stripes and the field of stars. Prepare cards with the name of each flag and year of each flag. A corkboard and pushpins are needed.

Divide Webelos into two teams. First boy from each team runs to his team's pile of pieces, grabs a stripe piece and a push pin and pins it to the corkboard. He runs back and touches off the second boy, who pins up a star field piece, which matches the striping. Next team member matches appropriate flag name and fourth member pins up the year of the flag. Continue to rotate until all five flags have been properly constructed, named, and dated.

Citizenship Test

Two teams face each other with a wide space between them. The leader asks each player a question about the Declaration of Independence, the Star Spangled Banner, the President, Vice-President, Governor, or other fitting



subject. A correct answer entitles that team to move one step forward. An incorrect answer passes the question to the other team. The first team to cross the other team's starting line is the winner.

Ring The Liberty Bell

Materials needed:

bell wire coat hanger

heavy cord/rope small rubber ball

Bend the coat hanger into a hoop with the hook at the top. Hang the bell in the middle of the hoop with rope, then hang the hoop from a low tree branch. Players take turns trying to throw the ball through the hoop. Have a person stand on the other side of the hoop to catch the ball. This game can be played by individuals or by teams. There are 3 ways to score points. Each time the bell is rung, the player scores 3 points. If the ball goes through the hoop but doesn't ring the bell, he scores 2 points. If the ball hits the outside of the coat hanger, the player scores 1 point.

Keeps score as points are made. Each player throws the ball only once per turn and gets 5 turns. Add up points after everyone has had his turn. The individual or team with the most points wins!

Cub Scout Uniform

Materials: Denner out of uniform

When preparing for the uniform inspection, have the Webelos tell what is wrong with the Denner. Some examples are:

- ★ Cap on backwards
- ★ Wearing den chief cord
- ★ Service star on neckerchief
- ★ Neckerchief twisted into a roll
- ★ Neckerchief tied around neck
- ★ One sleeve rolled up
- ★ Button unbuttoned
- ★ Pocket turned inside out

Your Rights as a Citizen

The following is a partial list of some of the qualities of a citizen and some of the right and duties of a citizen.

The right to equal protection under the law and equal justice in court.

The right to be free from arbitrary arrest or search.

The right to equal education and economic opportunity

The right to select public offices in free elections.

The right to own property.

The right to free speech, press, and assembly,

The right of religious freedom.

The right to have a lawyer and a speedy court trial if accused of a crime.

Your Duties as a Citizen

If you are going to have rights as a citizen and you want to keep them, then you also have certain duties that you must take care of. Your duties as a citizen are:

Obey the laws.

Respect the rights of others.

Keep informed on issues of National and local government.

To vote in elections.

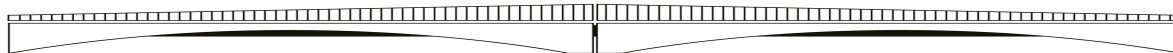
To serve and defend your country.

To assist the agencies of law enforcement.

To practice and teach good citizenship in our home.

U.S. Pledge of Allegiance

The Pledge of Allegiance first appeared in the September 8, 1892, issue of "Youth's Companion." Its authorship was disputed between James B. Upham, an editor with the magazine, and Francis Bellamy, a Baptist minister from Rome, New York, who was also on the staff. In 1939, a committee of the U.S. Flag Association ruled that Bellamy was the author. The words "The Flag of the United States of America" were substituted for "my flag" in 1923, and the phrase "under God" was added in 1954, upon passage of a joint House-Senate resolution.



According to the Encyclopedia Americana, "Use of the pledge quickly spread throughout the public school systems of the country. Many states made it obligatory part of the daily school ritual. When children of certain religious minorities refused, on religious grounds, to swear allegiance to a material object, they were expelled from school." The U.S. Supreme Court initially ruled that states were justified in requiring the pledge, but it reversed that decision in 1943, in the case of the West Virginia State Board of Education v. Barnette.

Know Your Community

As a project, your den might like to check out the following list to see which of the agencies listed can be found in your community, who operates them, and how they are funded. For the pack meeting, identify the agencies you find on a large local map that you can display. The boys should be able to answer simple questions about the agencies they have located.

Health: Hospitals, clinics, water filtration plant, sewage disposal, garbage collection, etc.

Protections: Fire and police protection, etc.

Education: Public schools, colleges and vocational schools, libraries, etc.

Recreation: Theaters, pools, parks, playgrounds, golf courses, and lakes, etc.

Transport: Roads and highways, bus and train terminals, airports, parking lots, etc.

Stores: Shopping centers, supermarkets, corner stores, etc.

Business: Major companies in your community.

Religion: Churches, synagogues, temples, and seminaries.

Volunteers: Volunteer agencies such as Good Will, shelters, food pantries, Boy Scouts of America, Girl Scouts of America, etc. What do they do in your community?

Good Turn Ideas

- While earning the Craftsman badge, make some wooden toys and give them to a children's home or abuse shelter.
- Use your Craftsman and Handyman skills to repair or refurbish toys and give to a hospital children's ward or institution for special needs children.
Give a holiday party for children in a hospital. Plan games, songs, small gifts and treats.
- Collect good used books and magazines for the library of a children's home, abuse shelter, retirement home, or hospital.
- Buy a pack of U.S. commemorative stamps. Pass out several to each Webelos and challenge them to discover the story behind the stamp.
- Plan and carry out a citizenship project or litter campaign, complete with posters, etc.
- Visit a city council meeting, police station, etc.
- Discuss the various organizations in your community, which help people. How are they financed and run? Do they use volunteer help? Visit one of these organizations.
- Discuss ways boys can be good citizens. Let them make lists of things they will try to do regularly.
- Observe voting process.
- Invite a "new" citizen to talk to boys and tell what becoming an American means to them.

Citizen Work Book

1. Who is the Vice-President of the United States?
2. Who is the Governor of (Your State)?
3. Who is the Mayor of the City in which you live?
4. Who are the Senators representing (Your State) in Washington?
5. List three natural resources of the United States.
6. How can you help save these natural resources?
7. Why should we help save our natural resources?
8. Why was the Constitution of the United States written?
9. The Bill of Rights lists certain freedoms and rights enjoyed by all citizens of the United States. List five of these rights.

Scavenger Hunt

Arrange a tour of a local government building. Make up a scavenger hunt based on the example below. Contact the public relations department if you need help, or visit the building yourself to make up the game. Upon arrival at the building, divide the Cubs into teams. Set a time limit and place to meet to compare answers.



1. What is the town mayor's name?
2. Draw a fast picture of the state flag.
3. What is the name of the room where the city council meets?
4. What are the office hours of the Water Department?
5. Name an office of the third floor.
6. What is the phone number of the building?
7. Find out what job one person does in the building.

We All Scream For Ice Cream

Ice cream was invented in Italy in the 16th Century, but when Dolly Madison, wife of James Madison (the fourth President), served it at the White House it was still considered a delicacy. Since that time, ice cream has become America's favorite dessert, as evidenced by the 1989 average consumption of 16 pounds per person per year! One third of all ice cream sold is vanilla, followed closely by chocolate and strawberry. For your pack meeting help plan a patriotic ice cream social. Arrange for ice cream machines, electric or hand cranks, and have the ingredients all ready to mix when the pack meeting begins. Serve in small sundae cups. (Find a local business willing to donate them.)

Crossing the Delaware

Divide den into two teams. They line up facing each other with a wide space between them. The leaders asks each player a question from the list below. A correct answer entitles that whole team to take one step forward. An incorrect answer passes to the other team. The first team to cross the other' starting line are the Good Citizens of the Day. Make a winding river about three feet wide with string. Have the Den Chief play patriotic music an a tape recorder, and tell the WEBELOS to move back and forth across the river. When the music stops suddenly, all those who are in the river are dunked. Continue until one person is left, he is George Washington for the night.

Citizen Test

1. Name one person who signed the Declaration of Independence.
2. Who was the first President of the United States?
3. What is the northernmost state?
4. Which state has Disney World?
5. What state/s had famous Gold Rushes?
6. Name one state on the Mississippi River.
7. Name the Empire State.
8. What were the last two states admitted to the USA?
9. Who is the Vice-President of the USA?
10. What state did the Pilgrims land in?

Flying Flags

Buy a bulk quantity of small plastic flags. Divide them up to all the den members during the closing ceremony. Tell them to carry the flags around this week and give them to people who are being "Good Citizens," explaining why.

Flag Ceremony

Volunteer as a den to do the flag ceremony for a local organization's meeting: VFW, Chamber of Commerce, League of Women Voters, Council of Churches, etc. Ask to sit in on the first part of the meeting to find out what items are on their agenda. How are they being good citizens?

Information Every Citizen Should Know

Who succeeds the President? Everyone knows that in the case of the death of the President, the Vice-President would take over the Presidency. However, what happens if the Vice-President also dies? Congress dealt with this issue in the 1940 's and decided that the following people should take over the Presidency in the order given:

President
Vice President
Speaker of the House of Representatives
President pro tempore of the Senate
Secretary of State



Secretary of the Treasury
 Secretary of Defense
 Attorney General
 Postmaster General
 Secretary of the Interior
 Secretary of Agriculture
 Secretary of Commerce
 Secretary of Labor

This succession was established by an Act of Congress on July 18,1947.

Citizenship Rating Sheet

Ask the boys to rate themselves on their citizenship using the chart 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. Urge them to be honest with themselves in making their rating each week.

I will try to rate myself fairly on each of 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.

Name _____ Rating scale: 5=very good 4=good 3=fair 2=poor 0=very poor

Traits	Date	Date	Date
1. I am honest, even in little things			
2. I am courteous, loyal and kind to my parents, teacher, and Webelos leader			
3. I try to show good sportsmanship.			
4. My parents and friends can trust me to do what I say I will do			
5. I work and play cheerfully with others.			
6. I always keep my promise.			
7. I take good care of my own things and things that do not belong to me, such as school books, school property, etc.			
8. I do my best to keep the Cub Scout Promise all the time			
9. I always help to clean up after den meetings and when I'm needed in my school classroom			
10. I never make fun of people (except maybe kidding around with my friends.)			
Total			

COMMUNICATOR

Activities :

- ❖ At the local library, find books about secret codes and various forms of communications
- ❖ Visit the base of a ham radio operator.
- ❖ Have a parent who uses a computer in his/her job explain its function.
- ❖ Visit a travel agent to see how a computer is used to book a flight. This could also be used as part of the Traveler Activity Badge, as you determine cost per mile of various modes of travel.
- ❖ Learn the Cub Scout Promise or Boy Scout Oath in sign language.
- ❖ Visit a retail or production facility for cellular phones.
- ❖ Learn how to make a cellular call.
- ❖ Visit library - talk to librarian, learn how books are indexed.
- ❖ Visit radio station - see how it operates.
- ❖ Visit television station
- ❖ Visit police station or 911 dispatcher - learn how 911 calls are processed and prioritized.
- ❖ Visit school for the deaf and/or blind.
- ❖ Use a computer to talk to other people
- ❖ Visit a newspaper office - see how a newspaper is put together. Watch the printing presses run.



- ❖ At a school or church function, create and post directional signs.
- ❖ Read to a visually impaired person.

Newsletter

Have the boys use their knowledge of communications to set up a den newsletter with a calendar of upcoming events, a listing of supplies needed at future den meetings, a reporting of den activities, and acknowledgments of people who have helped with recent den programming.

This amusing way for expressing actions and moods will cause boys and parents more fun than you can imagine. A fun way to start is to have boys in a circle. The leader makes an action and players exaggerate their version. Then make up your own mime and have fun!

1. Say with your hand, "Stop"
2. Say with your head, "Stop"
3. Say with your shoulder, "I bumped the door"
4. Say with your foot, "I'm waiting"
5. Say with your ear, "I hear something"
6. Say with your waist, "I'm dancing"
7. Say with your jaw, "I'm surprised!"
8. Say with your tongue, "Yum, this taste good"
9. Say with your finger, "Come here"
10. Say with your fingers, "This is hot!"
11. Say with your nose, "I smell fresh pie"
12. Make up your own gestures.

Communication With A Blind Person

How would you go about describing something to a blind person? An animal for instance, one they have never seen. Try this exercise; blindfold your den, give them each a pencil and a piece of paper, then describe to them an animal and have them draw what they think they hear. Remove the blindfolds and see if they can guess what animal they have drawn. Hint: Don't use any key words. Example: if you are describing an elephant don't use the word trunk for his nose.

Communication with the Blind

Have your den form a large circle. In the center place an empty coffee can. Blindfold one of the boys and supply him with a broomstick. The object of the game is to have the den direct the blind Scout to the can and have him pick it up with the broomstick. Was it easy? Does it work better with one boy giving directions or all of them?

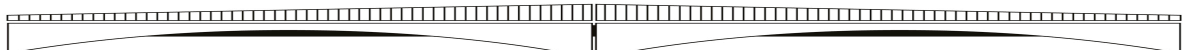
Secret Sounds

Use prerecorded sounds or have den chief produce sounds from behind a screen or another room. Webelos listen as each sound is produced and then write down what they think the sound is. Example: Sandpaper rubbing against something; a deck of cards being flipped into the air, a golf ball or Ping Pong ball, bouncing on a bare floor; bursting of a paper bag; etc.

Win, Lose or Draw

Divide into two teams. The equipment needed for this activity includes a one-minute timer, drawing marker, a pad of newsprint on an easel and a box with object cards. One member of a team chooses an object card and tries to draw it on the newsprint. His team tries to guess what he is drawing within one minute. If the team guesses the object, they receive three points. If the team is unsuccessful, the drawing is passed to the other team to guess within 30 seconds. An accurate guess is worth two points. If they too, are not successful, guessing is opened up to both teams together for another 30 seconds, and an accurate guess is worth only 1 point. Play continues when the second team chooses an object card and draws it. The winner is the team with the most points after a designated period of time. Charades are not allowed for hints.

Ideas For Object Cards: Blue and Gold, U.S. Flag, Cub Scout, Neckerchief Slide, Award, Cub master, Table Decorations, Parents, Den, Summer Activity Award, Bobcat, Campfire, Pack Flag, Council Patch, Bear, Pinewood Derby, Wolf, Tiger, Arrow of Light, Skit, Applause, Webelos Activity Badge, Uniform, Webelos.



Tower of Playing Cards

Equipment: Several decks of playing cards (all the same size)

Divide the boys into teams and have them build a tower with playing cards (Skip-be, Uno, Fish can be mixed if they are the same size.) Here's the catch. The boys cannot say one single word while building the tower - it all has to be done with sign and body language. When the tower is built, each team uses their verbal skills by deciding on a package that "sells" their tower. Why it's the best, tallest, grandest, wackiest, most pleasing, sturdiest, most stable, etc.

Invisible Writing

Equipment: Hot light bulb, Paper, White crayon, White paper, Water colors, Paint brush, and One of the following: milk, vinegar, lemon / orange / grapefruit/ apple/ onion juice, soda pop, or sugar water. Invisible Writing can be accomplished in many ways - milk, vinegar, lemon/ orange/ grapefruit/ apple/ onion juice, soda pop, and sugar water all dry invisible but when put next to a hot light bulb, they will darken so they can be read. Here is a different approach. Draw your message in code or in picture writing using a white crayon on white paper. The receiver uses watercolors to find the message.

Rules For On-Line Safety

1. I will talk with my parents so that we can set up rules for going online. We will decide on the time of day that I can be online, the length of time I can be online, and appropriate web sites for me to visit. If I want to visit other web sites, I will get their permission first.
2. While I'm online, I will not give out personal information such as my address, telephone number, parents' work addresses/telephone numbers, or the name of my school without my parents' permission.
3. I will tell my parents right away if I come across any information that makes me feel uncomfortable.
4. I will not respond to any messages that are mean or in any way make me feel uncomfortable. It is not my fault if I get a message like that. If I do, I will tell my parents right away so that they can contact the online service.
5. I will never agree to get together with someone I meet online without first checking with my parents. If my parents agree to the meeting, I will be sure that it is in a public place and I will bring a parent or my adult guardian along.
6. While I'm online, I will never send a person my picture or anything else without first checking with my parents.

CRAFTSMAN

Activities:

- ❖ List tools needed to complete badge.
- ❖ Visit furniture factory, unfinished furniture shop, lumber mill or lumberyard.
- ❖ Visit a tannery or leather goods manufacturer. Tandy Leather is always willing to help Cub Scouts.
- ❖ Invite an expert to give a demonstration on the proper care, safety, and use of tools.
- ❖ Make a den knot board.
- ❖ Tie in with scholar and discuss how education will help in doing crafts and working on the job.
- ❖ Select projects to work on (See Boys' Life Reprints "Craftsman Activity Badge #26-057" and "Fun with Tools" #BL-25, Crafts for Cub Scouts; Webelos Scout handbook)
- ❖ Have a birdhouse building contest or select another project.
- ❖ Have a "straight" nail-driving contest.
- ❖ Make a tool chest or bench hook for sawing
- ❖ Field Trip: Arrange to visit a home under construction. Talk to the workers at the beginning of the month, and look at blueprints. Visit again at the end of the month to see the progress made in that time.
- ❖ Visit a bicycle shop. Learn about the different kinds of bikes. Ask about bike maintenance. At you den meeting, take apart an old bike, and then put it back together.
- ❖ Talk about the necessity of organizing your work area at home. Look at someone's garage or shop to see ideas.

For Materials

- Ask your lumber yard for scrap lumber they are going to throw away
- Ask carpet companies for carpet scraps which are to be discarded
- Auto upholstery companies will sometimes give you plastic scraps left over from seat covers.
- Check with cabinet shops for scrap pieces of lumber, molding, etc.



Mineral Collection Book Ends

Your rocks and minerals collection will probably have some beautiful pieces, which you can put to use in a pair of bookends. Try to have pieces as identical possible to match up each bookend.

The right-angle wood base is made of 3/4" wood, the base measuring 4 3/4" square, and the upright piece 4 3/4" x 5 1/4". These are simply nailed together to become your form.

The plaster is made by stirring 1 1/4 cups of Plaster of Paris into a cupful of water in an old pan. When the mixture starts to thicken it is spooned immediately on the plaster form, building it up the back. Then a second batch of plaster is mixed in the same proportions and the form is built up further.

Press you specimens, foliage, figurines, etc., into this second layer before it hardens completely. You will have to work pretty fast. After a few hours you can slide the bookend off the wood base, peel back the foil, and lift the bookend off. At this point, break off any thin irregular projections of the plaster for these will only crumble off later. After allowing a week for thorough drying, glue felt to bottom by applying glue on plaster first, when that dries, add a second layer and a layer of glue on the felt.

Auto Reflector

Changing a tire at night on the side of the road can be dangerous. You need a reflector of some type to warn oncoming traffic of your car. The boys can easily make such a device.

Materials: 1/4" plywood - cut three pieces, 2" x 8"; drill; reflector tape; coat hangers.

Directions:

- Sand plywood pieces and drill a 1/4" hole in the top of each. Each reflector is made of three pieces of plywood.
- Cut the coat hanger into 6" pieces.
- Cut reflector tape into several 2 - 3' pieces and stick onto two of the three pieces in a diagonal pattern. Space the tapes evenly.
- Stack the two reflectorized wood pieces on top of the other wood piece. The top holes should line up. Push a piece of coat hanger wire through the hole and wrap the ends of the hanger to form a loose loop. Tape off the ends so they won't be exposed.
- The reflector is formed by creating a tripod with three legs. The two reflectorized legs should face traffic at night. Place the reflector about 10 yards behind vehicles to warn oncoming cars.

Carpenter Skit

Two boys are taking nails out of a box. One keeps throwing nails away.

"Why are you throwing all those nails away. They are perfectly good."

"The heads are on the wrong end!"

"Silly, those nails are for the other side of the house."

Toolbox Race

Egg carton "toolboxes" should be prepared before the meeting. Use an assortment of bolts, screws, etc. and mix them all together in the holes.

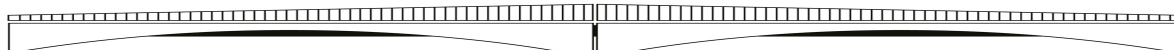
To play the game, give each Cub an egg carton. On signal, they must organize all the items into separate compartments. The first one to sort his "toolbox: gets to take it home with him.

Desk Organizers

A single piece of handrail makes a super simple organizer. Drill as many holes as you need, with the size depending on what kind of pens and pencils you use. The width of the envelope slots will depend on whether you stick a single envelope in it or a group of them. One wider slot for your address book might be a good idea, too. Cut the depth of the slots about 3/4" of the way through the handrail.

Wooden Wind Chimes

Create your own open-air concert with an orchestra of lattice, screen, rounds, half rounds, quarter rounds, dowels, squares, base caps, coves and stops, all clustered together to form a melodious wind chime. The tones will vary according to the weight, length and patterns of wood molding you choose. After you've made your selection, attach small eyehooks at he end and suspend them from a frame of squares with dowel cross pieces. The distance between



them should be far enough apart to swing freely, but close enough to touch in a gentle breeze. Stain or oil as you desire, then hang it from your porch or a nearby tree and await the first musical selection.

Working With Leather

Leather crafting is a hobby that many boys may carry into adulthood. It is best to start with simple projects like key chains and coasters and let the boys work their way up to more difficult items such as wallets or belts.

Look in the yellow pages for leather crafting supply stores near you. Here are some tips to help you get started:

- Dampen leather with a sponge for ease of tooling, but don't have it dripping wet.
- Have the boys draw a design on paper before starting. They can trace the design onto their piece of leather with an awl.
- Let the boys' practice with their tools on scrap leather first.
- Leather stains or acrylic paints will give projects added dimension.
- Put a wood board under each boy's leather piece while he is working.

Leather Totem Pole Bookmark

Materials needed: 1 piece leather 2" x 10", leather working tools, heavy scissors, and sponge for each boy, water.

Cut fringe up from the bottom of the bookmark; length of fringe should be about 1-1 1/2". Design totem pole symbols on paper, then transfer the design to the leather with carbon paper, a scratch awl, or by simply drawing it lightly with a pencil. Dampen both sides of leather with a sponge until the color of the leather changes. Keep dampening as needed while working as damp leather will hold the tooling better. Use the pointed end of a tool to carefully make design lines more clear but be careful not to penetrate the leather. Use a beveled tool to round off straight lines in the design.

Webelos Keepsake

Materials needed: 8"x 12" piece of 1/2" plywood, 1/4" plywood cut in fleur-de-lis shape, sandpaper paint or stain, picture hanger permanent black marker

Sand and stain or paint plywood, then glue the fleur-de-lis in the middle of the plywood. Place picture of yourself in the middle of the fleur-de-lis.

Glue your memorabilia onto the board and label as desired. Attach picture hanger on back.

Finishing - painted designs should be made with enamel. Tooling can be done by tapping lightly with hammer and nail. If you are using the silver side of the can, polish the surface with fine steel wool. All projects can be given a final protection with lacquer or wax.

Wire Sculptures

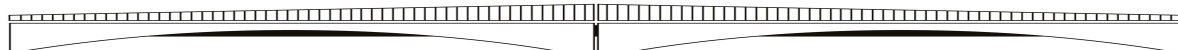
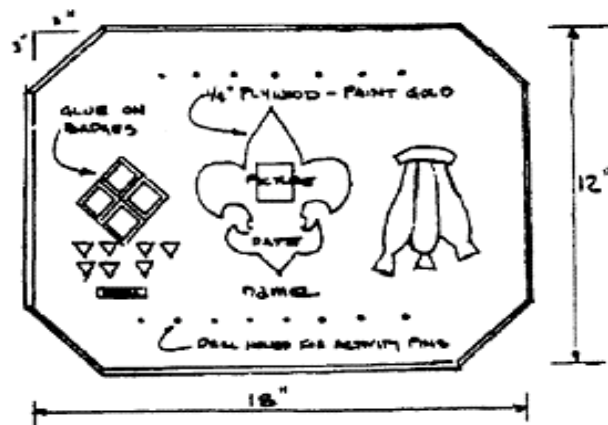
Materials needed. wire, copper, aluminum, colored telephone wire, wire cutters, wood block, hammer and nails.

Instructions: Twist the wire around a pencil to make coils. Plan a design for your sculpture. Shape the wire until it is just right. Nail the sculpture to the wood base.

Closing Thoughts

"I hold in my hand a pocketknife. This is a valuable tool because it can be used for many useful things. It is a dependable tool as long as the blade is kept sharp and free from rust, and the working parts are in good condition. If it is neglected and becomes dull and rusty, it will become dangerous. "The same principle applies to us, as well.

We have a body, which must be kept in good condition in order to work well. If we fail to take care of ourselves, we become rusty and dull just like a neglected knife. Do your best to keep fit and healthy this week."



Building Tools

1. We are the future builders of America. This is how we will shape tomorrow.
2. We will hammer out justice. (Hammer)
3. We will help Cut out crime. (Saw)
4. We will pinch out poverty. (Pliers)
5. We will wrench out discrimination. (Wrench)
6. We will live by the Golden Rule. (Ruler)
7. We will plunge out hatred. (Plunger)
8. We will drill love deep into our hearts. (Drill)

ENGINEER

Activities:

- ❖ Have an engineer or surveyor visit your den meeting.
- ❖ Draw a sketch of a bridge to build.
- ❖ Visit an office of civil engineers.
- ❖ Obtain a blue print of a building and ask an engineer to discuss the plans. Then tour the building.
- ❖ Visit a chemical production plant.
- ❖ Visit a college engineering department.
- ❖ Have an engineer visit your den and tell about his profession. He might be able to bring a set of blueprints, and explain the symbols used, and show how he uses blueprints.
- ❖ Visit (with permission) a housing project or a commercial building construction site, possibly in conjunction with a visit by an engineer as a guest speaker at your meeting.
- ❖ Visit The Corps of Engineers office if you are near one.
- ❖ Visit a bridge and take a tour.
- ❖ Measure the dimensions of your meeting place and include the location of doors and windows. Show how to sketch a simple floor plan with these measurements.
- ❖ Make catapults and have a contest. Demonstrate for the pack meeting.
- ❖ Have a resource person demonstrate the use of drafting tools.
- ❖ Visit a construction site with a contractor. Ask him to explain the use of blue prints and the order of construction.
- ❖ Have someone explain how to read topographic maps.
- ❖ Find pictures of different bridges and discuss the differences in their construction.

Block and Tackle Experiment

This simple apparatus shows how block and tackle increases power. You need two lengths of broomstick and a length of clothesline. Fasten one end of the line to one of the sticks. Wrap line loosely around both sticks as shown. Have two of your biggest den members grasp the sticks and try to keep them apart while the smallest den member pulls on the line. He should be able to pull the sticks together no matter how the others try to keep them apart.

Catapult Experiment

Use a ruler and an eraser or other soft projectile. Have a boy strike the short end of the ruler. How far did the projectile go? Now have him try it with half the ruler over the edge and hit it with the same force. Is there a difference in the distance? Why?

Measure The Property Line Where You Meet

Do this in small groups. Have someone write it down. Compare the results when all of the groups have finished. Discuss why the results were the same or different. Ask the Scouts why people have and measure property lines. Ask the Scouts if there is a way that they could measure the property line and be sure of the results and what might happen if the line were measured wrong.

Measure Your Meeting Room

Measure the dimensions of the room you meet in using a ruler, yardstick, and a tape measure in small groups. Compare results and discuss measuring experiences and problems. Equate their experiences with what an engineer might do as a part of his work.



Fields of Engineering

Aeronautical Engineering: Deals with the whole field of design, manufacture, maintenance, testing, and the use of aircraft both for civilian and military purposes.

Astronautical Engineering: Closely related to aeronautics, but is concerned with the flight of vehicles in space, beyond the earth's atmosphere, and includes the study and development of rocket engines, artificial satellites, and spacecraft for the exploration of outer space.

Chemical Engineering: Concerned with the design, construction, and management of factories in which the essential processes consist of chemical reactions.

Civil Engineering: Perhaps the broadest of the engineering fields; deals with the creation, improvement, and protection of the communal environment; providing facilities for living, industry, and transportation, including large buildings, roads, bridges, canals, railroad lines, airports, harbors, and other constructions.

Electrical Engineering/Computer Science: Divided broadly into the engineering of electrical power distribution systems, electrical machinery, and communication, information, and control systems.

Geological & Mining Engineering: Includes activities related to the discovery and exploration of mineral deposits and the financing, construction, development, operation, recovery, processing, purification, and marketing of crude minerals and mineral products.

Industrial or Management Engineering: Pertains to the efficient use of machinery, labor, and raw materials in industrial production.

Mechanical Engineering: Broadly speaking, covers the design and operation of all types of machinery and small structures.

Safety Engineering: Concerned with the prevention of accidents.

Sanitary Engineering: A branch of civil engineering that has acquired the importance of a specialized field due to its great importance for a healthy environment, especially in dense urban population areas.

Some Engineering Functions

Research: A search for new scientific knowledge, with the objective of applying it to solving problems.

Development: Applied research which results in working model.

Design: Conversion of developed ideas into economical, reliable, and producible plans of manufacture, use, or construction.

Maintenance: Plan and direct the methods of making the design and transforming it into a useful product.

Sales: Define and explain the application of the product and the sale of it.

Management: Administrate any or all of the engineers which perform the functions listed above and any other personnel required to perform the assigned task.

The Right "Man" for the Job!

Use a word from this list to fill in the correct answer.

Aeronautics, Chemical, Computer, City, Agricultural, Electrical, Physical, Industrial, Mechanical, Civil

1. An engineer who designs plants to make water safe to drink. _____
2. An engineer who designs machines in a factory. _____
3. An engineer who tests new processes and checks old ones in a chemical plant. _____
4. An engineer who plans new circuits and directs workers in an electrical plant. _____
5. An engineer who designs and tests new space techniques. _____
6. An engineer who designs and test new techniques for new equipment for industry. _____
7. An engineer who designs and tests equipment for farmers and ranchers. _____

Bridges and Machines

1. A flat surface over two supports _____
2. A flat surface over three or more supports _____
3. A flat surface over an arched support _____
4. A flat surface with turned up edges _____
5. A bridge with sides made up of a series of triangles _____
6. A bridge that appears to hang from strong strung cables _____
7. A pulley(s) and a rope or cable _____
8. A slingshot or other device used to project something _____



Answers: Catapult, Pulleys, Beam, Bridge, Plank, Bridge, Truss, Bridge, Levers, Suspension, Bridge, Block and Tackle, Pier Bridge, Arch Bridge

Do-it Yourself Flashlight

This flashlight can be assembled easily and provide a fun project for the boys. And better yet, it actually works!

Materials:

Flashlight battery

Bulb

Plastic pill bottle with a flexible lid

Insulated wire

1. The pill bottle should be large enough for the battery and bulb base to fit inside it. The wire should be the kind that can be bent easily.

Scrape the insulation from one end of your wire and form it into a flat coil.

2. Attach the coil to the bottom of the battery with adhesive tape.
3. Cut an opening in the center of the pill bottle lid, so that the base of the bulb will fit. Push base of bulb through hole in lid.
4. Scrape the other end of the wire and wind it around the base of the bulb. Secure in place with some tape.
5. Crumple small pieces of paper. Place enough of this in the bottom of bottle so that when battery is inserted and the lid is tightly in place, the bottom of the bulb will just make contact with the raised center top of the battery.
6. Hinge one side of the lid to the bottle with tape.
7. When lid is closed, the bulb will light. To shut off your flashlight, flip the lid up. This light creates a dim glow. If you want a larger light, use two batteries in a larger container.

Den Floor Plan

Invite the high school drafting teacher to your meeting. Learn to use T-squares, triangles, straight edges, and other equipment needed to accurately draw a floor plan. Measure the dimensions of your den meeting place. Make a simple floor plan sketch, including location of doors and windows.

Survey Maps

The U.S. Department of the Interior publishes geological surveys of the whole county. Quadrangle maps can be purchased at some sporting goods stores.

Look at a map which includes your town and try to find your house. What is the exact longitude and latitude of your home? Find your meeting place, nearby lakes, and other points of interest.

How Does Your Den Measure Up?

Line the Webelos up in the following manner and then take measurements. Use a 50-foot tape measure. This would be fun to do as teams, too. See how they measure up!

1. Shoulder to shoulder.
2. One foot in a line, heel to toe with the next boy.
3. Arms out full length to sides, fingertips touching.
4. All boys lying down in a line, head to feet.
5. Palms only, one boy beside the other.
6. Add up the circumference of all heads.
7. Add up the hand to elbow distance of all boys.

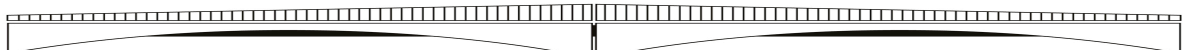
Electric Current

Players form a circle holding hands while the "electrician" is out of the room. One player is designated to be the sender. He starts the current going around the circle by squeezing either the left or right hand of the next boy. The "electrician" returns

and stands in the middle of the circle. He says, "Time to turn on the electric!" He then tries to locate the current being passed. If he can spot a squeeze, that person trades places with him. Repeat.

Word Lightning

Divide the den into two teams. the leader announces the category such as bridges, electric currents, engineer jobs. Each team must say one word in that category, then the other team says a different word. Continue back and forth until one team is stumped Line up in two teams for this relay. The leader stands at a table with a "topo" map.



Teams take turns. One player at a time comes forward and the leader points to a symbol to identify or asks a question. If the boy is correct, he runs back and tags the next person. If he is not correct, the other team begins its turn.

Estimation

Materials needed objects of various sizes, weights or lengths.

Instructions: Often times people describe objects by large measures - feet, miles, tons, etc. Try your hand at describing these smaller objects which are used or seen every day. (Examples: a piece of rope, a kleenex box, a can of food with weight covered, five pound bag of flour, a belt, the leaders weight, a long board or pole) This can be a team effort or done alone. Have boys write down their estimates. Measure or weigh to find who is the closest.

Have several sizes of boxes arranged on the floor. As each Webelos comes forward to receive his badge, he picks up one and builds on another one. Boxes can be decorated with Scout logos or names of the Pack leadership.

Catapult

Materials:

Catapult Arm

Four popsicle sticks

Plastic spoon tied on with wire and

tape (twist wire for rubberband stop)

One rubber band

Base

Wooden slat 1 x 2

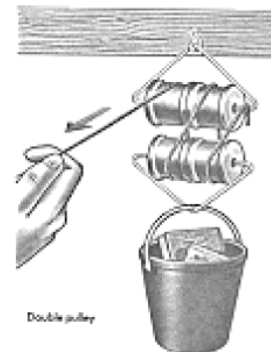
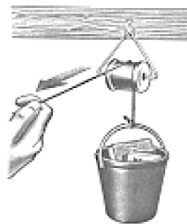
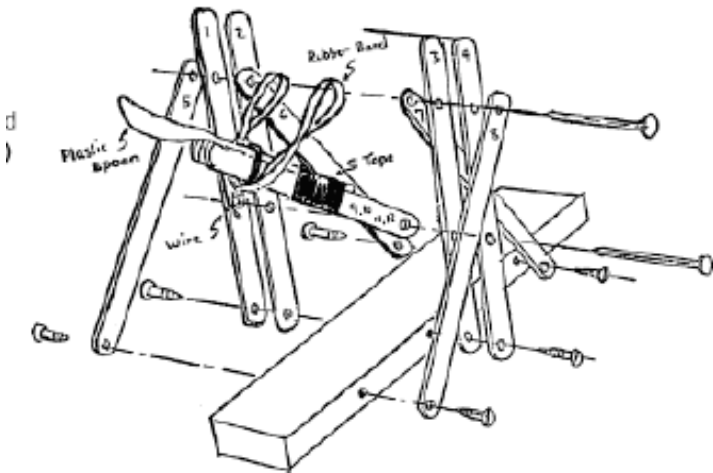
10"long

Sides

Eight popsicle sticks

Two 2 1/4"nails

Six 3/8"wood screws



Make Your Own Pulleys

Materials:

Wire

Thread spools

String

Screw in Hook

Toy bucket full of heavy objects

1. Bend about 8 inches of wire into a triangle shape and push the ends into a thread spool.



2. Find a suitable place to hang your pulley. A book in the shed or garage or the hook at the end of a plant hanger will do.
3. Tie one end of the string to the handle of the load.
4. Wind the string over the thread spool.

- Is it easier to lift the load with the pulley?
- How much string do you have to use to lift the load 1 foot?

Try a double pulley

1. Make two wire triangles. Use about 1 foot 2 inches of wire for each one.
2. Attach two spools to each triangle.
3. Thread the string around the pulleys as shown in the diagram. Use about 6 ½ feet of string.
4. Attach the heavy load to the pulley as before.

Is it easier to lift the load with the double pulley? How much string do you need to raise the load 1 foot?

How It works

The pulley with one thread spool allows you to lift a heavy load directly underneath the pulley. The double pulley means you have to pull only a ¼ as hard, but you have to pull for 4 times as long.

Fountain in a Jar

Materials:

2 Jars one with screw type lid

Modeling clay

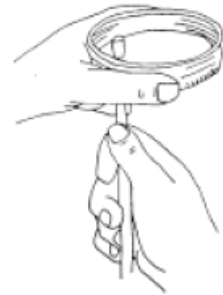
Large nail and hammer

2 plastic drinking straws

Water

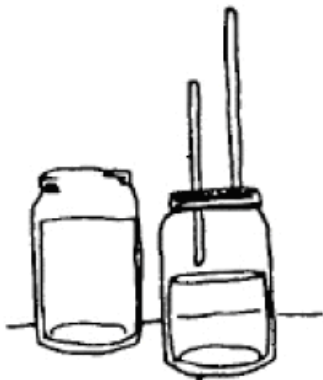
Scissors

Ruler

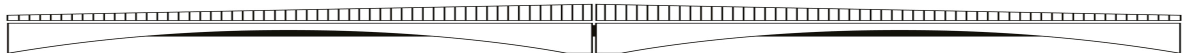


With the help of an adult, use the nail and hammer to punch two holes in the lid of the jar the size of the straws. Push the end of one of the straws about 1/2 inch through one of the holes and the other straw about 2 inches through the other hole.

Cut the second straw so that about 4 inches sticks above the lid. Use the clay to seal the openings around the straws. Now fill the jar about half full of water and screw the lid in place. Fill the other jar with water and place it near the edge of the sink. Quickly turn the jar with water and place it near the edge of the sink. Quickly turn the jar with the lid upside down and lower the shorter straw into the water in the other jar.



You will see a fountain of water appear in the upper jar. The fountain occurred because the water flowing from the longer straw reduced the air pressure inside the closed jar. The higher air pressure on the water in the open jar pushed the water up the short straw and created the fountain.



FAMILY MEMBER

Activities:

- ❖ Make a list of fun activities of little cost and do them over several den meetings.
- ❖ Switch chores with another family member for a month.
- ❖ Have the boys make their chart showing the jobs that they and other family members have in their homes. Have them bring the charts to the meeting and tell what jobs they are taking on for the next two months, and how they will do them.
- ❖ Have a contest - take a small piece of cloth and a button, needle and thread. Have the boys sew a button on -- judge the button that is sewn on the best.
- ❖ Play a game of hazards. Set up a room with several hazards. Have boys come in and find as many hazards as possible.
- ❖ Practice house cleaning skills by cleaning the chartered organization areas. Be sure to get permission and ideas first.
- ❖ Have a mother come in to the den meeting and talk about clothes washing.
- ❖ Invite a home economics teacher or dietician to talk to your den. Perhaps your den could also plan a week's worth of meals and visit a retail food establishment to price the food required. This would also cover a requirement in the Fitness Activity Badge.
- ❖ Make outlet insulators. Use foam meat trays, save at home, or ask local grocery store for some. Use outlet covers as guides.
- ❖ Invite a fireman to a den meeting to talk about home safety. Perhaps he can also provide you with a copy of a home inspection sheet.
- ❖ Take a guided tour a waste disposal facility.
- ❖ Invite an energy conservation engineer to give a talk on energy. Tour an energy conserving home that is built underground.
- ❖ Invite someone from OSHA or a plant safety committee to give a talk after touring a manufacturing facility.
- ❖ Keep a personal budget for a month.
- ❖ Visit with a local financial institution to find out how the monetary system works and how saving money as a family unit can be beneficial in the long run.
- ❖ You could also contact the Police Department and ask if someone from Crime Prevention could attend one of your meetings to talk about security in your home.
- ❖ Have the boys fix a meal and invite the parents to your meeting for a feast! In the meal planning, they must plan the meal, shop for the food and then cook it.
- ❖ Have a "Family" meeting at your den meeting and have the boys show Cub Scout Spirit by doing their best to make plans for the rest of the year, or at least three months.
- ❖ You might invite a mother to show some cooking skills to the boys or to explain recipes. Have the boys use measuring spoons, cups, etc. Have them explain such terms as cream, braising, stewing, and steaming.
- ❖ Plan a family game night - each family brings a game and takes part in sharing the game with another family. The boys could even "invent" games for the families to play.
- ❖ Tour a fast food restaurant or small restaurant.
- ❖ Have someone from OSHA or plant safety committee give a talk after touring a manufacturing facility.
- ❖ Tour an energy conservation home (underground or energy efficient).
- ❖ Tour the local water company and ask for ways to conserve water.

Shopping

This is a variation of Kim's game. Fill a grocery bag with items from your cabinet before the den meeting. Close to the activity time, add cold items from the refrigerator. To play the game, put one item from the bag at a time, announce the name and lay it on the table. When the bag is empty put everything back in quickly. Give boys a paper and pencil and ask them to write down what items were on your shopping bag.

Who Are We?

Ask boys to bring baby pictures and family pictures to the next meeting. Hold the pictures up one at a time and try to guess who it is. Bring in family vacation pictures and try to guess where the family went. (Disney World, the White House, etc.) Think of other ideas of pictures the boys can bring to show off (first fish catch, riding a horse,



talking to someone famous, etc.) Take some den pictures and make up an album of your Webelos family or take slides and play music while you are watching them.

Laundry Hints

Removal with a store-bought cleaner-ballpoint pen ink, facial makeup, motor oil, rubber cement, wax. One of the best pen ink stain removers is using a cheap hair spray on the ink spot.

- Put absorbent cloth or paper towel under stained area.
- Place chemical cleaner on stain.
- Rub stain until it leaves the clothing and passes into the material below.
- Remove the absorbent material. Put cleaner on a new cloth. Wipe around edges of stain and toward center of stain.
- Let dry. Reapply treatment if removal unsatisfactory.

Removal with water - blood, ketchup, coffee and tea, dairy products, grass, mustard, soda pop:

- Place absorbent cloth or paper towel under stained area.
- Rub stain gently with water. If stain is persistent, rub in drops of detergent.
- Rinse out detergent.
- Remove absorbent material.
- Wipe dry.

Family Facts

Save your family memories and pass them on to the next generation. Nothing gives more enjoyment to a family than "REMEMBER WHEN." Children learn who they are from their parents and grandparents. To play FAMILY FACTS have each member of your family write out questions that only your family would know - the more personal the better. Who went to Canada on vacation? What was this family's first pet? Who broke their arm during the school play? Who ran into the basketball standard and chipped his front tooth? What was the address of our first house? When is Grandma's birthday? When did dad graduate from high school? Play in the car, home on a rainy day or at family gatherings. For a different twist, make up cards in categories -dates, people, places, events, pets, vacations, etc., and play family trivial pursuit. Use the regular Trivial Pursuit game, but substitute you family cards.

Family Finances

Many Cubs are not aware of how their families spend money. Food, clothing, and entertainment are obvious. Suggest to the parents that they share the actual bills with their children and have them add up the total cost. They will be amazed. As the Cubs conduct the safety/energy checklist, encourage the parents to discuss the cost of keeping the house in good repair, the cost of water use, the cost of cooling and heating the house, etc. Then the Cubs will be better prepared to share in ideas for saving money and they will be ready to develop a family energy-saving plan.

Zoo Babies

Visit a local zoo with your den families. While there, find out about the family structures of some of the animals. Observe how the monkeys socialize and care for their young. When are some of the other animal babies "on their own?"

Family Snack Surprise

Prepare a cake mix, then spoon batter into flat bottom wafer cones. Fill half way. Place six cones at a time on a tray and microwave 2-3 minutes on high or until a toothpick inserted comes out clean. Rotate during cooking period.

Trivia

For an evening of great family fun make up a trivia game to play. Each person writes a question on an index card. Example: What is your favorite book? What do you live about your bedroom? When is mom's birthday? What was your first home address? Mix the cards together then each person draws a card to answer. You could also have every person answer every question. Learn more about each other and have fun, too!

Saturday Fun!!

Have boys arrive early, like 6:30AM. Ask them to wear pajamas and bring sleeping bags. Enjoy a typical "family" Saturday morning. Boys can watch cartoons, play board games or Legos, or sleep. Have them help make a special breakfast like waffles or home-made yeast cinnamon rolls. Talk about what their families do on a Saturday morning.



Stress the importance of allowing each person to have freedom to do as they please to relax. Are there ways they can help by cooking or playing with their brothers and sisters?

Dirty Clothes

Announce that the next week the den will be meeting at the local Laundromat. Each boy should bring a load of wash and coins for the washer and dryer. Leader can bring a box of detergent and measuring cup. Meet and wash clothes! Look around at the kinds of washers and the safety instructions. Time how long you are there.

Bills!

Ask your parents to help you set up a chart of the electric and gas use in your home. Write down all the ways you can think of which use electricity or gas. Look at the bills for the last few months and write down the actual usage and the cost. Is the usage up or down? Why? If your parents have the bills from last year at the same time, compare them. For a one month, practice turning out lights and conserving in other ways. See how much difference you can make on the next bill. The utility companies can provide you with a list of appliance usage/hour. Figure out how much it costs to dry a load of laundry, or to run your hair dryer or toaster.

Grocery "Blues"

Material needed: paper and pencil for each boy. Instructions: Food is one of the major ongoing expenses that a family has, so good shopping habits will help curb the costs. Boys sit in a circle. They write down the names of ten items their family buys at the grocery store...only scramble the letters of each word! On signal, each boy passes his grocery list to the boy on his right. Set a time limit, and have them unscramble the grocery list. This game could be played as a team also.

House of Cards

Divide den into two teams. Give each team 20 playing cards. On signal, they must build a house of cards using all 20. The first team to complete a house that stands alone for five seconds are the "den contractors."

Who Are We?

Ask boys to bring baby pictures and family pictures to the next meeting. Hold the pictures up one at a time and try to guess who it is. Bring family vacation pictures in, and try to guess where the family went. (Disney World, the White House, etc.) Think of other kinds of pictures the boys can bring to show off (first fish catch, riding a horse, talking to someone famous, etc.) Take some den pictures and make up an album of your Webelos "family" OR take slides and play a music record while you are watching them.

Home Hazards

Before the den meeting, set up as many possible hazards around your house as possible. (Safely, that is!) Examples: pan on the stove with handle sticking out over the front, metal pan in the microwave, bag of newspapers in the middle of the stairs, (empty) bottle of ammonia sitting in the corner, matches too close to the fireplace, gas can in the laundry room, pills (candy) laying on the counter. When the boys arrive, give them a paper and pencil and ask them to write down any hazards they see. During the opening period discuss the answers. Are there some that were not noticed? Ask them to take their lists home and check for similar things at their house.

Fire Safety Quiz

Use at a den meeting by reading the questions and asking the boys to write down the letter of the correct answer or by making copies and giving one to each boy.

1. What should you do to be ready if fire should strike your home?
 - a. Keep pails of water handy
 - b. Have an escape plan and rehearse it often
 - c. Be ready to carry out the furniture
 - d. Have a suitcase packed

2. In making your escape plan, why should you know two ways out of every room?
 - a. So you can see different parts of the house when you practice
 - b. In case fire or smoke blocks one of the escape routes.



- c. To keep people guessing
 - d. To make home fire drills more fun
3. If your clothing catches fire, what do you do?
- a. Run for help
 - b. Look for water to throw on yourself
 - c. Roll on the floor or ground, wrapping yourself in a coat, blanket or rug if possible
4. What should you use for light in a dark closet when there is no light bulb?
- a. A match
 - b. A candle
 - c. A cigarette lighter
 - d. A flashlight
5. When you check extension cords in your house, what do you look for?
Choose Two.
- a. Frayed, broken insulation
 - b. Whether the color matches the woodwork.
 - c. Whether they run under rugs
 - d. Whether the plug is brown or white
6. In checking around a furnace for fire hazards, you should remove which of these?
- a. Fishing rods and reels
 - b. Table
 - c. Garden tools and aluminum folding chairs.
 - d. Gasoline can, greasy rags, and newspapers

My 30 Day Budget Plan

Where will my money come from:

Allowance _____

Jobs..... _____

Savings..... _____

Other..... _____

Total Money

Where my money will go:

School Lunch..... _____

Dues..... _____

Clothes..... _____

Bus..... _____

School Supplies..... _____

Food/treats..... _____

Other:

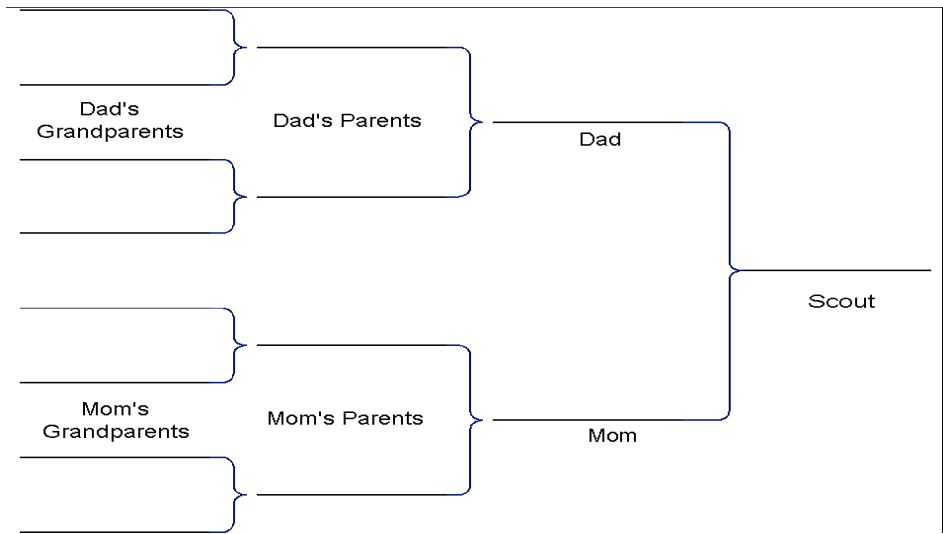


Total Expenses
Genealogy

Seven Day Expense Record

Category/Purchases	Monday	Tuesday	Wechesday	Thursday	Friday	Saturday	Sunday	Total
Daily Total								

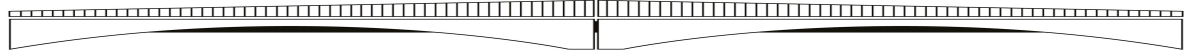
Tracing family roots can become a lifetime hobby. There are many books and classes on how to find information. Ask if any Den parents have organized charts or have studied their heritage. Have the boys make a family tree for both their mother and father’s family from a list of all the members of their family. What are their birthdays, dates of marriage and years of death?



FITNESS

Activities:

- ❖ Have the boys read a story in the newspaper or magazine about a drug or alcohol related incident. Have them report back to the den and discuss what happened.



- ❖ Invite a nurse, doctor, dentist, or E.M.T. to talk about the effects of tobacco, drug, or alcohol abuse as well as the positive effects of eating a healthy diet. Have the boys write questions on cards so they are anonymous.
- ❖ Invite a local sports figure or coach to come and discuss fitness with the boys.
- ❖ Invite the grade school gym teacher to your meeting. Get to know them on a personal basis: Why did they become a teacher? What kind of background do they have? What sports are they currently active in? What do they like about teaching kids?
- ❖ Let boys design posters on how to say no to drugs, cigarettes, and alcohol. Display at a pack meeting.
- ❖ Show films (approved by parents and pack committee) on drug and alcohol abuse.
- ❖ Invite a dietician to come and discuss the benefits of a balanced diet.
- ❖ Take a field trip to a fitness or recreation center.
- ❖ Have the boys collect advertisements for tobacco and alcohol. Help the boys see that the activities in those ads have nothing to do with tobacco or alcohol. Have them read the warning labels on cigarette advertisements, note the size of the warning in relation to the ad. Can people do the activities depicted in the ads without smoking or drinking?
- ❖ Invite the grade school gym teacher to your meeting. Get to know them on a personal basis. Why did they become a teacher? What kind of background do they have? What sports are they currently active in? What do they like about teaching kids?
- ❖ Have your den write a skit depicting ways to say 'NO' to drugs & smoking.
- ❖ Have a police officer involved with drug prevention attend a den meeting. Have the boys interview him and ask questions concerning drugs and alcohol.
- ❖ Have the boys find out what the policies are in their school about drugs and what would happen to students with drugs in their lockers, etc.
- ❖ Collect newspaper and magazine articles about accidents and crimes that are drug or alcohol related.
- ❖ Find out what some organizations are doing to stop use and availability of drugs, especially to, children.
- ❖ Arrange a visit to the YMCA or local health club. Tour the whole facility looking at all the machines. Meet briefly with various instructors to find out what they do. Look at a schedule of classes. Get some fitness tips from a personal trainer. Ask what they do for emergencies.

Test Your Heartbeat

Did you know that you can't actually hear a heartbeat? The heartbeat itself is just a contraction of muscle and is perfectly quiet. What you can hear is the sound of heart valves snapping shut. Here's how to test your heartbeat: Press the first two fingers of one hand over the radial artery in the opposite wrist. The radial artery is located under the depression just below the base of your wrist. Sit very quietly and move your fingers until you can feel the pulse of your blood. Using a watch or clock with a second hand, count the number of beats in 10 seconds. Multiply by 6. Now you know the number of beats per minute. Run, exercise, or jump rope for 10 minutes. Take your pulse again to see how much faster your heart is pumping.

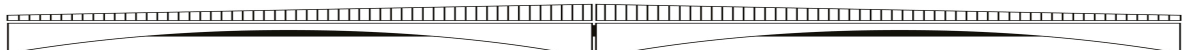
Magic Circle

Preparation: At least three people, roughly the same size

Can you and all your friends all sit down without touching the ground and without using a single chair? Everybody stands in a circle facing the same way with his or her hands on the next person's waist. Now, everybody bends their knees until they are sitting on the knees of the person behind them. Lead your entire pack in this activity at the next pack meeting. What is the largest Magic Circle you can make? All the workers at a Japanese car factory formed the world's largest Magic Circle of 10,323 people!

Jumping Rope

Jumping rope is wonderful aerobic exercise, which means that it exercises the heart. Professional athletes like boxers use skipping rope to built their endurance and coordination. See how many jumps you can do before making a mistake. How long can you jump rope? The world record is over 12 hours. How fast can you jump rope? Fast jumping is best done boxer style with both feet together all the time. It is helpful to have a short rope so that it just misses the ground as you jump. Can you jump backwards? With practice, you will find this almost as easy as skipping forward. Cross hand jump: jump in the normal way but, as the rope passes over your head, bring your hands forward and cross your wrists. Quickly uncross them before jumping over the rope. Two jump: jumping with a friend using only one rope.



Smell Test

Everyone knows what a taste test is, but have you ever had a smell test? One way to cook healthier meals is to replace some ingredients like salt or fats, which are used primarily as taste enhancements, with healthier alternatives. Herbs and spices have strong and distinctive smells as well as flavors. Many of the smells can be associated with favorite or special food memories from even very early childhood, like mom's apple pie or grandma's cookies. This introduction to herbs and spices will come in handy in a year or two when your Webelos will be responsible for cooking their own meals in Boy Scouting. It also provides a meeting full of surprising discoveries.

Before the meeting, gather a number of herbs and spices. Try to have a few examples of an herb in both dry and fresh forms. Also, look for prepared food items in your kitchen that have the distinctive aroma of one or two of the items you have gathered. During the meeting, have the boys sniff the herbs and spices (one at a time) and try to think of a food that often smells the same. Have them sniff a dried herb, then crush or break off a fresh piece of the same herb so they can see the difference in the strength of the aroma and taste.

Finally, open a container of a prepared food and see if they are able to identify which herb or spice gives the food a distinctive flavor.

Activities That Will Help The Boys Understand The Harmful Effects Of Cigarette Smoking

1. Define "pollution." ("Pol-lu-tion: to make unclean, impure, or corrupt; desecrate; defile; contaminate; dirty". Webster's New World Dictionary of the American Language)
2. Discuss pollutants in the air in the outside environment. Use pictures from magazines or newspapers. Include: factory smoke, car exhausts, rocket launches, and smoke from someone else's burning cigarette & so on.
3. Explain how all living things need air to breathe.
 - a. Put a plant under an airtight container. What begins to happen?
 - b. Put ants or other insects in an airtight jar. Give them everything else they need to survive. What happens? Why? (When the ants' activity begins to decrease, open the jar and set them free.)
4. Talk about the fact that smoking cigarettes is harmful to our health and how it "pollutes" the internal environment of our body (the lungs).
 - a. Blow smoke from a cigarette through a tissue. What did you observe? Wouldn't that also make your lungs "dirty?"
 - b. Hold your breath and have someone check the time. Did you have to breathe very soon after you started holding your breath?
 - c. Demonstrate the effects of sick or injured lungs:
 - (1) Light a candle. Ask a boy to stand a reasonable distance from the candle. Instruct the boy to take a deep breath, and then blow out the candle.
 - (2) Relight the candle. Ask the boy to stand at the same distance from the candle. Instruct him to take a deep breath and blow out at least half of the breath before attempting to blow out the candle. With the breath that is left, ask the boy to blow out the candle. What happened?

Nutrition Connection

Nutrition and fitness go hand in hand. Teach the boys the four basic food groups and what each does for the body. Have the boys make a poster or collage showing foods that belong in each group. Use magazines and advertisements from the Sunday papers for these. Let each boy make up a menu for a meal and let the other den members check it for balance. This would be good to do for a campout menu. They need to be balanced also.

Milk Group Fruit-Vegetable Group

(Builds teeth and bones)

(Builds energy and helps your body defend against disease)

Milk and Milk Products including cheese, cottage cheese and ice cream, all kinds of fresh fruits and vegetables

Protein Group--Bread-Cereal Group

(Builds muscles, bones, and blood. Quick energy builders, helps to make your body work better.)

Beans, rice, meat, cereal, grits, fish, bread, peanut butter, flour products, eggs, spaghetti.

Jump the Beanbag

A small beanbag is tied on the end of a rope or heavy cord. The leader stands in the center of the circle made up of the players facing him. The leader swings the beanbag around the circle at ankle height. Once a player is hit he must leave the circle. The last player left is the winner.



A.B.C.

Two players hold the end of a rope about 10 feet long. With rope lying flat on the ground each player jumps over the rope. The rope is then raised about four inches high which is 'B' and every body jumps over. Continue raising the rope four inches with each letter of the alphabet until only one player is left.

Shuttle Run

Area and Equipment - You'll need two blocks of wood, 2 inches by 2 inches by 4 inches and a stopwatch. Mark two parallel lines on the ground 30 feet apart. Then put the blocks of wood behind one of these lines. The child will start from behind the other line.

Procedure:

1. The time should raise his arm and say, "Get ready!"
2. Then the timer simultaneously says 'Go!', lowers his arm, and starts the stopwatch.
3. The Webelos Scout runs from the starting line to the blocks, which have been placed just behind the second line, He picks up one of the blocks, runs back with it to the starting line, and places the block behind the line. The block must be placed, not thrown, on the ground.
4. Then the Webelos Scout runs back to the other One, picks up the other block, and carries it back across the starting line.
5. As the Webelos Scout crosses the starting line with the second block, the timer should stop the stopwatch. The child's time should be calculated to the nearest tenth of a second.
6. The child should then be given a chance to do the event again. The better of the two times will become his time for the shuttle run.

Jump the Shot

This game is played outside. Tie a stuffed sock onto the end of a 12 foot rope. Boys standing in a circle just inside the length of the rope. The boy in the middle slowly starts to swing the rope around at ankle height Player must jump as the rope goes past them. If they get hit they must drop out of play. The center person gradually builds up speed. The last person not hit becomes the new person in the middle.

Indian Star Reach

Materials needed: Long piece of rope, six cardboard stars, six clothespins. Tie the rope overhead at an angle, starting just out of reach of the shortest person. Space the stars along the line with clothespin. The first boy jumps to touch a star, starting at the lower end He must tag one star before moving on to the next one. Count how many stars he can reach. Repeat with the next boy. This can be a team competition, or a personal quest.

In the Garden

All Webelos stand in a circle. The leader calls out the name of a garden vegetable. If it grows below ground, boys sit down (beets, carrots, potatoes). If it grows above ground, boys remain standing (peas, tomatoes, beans). If boys do the wrong action, they are eliminated. Toward the end of the game use less common vegetables such as okra, eggplant, peanuts, endive. Last boy left is The healthiest eater!

Balanced Diets?

Make up a and with the food groups listed across The top, plus "junk." On The side make six lines and list breakfast, lunch, and dinner for yesterday and today. As the Webelos arrive, ask them to complete the form by filling in the name of The foods they ate. (Boys do not put their name on the paper.) Collect the forms and hang them up. Ask boys to circulate reading them and then vote for the most balanced diet shown. The winner receives a gift certificate for ice cream at a local store.

Betcha Can't

1. Put a paper on your forehead and write your name on it.
2. Twirl one thumb clockwise and the other thumb counterclockwise.
3. Write a sentence with one hand and at the same time use the other hand to put coins into a cup.
4. Write your name with the opposite hand than you use.
5. Pick up a piece of paper from the floor without bending your knees.



Thumbless

Give each boy two six-inch strips of adhesive tape. Ask them to help each other taping their thumb and forefinger together. (Both hands)

Next ask them to unlace their shoelaces, unbutton a button, peel an orange, thread a needle, etc. Find out how essential the thumb is for manual dexterity!

Footprint Mural

Work in a large area like a garage. Roll out mural paper on the floor. Have pans of paint set up around the edges. Boys take off their shoes, step in the paint and start walking slowly! The only rule is they cannot walk on top of another footprint. Have pans of water and towels available for clean up. Talk about proper foot care. Take the mural to the pack meeting as a backdrop for your skit. etc.

Fancy Writing

Give each boy two pieces of paper and pencil. Ask him to remove both shoes and write his name using the pencil in his toes. Try each foot on a different paper. Is one easier? Can you read it?

Fitness Stations

Invite den parents to one of your meetings. Set up stations around the house and yard with one parent at each. Give boys an index card which the adults will sign upon completion of their activity. Stations could include: How many jumping jacks can you do in one minute? Push a balloon five feet with your head. Shot-put six beans into a can. Walk ten feet balancing an egg on a spoon. Think up some other fun ones to use.

FORESTER

Den Activities

- ❖ Collect leaves for identification. Boys could mount them or make leaf prints.
- ❖ Bring a log to den meeting or find a tree stump and have the boys count the annual rings to determine the age of the tree. See if they can tell something about the kind of weather -dry or wet spells -- through which the tree lived by looking at the rings.
- ❖ Visit a lumberyard or saw mill, nursery, or tree farm. A local lumber dealer can help the boys by furnishing wood samples for their collections.
- ❖ Check the local forester about advice on planting projects and seedlings.
- ❖ Plant a tree.
- ❖ Make a tree survey in your area.
- ❖ Ask a fireman or forest ranger to tell the boys about wildfire and how to control it.
- ❖ Teach the boys to measure tree diameter and height.
- ❖ Check with a local conservationist for advice on planting project and seedlings.
- ❖ For a long-term project, adopt a tree and keep a diary on it. Measure its girth, estimate its height, record when it buds, when it loses its leaves, and other interesting things.
- ❖ Make a tree identification kit for your den from strips of bark, leaves or needles and cones or seeds.
- ❖ Ask the County or State Parks Department if your den can plant trees. The parks will provide the trees and designate where to plant them.
- ❖ Teach the boys the Outdoor Code
- ❖ Make a collection of leaf prints.
- ❖ Take a hike to identify trees
- ❖ Grow a tree from seed to plant
- ❖ Visit a tree farm or nursery

How important trees are in our lives. Trees:

- Provide fuel, furniture, paper, wax, cork, oils, gums, rubber, syrup, nuts, and fruits.
- Give shade, beauty, and relief for the drabness of concrete.
- Make it cooler in the summer with their shade and warmer in the winter by serving as a windbreak.
- Provide homes and shelter for birds, which in turn help reduce insect pests.
- Make an area more attractive and appealing and so it increases property values.
- Screen impurities, trap the dust in the air.
- Help prevent soil erosion.
- Provide a barrier that helps screen out noise. Properly placed, they can reduce traffic noise up to 60%.



- Put oxygen in the air.
- Produce humidity and cut the smog.
- Are our principal air conditioners. The cooling effect of a healthy tree is equivalent to 10 room-size air conditioners operating 20 hours a day.
- In state and national forest, provide recreational retreat for millions of people.

In General, Trees

- Provide fuel, furniture, paper, wax, cork, oils, gums, rubber, syrup, nuts, and fruits.
- Give shade, beauty, and relief from the drabness of concrete.
- Make it cooler in the summer with their shade and warmer in the winter by serving as a windbreak.
- Provide homes and shelters for birds, who in turn help reduce insect pests.
- Make an area more attractive and appealing and so it increases property values.
- Screen impurities, trap the dust in the air.
- Help prevent soil erosion.
- Provide a barrier that screens out noise.
- Put oxygen in the air.

Smokey's Pledge

I promise that:

I will not play with matches.

I will tell people who smoke to use an ashtray.

I will see that campfires are in a clear place, at least 5 feet from anything else that will burn.

I will not leave a campfire until it has been put out with water

I will tell all my friends to always be careful with fire.

how to plant a shade tree

1. Select the tree and decide when and where to plant it.
2. Protect the root from drying. Unpack a bare-root tree immediately and place it in a bucket of water or thin mud. Do not plant with packing material attached to roots.
3. Dig a hole large enough to hold the entire root system without crowding.
4. Make certain that drainage from the hole is good. Planting-holes must be drained for trees to grow satisfactorily.
5. Cut off one half inch of the ends of the roots to expose live root tissue. Prune the top of the tree as needed to compensate for roots lost in digging and moving. Consult a nurseryman or a good tree manual before starting to prune. This is a skill, and care should be taken to control and shape growth and to protect tree health by eliminating dead, diseased, and injured wood.
6. Put some fertile soil in the hole.
7. Set the tree in the hole no deeper than it was at its original site.
8. Install support stakes. One to three wooden stakes usually will support trees that have a trunk diameter of no more than two inches. The wooden stakes should be 6 to 8 feet long and strong enough to hold the trunk rigidly in place.
9. Cover the roots with fertile soil, tamping it or settling it with water. Pour protective mulch, such as wood chips or peat moss around the base after water has soaked in.
10. Wrap the trunk with a protective covering such as burlap, cloth strips, or paper. Don't use polyethylene plastic.
11. Fasten the trunk to the stakes with canvas tape or loops of wire passed through a section of rubber or plastic hose or similar material.
12. Care for the tree after planting. Water well and Stand Back And Be Proud!

To Transplant A Tree

Cut off one-half inch of file ends of the roots to expose live root tissue. Prune the top of the tree as needed to compensate for roots lost in digging and moving. Consult a nurseryman or a good tree manual before starting to prune. Put some fertile soil in the hole. Set the tree in the hole no deeper than it was at its original site. Install supporting stakes. One to three wooden stakes usually will support a diameter of no more than 2". The wooden stakes are strong enough to hold the trunk rigidly in place.

How Trees Grow

A tree has three main parts. The roots anchor it in the ground and absorb water and minerals from the soil. The trunk and branches carry sap and lift the leaves into the sunlight. The leaves are the food factories of the tree.



A tree grows higher and wider by lengthening its twigs and branches at the tips. At the ends of the twigs, the terminal buds are continually adding new cells. Meanwhile, the twigs, branches, and trunk grow thicker.

Most trees have a section called the cambium, which is a layer of cells where the growth in diameter occurs. Every year the layer of cambium between the sapwood and the inner bark adds a layer of new cells to the older wood. Each layer forms a ring. By counting these rings you can tell the age of a tree.

Water and dissolved minerals travel up from the roots to the leaves in the new layer of wood inside the cambium. This part of the trunk is called sapwood. Other sap carries plant food down from the leaves through a layer inside the bark.

As the tree grows, the older sapwood stiffens and loses connection with the leaves. Then it just stores water, and finally, it becomes solid heartwood.

While the cambium makes the tree trunk and its branches grow in size, the leaves produce the food, which builds the tissues of the tree. Using the energy from the sunlight, the green coloring matter in the leaves (called chlorophyll) takes carbon dioxide out of the air. It combines the carbon dioxide with water and dissolved minerals from the roots to form sugars and starches.

Forest Fires--We Must Protect Our Forests!

Life is short. Forest animals lives are in our hands. When the trees and grass grow dry as timber, don't leave burning embers at a campground. Even contained fires can quickly get out of hand and grow like fury. A few smoldering twigs can become a rampaging blaze. A single careless toss can turn the forest world into wholesale horror. Fire destroys burrows, nests, seeds, roots, hunting territories, mating grounds, and LIFE. It takes no more than one fool to start a fire. It often takes an army of cool heads to put one out. Man is responsible for 58% of all forest fires, and about 1/3 of that number are set on purpose. People who use the woods for recreation are responsible for 1/3 of all forest fires each year.

Learn How To Use Fires Safely – Or Stay Home!

Lightning causes many forest fires too, but when it strikes it often happens on top of a hill, where the temperature is cooler, the fuel supply is sparse, and the flames are more easily spotted.

Animals caught in a forest fire can't outrun the flames. Think about them on your next trip, and rake the ashes of your campfire extra carefully. You'll be glad you did and so will the animals.

A surface fire burns along the floor of the forest. It is usually slow moving and close to the ground, but it can spread fast. It kills small trees and will permanently damage larger trees. Most fires are this type.

A ground fire burns on or below the forest floor. Lightning often starts these fires. They move slowly, and often go undetected for weeks. They are hard to put out. The heat they create beneath the ground destroys the trees' roots and any chance for life.

A crown fire moves faster than most people can run! These fires often start as surface fires, and are blown by wind into the tree crowns. Fir forests are especially vulnerable. The needles and cones catch fire easily and quickly. A grove of trees "topping out" in this way is doomed.

A fire has to be fed or it dies. If you want to kill one fast, cut off its supplies: heat, fuel, and air. The main elements which influence the spread of fire are fuel (such as dry grasses, dead leaves, brush, small trees, logs, top soil); weather (wind, moisture, and temperature); and slope.

Wood Collection

Make a collection of various types of tree limbs cut in cross-sections. These show heartwood, growth rings, cambium layer, and bark. Do not cut these from live trees, but from limbs that have fallen off. If green, allow to dry in a warm place for several weeks.

Saw the ends squarely and retain the bark. Then cut them crosswise, lengthwise, and slanting to show all the features of the wood. Sandpaper your specimens, then brush on shellac.



Diameter Tape and Cruising Stick

Foresters use cruising sticks to measure a tree's diameter and height. These facts are essential in figuring the amount of wood in a tree.

Tree Diameter: Cut a strip of flexible paper or cardboard about ½ inch wide and 45 inches long. Begin at one end of the paper strip and make ink markings 3.14 inches on tape equals 1 inch of tree diameter. To measure tree diameter, wrap tape around tree at chest height, about 4 ½ feet above ground. The diameter of the tree in inches will be at the mark nearest where the tape over-laps the zero end.

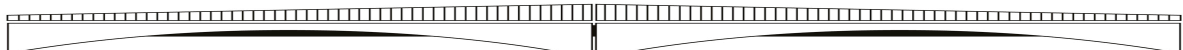
Tree Height: Glue a strip of hard paper or cardboard on one side of a yardstick. Begin at one end and make marks 6.16 inches apart with ink. Label the first mark 1, the second 2, and so on. To measure tree height, stand 66 feet from it. Hold arm horizontally and the stick vertically at arm's reach – about 25-inches from the eyes. Slide stick up or down until the top of the stick is in line with the top of the tree. Without moving, sight bottom of tree (be sure stick is still vertical) and see the place on the stick where line of sight crosses it. The nearest figure is the number of 16-foot lengths in the tree. If the figure is 2, there are two 16-foot lengths, so the tree is 32 feet high.

Tree Quiz

1. Which tree has the softest wood?
2. Which tree is shaped like a vase?
3. Which trees are the tallest?
4. Which trees are the oldest?
5. Which tree has a leaf shaped like a mitten?
6. Which tree gives maple syrup?
7. Which tree has paper-thin bark?
8. Which tree is used for baseball bats?
9. Which tree is suited to make your pencils?
10. Which conifers lose all their needles in the fall?
11. Which evergreens bear berries instead of cones?
12. Which broad-leaf keeps its leaves all year?
13. What part of the tree is used for making paper?
14. What part of the tree gives us turpentine?
15. Which tree is our most important lumber tree?
16. Which trees are softwoods?
17. Which trees are the hardwoods?
18. Which trees are often called "Stinkweed"?
19. Which tree is used for making matches?
20. Which tree is used to make spools?

ANSWERS to Tree Quiz

- | | |
|--------------------------------|-----------------|
| 1. Balsa | 18. Ailanthus |
| 2. Elm | 19. Aspens |
| 3. Redwood | 20. White Birch |
| 4. Sequoia | |
| 5. Sassafras | |
| 6. Sugar and Black Maple | |
| 7. White Birch | |
| 8. White Ash | |
| 9. Red Cedar | |
| 10. Larch and Bald Cypress | |
| 11. Yew Cedar Juniper | |
| 12. Live Oak | |
| 13. Cellulose | |
| 14. Long Leaf and Bobolly Pine | |
| 15. Douglas Fir | |
| 16. Evergreen | |
| 17. Deciduous | |



Play On Names

Match each statement on the left to the appropriate tree on the right. _____ This tree comes in twos

1. _____ This tree is nearest the sea.
2. _____ This tree is a romantic evening for 2.
3. _____ This tree keeps you warm
4. _____ This tree was an Egyptian plague
5. _____ The tree we offer when we shake hands
6. _____ This tree is used in kissing
7. _____ This tree is always crying
8. _____ This tree is a Colorado ski slope

Date

- A. Aspen
- B. Locust
- C. Pear
- D. Tulip
- E. Beech
- F. Weeping willow
- G. Palm

H. Fir Lumber Production in the United States

Leaf Scavenger Hunt

Give yourself one point for each item found.

1. _____ Leaves can have teeth (jagged edges)
2. _____ Leaves can have lobes ("fingers")
3. _____ Leaves can have palmate vein patterns (spreading from single base point)
4. _____ Leaves can have pinnate vein patterns (spreading out from central vein)
5. _____ Leaves can have parallel vein patterns (long veins parallel to each other)
6. _____ Leaves can grow in opposite arrangements (two leaves start out from same point)
7. _____ Leaves can grow in alternate arrangements (leaves are not at same point on branch)
8. _____ Leaves can grow in whorled arrangements (leaves are grouped at points)
9. _____ Leaves can have simple leaves (one leaf)
10. _____ Leaves can have compound leaves (many leaves on a stem)
11. _____ Leaves can be evergreen
12. _____ Leaves can be deciduous

Forest Plants Useful to Wildlife

Match the forest plants to their best uses.

1. _____ Wild flowers
 2. _____ Wild berries
 3. _____ Grasses, mosses
 4. _____ Hollow trees
 5. _____ Chestnut trees
 6. _____ Pine trees
-
- A. shelter, homes for small animals
 - B. food for birds, animals
 - C. nectar for bees to make honey
 - D. food for deer, other animals
 - E. nesting for red-cockaded woodpecker
 - F. food for wild turkeys



Forest Fun

Fill in the blanks with the name of the tree the statement reminds you of.

Sumac	Walnut	Mesquite	Rubber	Oak	Spruce
Ash	Elder	Pine	Orange	Apple	Locust

1. _____ A person who is old.
2. _____ Something that stretches
3. _____ A bright color
4. _____ A nut
5. _____ Small insect
6. _____ Another name for cleaning up
7. _____ OK spelled with an A in the middle
8. _____ A present for a teacher
9. _____ The most "knotty" wood
10. _____ The sound a slap makes
11. _____ Fire leftovers
12. _____ A city in west Texas

Forest Layers

Put the appropriate words into the blanks in the paragraph below -

litter trees ground cover shrubs

There are several layers to most forests. The most evident are the _____ that fill most of our vision. Then lower are the bushy _____ followed by the fallen leaves and mossy _____ covering the forest soil. Sometimes a fourth layer, _____, is added by careless humans who don't clean up after themselves.

Information:

Six Forest Trees and Useful Wood Products:

Cedar - shingles

Redwood - weather resistant lumber

Longleaf Pine - chief lumber producing pine of the southern United States - also turpentine and tar.

Pecan., Oak, Ash - (hardwood) furniture

White Pine - pulpwood for paper and lumber

Douglas Fir and Ponderosa Pine - chief lumber producing pine of the Pacific States - also telephone poles.

THE MAJOR SOFTWOODS ARE DOUGLAS FIR AND SOUTHERN PINE.

Six Forest Plants Useful to Wildlife:

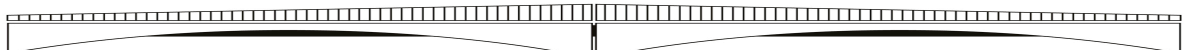
- Wild flowers, such as honeysuckle - nectar for bees to make honey.
- Wild berries, such as blueberries - food for birds and animals.
- Grasses and Mosses - food for deer and other animals.
- Hollow trees (cottonwood) - homes and shelters for small animals.
- Chestnut trees - food for wild turkey.
- Pine trees - red cockeyed woodpecker, an endangered species nests only in pine forests.
- Cypress trees - ivory billed woodpecker (almost extinct) lives on woodboring insects that tunnel under bark of dead Cypress trees.

Diary of a Tree

Read the tree diary below and complete the tree rings the way you think they would look based on the tree's thoughts.

Year 1- (this one is done already) I am one year old today! Happy Birthday to me! I am as thin as a reed and I bend easily in the wind.

Year 2 - Today I turned 2! It's been a tough year. There are a lot of big trees all around me and I have a hard time



seeing the sun. I wish they would sit down or something.

Year 3 - Three years old! Yipee! Still kind of crowded around here. But I do see some sun on my south side every day. We had a very long winter too.

Year 4 - The trees on my east and north side all rotted and fell to the ground. Lots of neat stuff in the soil all around me now. I just love gooey stuff.

Year 5 - I'm a big boy now! This has been a fun year. Lots of rain and sun. I'm not crowded any more and soon I will be a big tree too.

Year 6 - Happy Birthday to Me! It's been a hot year. I'm so thirsty.

Year 7 - I would like a cup of water for my birthday.

Year 8 - It's not so fun being a big tree. I wish it would rain. It's so hot!

Year 9 - It's great to be a tree! Lots of sun and rain. I've had the best year of my life! Must have been that new rain dance I learned that did the trick.

Year 10 - Another great year! And guess what? I'm 10 years old! YIPPEEEEE!

Parts of a Tree

Each layer of a tree cookie (cross-section) can tell us something about the tree's life and the climate in which it grew.

Write the correct parts of the trees in the appropriate blanks.

cambium growth ring heartwood outer bark phloem xylem

Item 1 is called the _____. It is a layer or zone of cells, just one cell thick, inside the inner bark. This produces both the xylem and phloem cells. This is where diameter growth occurs, and where rings and inner bark are formed.

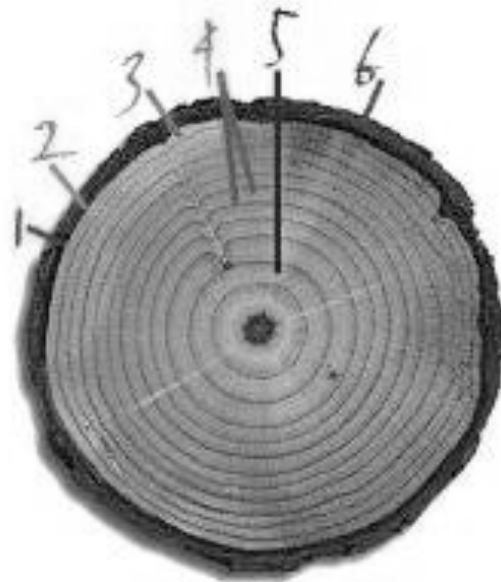
Item 2 is the _____ or inner bark. It carries sugar made in the leaves or needles down to the trunk and roots, where it becomes the food the tree needs for growth.

Item 3 is the _____ or sapwood. It carries the sap up from the roots to the leaves. Sapwood gives a tree its strength.

Item 4 is a _____. The lighter portion is called the "early wood" (because it grows in the spring), and the darker portion the "late wood" (which grows in the summer). Together, they represent one year of growth.

Item 5 is the _____. This develops as a tree gets older. It used to be sapwood, and gives the trunk support and stiffness. It is often darker than sapwood, since its water-carrying tubes get clogged up. This tree has not developed this yet.

Item 6 is the _____. This layer protects a tree from insects and disease, excessive heat and cold, and other injuries.



Tree Baseball

Divide den into two teams. Prepare a list of questions about forestry ahead of time. Write them on index cards. Rate them according to difficulty: single, double, triple, home run. To play: the batter tries to answer the question. Advance according to the regular rules of baseball. Each team has three outs. Play until a preset score is reached. Try these true or false questions: (Make up your own questions!)

1. The Balsa tree has the softest wood. (True)
2. There are taller trees than the Redwoods. (False)
3. There are older trees than the Sequoia (False)
4. Sassafras tree has a leaf shaped like a mitten. (True)
5. Red Cedar trees are used for baseball bats. (False, White Ash)
6. The Yew tree bears berries instead of cones. (True)
7. Evergreens are the hard woods. (False. Soft)



Activity

Almost any one can figure out the age of a tree by counting its rings. Now you can do the same by dating a twig by looking at its bark.

Every tree branch ends in a "terminal bud," which contains the growth for the next season. Every spring, the leaves sprout from that bud and the twig lengthens. At the end of the growing season, the leaves fall and a new bud is formed to protect the tip of the growing branch. Wherever the terminal bud is formed, a band is left around the twig. By looking at the distance between the bands, you can get an idea of how fast the twig grew and how many seasons it's been growing. The more bands, the more seasons. The longer the distance between bands, the more the twig has grown that year.

Activity

Tree seed art-take a plastic grocery bag and go on a seed collection hunt. Be sure to gather seeds that have already fallen to the ground. Some seeds will have casings or pods, some may have what looks like wings, while others will be in protective shells. After collecting, clean off any dirt and attach to a posterboard using white glue that dries clear. To preserve your picture, wrap in clear plastic wrap and tape it to the back of the poster board.

There's no greater thrill than being in the forest, amongst the trees, hearing the wind in the treetops and feeling the peace there. These activities will help you to appreciate the woodlands around you.

Leaf Collections

Dry Leaf Collections-Put each leaf between a separate sheet of newspaper. Put several fold of newspaper on top of and underneath the sheets you are using to press the leaves. Put something heavy on top until the leaves are pressed out and dry.

Crayon Print

Lay a leaf on the table with vein side up. Put a clean sheet of paper on top of it. Hold the leaf in place with your hand and make parallel strokes back and forth over the leaf with your crayon until the print shows on your paper.

Inkpad Leaf Prints

Put a leaf, vein side down, on your inkpad. Cover it with a piece of newspaper and rub your hand back and forth over it. Then put the leaf, ink side down, on a clean sheet of paper. Put a newspaper over it again and rub.

Paraffin Coated Leaves

Melt paraffin in a double boiler. When it is melted, turn off the heat. Dip one leaf at a time into the melted wax. Shake off the extra drops of wax into the pan. Hold the leaf until the wax hardens, then lay it on waxed paper. Using this method, you can get the leaves in their green color, or the brilliant colors of autumn.

The Web of Life

Materials needed: ball of string or yarn, scissors, plain white stickers and pen.

Everyone stands in a circle and the den leader begins by asking each individual to name a tree that grows in the forest. The first to speak up will be given the end of the string or yarn. Next, ask the boys to name an animal that depends on that tree for food or shelter and then hand the ball of string to the boy that answers. This creates the first strand of your web of life. See if anyone can name an animal or plant that depends on the first animal and pass the ball of string to him. Continue until each child has answered a question and is holding a part of the web of string. You can use the stickers to place the name of the animal or plant suggested by the boy and put it on his hand. After playing the game, ask the boys to imagine that a forest fire has wiped out all the trees in their forest. Have the boy representing the tree tug on his end of the string and tell each child who feels a tug to give a tug in turn. Very quickly, each boy in the web should feel the impact of the loss of the tree.

Forest Glossary:

soil layer is the foundation of the forest. It supports and provides moisture and nutrients to plant and tree roots. It consists of decomposed plant matter and inorganic mater, like rocks, minerals, and clay.

Litter layer is the floor of the forest, where decaying plant matter and fungi undergo the transformation into soil.

Bacteria, insects, and worms in the litter help break down the plant matter. Field layer is the first layer of growth on the forest floor-a soft carpet of moss and ferns, wild flowers, grasses and other low plants.



Understory is made up of bushes, shrubs, woody plants, and young trees reaching up to the forest canopy. It provides a habitat for birds and insects. Canopy is the highest layer of the forest-the intertwined branches of mature trees that shade and protect lower forest layers and provides a habitat for insects, birds and small mammals.

GEOLOGIST

Den Activities

- ❖ Take a treasure hunt for rocks and minerals. Check specimens on the mineral hardness scale.
- ❖ Start a collection of geologic materials used in home construction. Make a display for pack meeting.
- ❖ Visit a geology exhibit, department, museum, or collection.
- ❖ Tour a quarry, mine or gravel pit. Look for fossils.
- ❖ Visit an industry that uses geological materials.
- ❖ Visit and watch the seismograph for earthquake activities.
- ❖ Make a mineral hardness kit.
- ❖ Have a demonstration of a rock tumbler.
- ❖ Make a buckskin nugget pouch to carry rocks. This will complete a Craftsman requirement.
- ❖ Have a contractor come to talk to boys about minerals used in home building such as slate, limestone, brick marble, cement, and gypsum.
- ❖ Visit a jeweler's shop.
- ❖ Visit a rock collector's club meeting.

Importance of Rocks

To introduce boys to rocks, tell them of the importance of rocks and how they can determine the wealth of a nation. Their kinds and quantities can determine whether the people of a nation are poor or wealthy. The importance of rock can easily be pointed out in four different ways:

1. Food -- Soil is made up of the fragments of rocks with their minerals and many other substances. Soil is a direct result of the weathering of rock of which it is composed. Except for the products of the sea, all animals and people are directly dependent upon food grown in the soil.
2. Fuel -- Fuel comes from rocks. Coal is a rock composed of organic material. Oil is found in rocks such as sandstone and shale. Our economy couldn't exist without a good supply of fuel.
3. Mining -- Many ores such as iron, copper, zinc, aluminum, lead, sulfur, and borax rocklike. Without these ores, manufacturing would be impossible.
4. Construction -- Tons of crushed rock, gravel and sand that are used in making roads and buildings. There are the various kinds of cut stone used for building blocks and monuments, and the materials used in the building of your home and the many things that are in it.

If you can round up a "rock hound" from your pack, he can help the boys with some of the technical aspects of geology and the study of rocks and minerals.

Rock or Mineral Identification Contests

Identify specimens and name them. Have a rock and mineral identification "bee."

Rock Pick Up

Arrange the players around a table or kneeling in a circle on the floor. Give each a saucer with two toothpicks and 12 small rocks. On signal, the contest is on to see who can be the first to lift out five rocks. With each round, increase the number of rocks needed to win.

Mineral Tag

This is played as regular tag, except that the players must be touching an object made from minerals to be safe.

Baden-Powell Game

How many minerals or rocks can be made from letters in Baden-Powell's name.

First Aid Kit:

Any trip away from home requires a first aid kit. Keep one handy.

Geologist Quiz (True or False)

1. The principal ore of the metal lead is galena.



2. Overflowing lava always makes mountains.
3. Petrified wood is an unusual type of fossil.
4. A knife blade can easily scratch feldspar.
5. Sandstone is igneous rock made of cold magma.
6. Scientists record earthquakes on a quakograph.

Answers to Geologist Quiz : 1. T // 2. F// 3. T// 4. F// 5. F // 6. F

Field notebooks and labels

As you collect each specimen, give it a number. Put the labels on the rock before you wrap it up. In a small pocket notebook list the following information:

Name:

Location:

Date:

Collector:

Later at home you can enter the information in your permanent record.

Tools:

1. Hammers: A geologist hammer weighing 1-2 pounds is a practical hammer to take along on your expedition.
2. Chisels: 1 or more steel chisels are essential collecting tools. Do NOT use wood working chisels, as they become dull and nicked quickly.
3. Magnifiers: A good hand lens or pocket magnifier will help you identify many characteristics of rocks.
4. Compass: A good compass is an invaluable tool. Learn how to use one to keep from getting lost.
5. Goggles & Face Shields: These are important pieces of safety equipment to use while hammering. Your eyes will thank you.

Rock Formation

Stalagmites are mineral formations on the floor of a cave.

2 cups water, 1/2 cup Epsom salts, heavy cord, tray or board

Directions:

Into a cup of water stir 1/2 cup of Epsom salts.

1. After all of the salt is dissolved, pour 1/2 of the solution into a second cup.
2. Set the 2 cups about 4-5 inches apart on a tray or a board.
3. Attach a piece of heavy cord into the solution in one cup. (Be sure this is cord that will absorb liquid. A piece of cloth twisted until it is rope-like will also work.)

Attach the other end into the second cup. Let the cord loop slightly in the middle. In a short time the liquid should begin to drip. Be sure that it drips very slowly. Soon you should see a stalagmite.

Make A Volcano

Materials:

12 inch-square wood for base, aluminum foil, baking soda, vinegar, red food color, newspaper and wallpaper paste

1. Make a cone-shaped base for papier-mâché by sticking pieces of coat hanger in wood base diagonally. Fill in under wires with wadded aluminum foil.
2. Cover cone with papier-mâché. Leave an opening in top where jar lid can be set. Let dry.
3. Paint with tempera or acrylic paint.
4. Set jar lid upside down in top of volcano.
5. To make volcano erupt, place about 1 teaspoon of baking soda in the jar lid. Add ¼ cup vinegar mixed with a little red food coloring and watch the action. This is safe to use indoors.

Make Sandstone

Materials:

Water, Salt, Nail, a small saucepan, spoon, fine sand (about one quart), a plastic or cardboard container, aluminum food container. Pour one cup of water into a small saucepan and heat it on the stove over medium heat. As the water heats, add the salt and mix well. Continue adding salt and mixing it well until no more will dissolve in the water. Remove the pan from the heat. Place the sand in a deep, plastic container that is large enough for mixing. Pour the salt solution into the sand and mix thoroughly. The sand should be completely moistened. Punch tiny holes into the bottom of an aluminum food container with a nail. Press the sand and salt mixture into the container and pour



away any excess water. Keep this experiment in a warm, dry spot for several days. After the sand has dried out, lift the chunk of material from the container and examine it. You have just made sandstone. The sandstone just made was created in much the same way that nature makes it. The salt clings to the particles of the sand and holds them together. If you find sandstone in nature, you will find it is made of several layers. This occurs when one sandy sediment is laid on top of another. These layers are pressed together over time to make the rock you see today.

Mineral Matching

- | | |
|-----------|--------------|
| a. Gold | e. Lead |
| b. Silver | f. Copper |
| c. Zinc | g. Beryllium |
| d. Iron | |

- ___ metallic element resembling magnesium, used in making galvanized iron, alloys, and as an element in voltaic cells.
- ___ a ductile, malleable, silver-white metallic element - used for making machinery, tools
- ___ precious yellow metallic element, used in coins, decorations, etc.
- ___ metallic element, light, reddish-brown color used as an electrical conductor - manufacturer or alloys such as brass and bronze
- ___ steel gray, hard, light metallic element used in coppers - in springs
- ___ white, ductile metallic element used in coins, ornaments, table utensils
- ___ a heavy, malleable, bluish gray metal used in bullets

Like a Rock

Use these words to fill in the blanks below:

volcanoes mountains geologist's hammer magnifier sedimentary rock chisel igneous rock safety glasses geysers fossils earthquake metamorphic rock

- _____ Rock made by the cooling of magma; not layered; examples are granite and basalt.
- _____ Sediment that under great pressure becomes rock; it is layered; examples are sandstone, shale and conglomerate.
- _____ Baked rock or rock that has changed form; examples are marble and quartzite.
- _____ Used to pull rocks out of the hillside and for breaking them apart.
- _____ Used with a hammer to chip stone as well as for digging things loose.
- _____ These help protect eyes while digging and exploring.
- _____ This is a special type of glass that is used to make things appear larger so they can be examined more closely.
- _____ Holes in the ground through which streams of melted rock pour out of the earth; may form into a mountain peak.
- _____ Steam and boiling water that is blown into the air.
- _____ Rocks in one area (under great pressure from other rocks) that crack together and cause the phenomenon of "shaking" earth.
- _____ This land feature can be formed by volcanic action, erosion, or by uplift.
- _____ A trace of animal or plant life from millions of years ago that has hardened into rock.

Word Scramble

Unscramble the letters to spell words used by a Geologist.

- LOSFI _____
- OATMNUNI _____
- AQETEUKRAH _____
- YESREG _____
- LEONOVAC _____
- FIERMAGNI _____
- TAEFSY --- SSLGAES _____
- EHILCS _____



M R A M H E
C A M E T H M O R P I
Y S E D M A E N T I R
O N G I E S U

HANDYMAN

Activities:

- ❖ Have a clinic on the care and repair of bicycles. Set it up like a shop and have each boy bring his bike and do repairs. Etc.
- ❖ Demonstrate different ways to mark tools for ownership identification.
- ❖ Hold a nail-hammering contest. See who can hammer a nail in the fewest number of strokes.
- ❖ Visit a good home workshop and have the owner explain the use, storage, and care of tools.
- ❖ Organize a pack car wash.
- ❖ Organize a pack bike rodeo.
- ❖ Show safety measures for lawn mowing.
- ❖ Build sawhorses show their use.
- ❖ Build a small step stool (see Webelos Book).
- ❖ What a great way to help around the home and make life easier for Mom and Dad. This activity badge will provide new opportunities to gain new skills, which will last them a lifetime.
- ❖ Invite an auto mechanic to the den meeting. Have him demonstrate how to do preventative maintenance on a car.
- ❖ Ask a cyclist to the den meeting to talk about proper care and maintenance of a bicycle.
- ❖ Go to a hardware store or garden nursery. See what hardware can be used to make a storage area for hand, lawn, and garden tools.
- ❖ Have a bike inspection and bike rodeo.
- ❖ Visit a car wash facility.
- ❖ Visit a gas station, garage or tire repair shop.

Bicycle Rodeo

If handyman is worked on during the spring or fall, it would be a great idea to tie in a bicycle rodeo or a bicycle safety program. The death toll in bicycle accidents is about 1,000 a year. Boys between the ages of 5 and 14 are involved in the majority of serious bicycle accidents. Many people on bicycles do not realize that they are a driver in the same sense as being an automobile driver. Webelos Scouts need to learn that when they are on bicycles, they are drivers and must obey the same traffic rules as other drivers.

At your bike rodeo, train the boys in how to keep their bicycles in good working order, how to drive them safely, and teach them of the rules of the road.

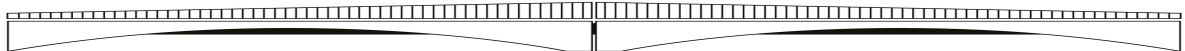
You could set up an “obstacle” course and have the boys safely maneuver their bikes along the course. A special neckerchief slide could be made up and given to all participants, or make up a certificate to hand out.

Handyman Outing

Take the Webelos den on a tour of a local hardware store to learn what is available and where to find materials for home repairs. VARIATION: Before going to the hardware store, have each boy pick an imaginary repair (leaky faucet, clogged drain, sagging gate, damaged lamp cord, etc.) In the store, boys take turns locating and pricing the materials he would need to make his repair.

Handyman Scavenger Hunt

In a boy’s home or meeting place, hunt for the following items or create your own list. Boys should be accompanied by a leader or parent. They should not gather the items but instead, have the boys write down the location of each. Here is a sample: Pruning shears, Edge trimmer, Lawn mower, Gasoline can, Oil can, File, Pliers, Hammer, Nails, Screwdriver, Air pump, Tire tube, Old rags, Old newspapers, Window cleaning solution, Aluminum cans, Tire pressure gauge, Crescent wrench, Tire changing tools, Auto jack and stand. After the locations for these tools are recorded, go over the list and see if any of the items are not stored in the proper locations. For example, are the old rags stored on top or next to the gas can in a closed cabinet? Are the pruning shears lying on the floor where young children may be able to “play” with them? Also check the tools for cleanliness and sharpness. These factors influence their serviceability.



Kim Games-Handyman Style

Collect 20 items used for household repair jobs - nail, washer, screw, nut, etc. Lay these items on a table or tray. Let the boys have a good look, then cover items, or remove the tray. Each boy is to write down as many things as he remembers. Game can also be played by team.

Tool Board

Screw a 18" x 20" pegboard to a 20" x 24" piece of 1/2" plywood using 3/8" spacers between to allow air space for the hooks. Use a paint pen to draw outlines of where each tool is to be hung on the board. Attach directly to the garage wall.

For nails, nuts, bolts, etc. place each in separate small jars. For each jar, put two hooks in pegboard on either side of the jar. Stretch a rubber band between the hooks and slip the jar between the rubber band.

Handy Punch

You will find this homemade awl very useful for many projects. You will need a nail about 3-inches long, plus two strips of wood about 1-inch wide, 4-inches long and 3/8-inches thick. Place the nail lengthwise on one wood strip, with the head about 1/2-inch from the end and point of nail extending beyond the wood. Hammer edge of nail head embedding it in the wood. Apply glue to other wood strip and place it on top of first strip. Hammer nail end together until nail head is embedded in top strip. Let dry. The wood handle is convenient when heating nail for punching heavy plastic.

Insulate the Water Heater

This is a fairly simply project that can be done by a Webelos, but I would suggest having adult guidance.

The U.S. Department of Energy says the cost of heating water is 14% of most homes' energy costs. DOE recommends you cut your costs and extend the life of your water heater by adding insulation and lowering the thermostat. Insulation kits are available for less than \$15, and installing the kit takes less than an hour. The only tool he will need is a pair of heavy-duty scissors (or sharp utility knife) to cut it down to fit the water heater.

Have the Webelos check the setting on the tank's thermostat. The DOE recommends setting it for 115 degrees. Any above this can cause serious burns especially in infants and the elderly. Also, 115 degrees is hot enough for cleaning.

Tool Silhouettes

Equipment:

Black Construction Paper

Poster Board

Glue

Tools

Trace silhouettes of small tools on construction paper. Some examples could be hammer, plane, brace, bit, wrench, or screwdriver. Cut out the shapes and glue onto poster board. Number each one. Give Webelos a paper and pencil. They look at the posters and try to identify the tools. The boy with the most correct list wins.

Tire Inflation Game

Divide Den into two teams. Have a bicycle for each team.

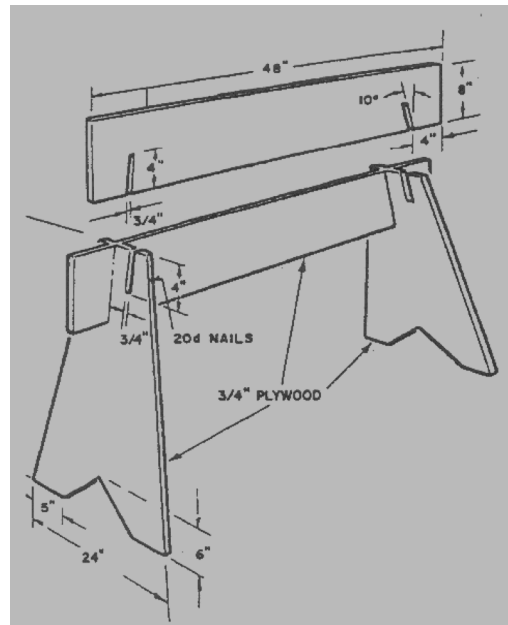
Each boy pumps up empty tire until he thinks it's full as

judged by his feeling the hardness of tire. Leader checks with

tire gauge to agreed upon full tire pressure. Team

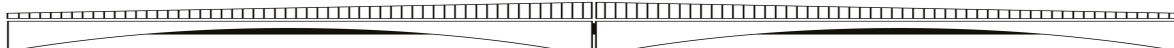
with average pressure closest to correct full pressure wins.

Too easy? Add a time factor like maximum of one minute per scout.



Knockdown Sawhorses

If you have a space problem or don't want sawhorses standing in the shop area when not in use, build collapsible ones out of either solid stock or plywood. The plans for a solid stock sawhorse show how the crosshair, or rail, is slotted so that it fits tightly into the opening at the top of the legs. If the opening is tapered slightly, it helps insure



a tight fit. You can build collapsible sawhorses from $\frac{3}{4}$ " plywood. A single sheet of 4'X8' sheet will make two sawhorses. The assembled horse is locked together by 20D nails inserted in drilled holes. Make cuts accurately to insure that parts fit smoothly. Finish with two coats of paint or clear finish. Apply soap or paste wax to the joints and the pieces will slide together easily

NATURALIST

❖ Activities:

- ❖ Make insect zoos or terrariums
- ❖ Learn to identify poisonous plants and reptiles.
- ❖ Make bird migration maps, using large USA maps. Then go bird watching and see how many of the species you can identify.
- ❖ Take a nature hike and look for animal tracks. Make plaster casts of tracks.
- ❖ Study wildlife homes
- ❖ Make bird feeders, then observe birds who use them.
- ❖ Make an ant farm.
- ❖ Make an insect study laboratory
- ❖ Make bird feeders and observe the birds.
- ❖ Start a nature collection
- ❖ Invite a conservationist to a meeting.
- ❖ Make a leaf collection.
- ❖ Take a bird watcher's hike, identify birds.
- ❖ Collect tadpoles; keep in terrarium; watch them grow.
- ❖ Study wildlife homes.
- ❖ Make a list of plants in your area.
- ❖ Take a hike and look for animal tracks.
- ❖ Boys keep a nature notebook, jotting down discoveries on field trips.
- ❖ Make a list of all plants in a given area.
- ❖ Visit a zoo or nature exhibits. See mounted wildlife.
- ❖ Make a leaf and nut collection.

Bird Brush

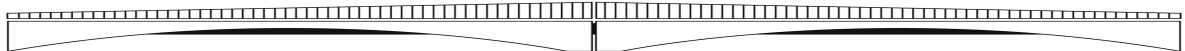
Use a clear scrub brush for this easy feeder. Melt some bacon grease or lard in a pan, then dip the brush into it. Sprinkle birdseed mix onto the bristles. As the fat congeals, the seeds will stick. Tie the brush to a tree in a safe spot.

Phenology

Phenology is the study of periodic changes in plants and animals as they respond to weather, climate, and the seasons. Each spring we anxiously await the first returning robin in the hope of warmer weather. Or I look for the returning Goldfinch. That is a phenological event. It happens every year but the return date depends a lot on the weather. Migration and flowering are two more examples of phenological events.

One good thing about personal observations is that anything in nature is fair game. The arrival of the first robin or goldfinch in spring might be a typical entry in a phenologist's notebook. Another might be the first observation of a flashing firefly in summer, or how about the return of those pesky dandelions. The last snow or frost of spring, or the date of the first mosquito bite of the season are entries for the budding Phenologist. It is a matter of selecting subjects of interest and then setting up a routine for collecting and comparing your data.

The best observations for comparison purposes are those that are made from the same location from year to year. For plant life, a specific site (such as a flower garden) is commonly used. Sometimes, the same plant is a good indicator. For birds, migration, mating rituals or nesting dates are frequently recorded. Birds using flyways migrating from the south back north is yet another observation. The last snow or frost of spring, the date a local lake freezes in the autumn or the date of the first mosquito bite of the season are all phenological possibilities. A good thing about personal observations is that anything in nature is fair game



Phenology Calendar

Buy or print blank calendar pages on your computer and have the boys fill in the dates for the month. Post the calendar in the kitchen, so it's handy to jot down "things of nature." List one or two things each day; cardinals at the bird feeder, grass turning green. Full moon in the sky, etc. Encourage the boys to keep a phenology calendar for a whole year. Then they can look back and compare nature's cycles.

The Nut Collectors

Six squirrels began to gather hickory nuts and put them into a large basket. The squirrels worked so fast that the number of nuts in the basket was doubled at the end of every minute. The basket was completely full at the end of ten minutes. How many minutes had it taken the squirrels to get the basket half full.

ANSWER--If the number of nuts in the basket doubled at the end of every minute, the basket must have been half full in nine minutes. Then, after one more minute, the half would be doubled, thus filling the other half of the basket.

Make Your Own Ant Farm

Take a large peanut butter jar (empty and cleaned) and place a baby food jar upside down inside it. Fill the peanut butter jar with sand. Make some holes in the top of the jar with a nail or screw. Add a little honey or jelly every few days, along with a little water. Now gather up some ants from outdoors. After you've closed the lid, be sure to stop up the holes with cotton so the ants don't get out. Now, remember to keep a cloth over the jar whenever you're not observing it. This way the ants will make really cool tunnels right near the sides, instead of hidden deep to avoid the light.

Sponge Garden

A sponge is an ideal surface on which to grow seeds due to its ability to hold water in its many small cavities. Soak the sponge and place it in a shallow dish of water. Sprinkle seeds over the top surface of the sponge. Try the seeds of grasses, sweet alyssum, coleus, and any other small seeds left over from planting a flower garden. The shoots of almost any plants will be an attractive display. Remember to keep water in the dish so that the sponge doesn't dry out. Also once the seeds begin to sprout, all the food in the seeds will be gone and you will need to add some liquid plant food to the water.

Rare Bird Facts

1. What is the fastest flying bird?
2. How high can birds fly?
3. What is the Nebraska State Bird?
4. What bird has become extinct in the last 75 years?
5. Why do all birds build nests?
6. Name two "major league" birds.
7. Which birds can fly backwards?
8. What bird is known for its famous deliveries?
9. What is the largest bird in North America?
10. What is the smallest bird in the world?
11. List three birds that cannot fly?
12. What color is a bluebird?

ANSWERS to RARE BIRD QUIZ

1. Swifts have been timed at 200MPH.
2. A vulture has been seen flying at 25,000 feet.
3. Western Meadowlark
4. Passenger Pigeon
5. Birds build nests to "house" their eggs while they incubate.
6. Cardinal and Oriole
7. Hummingbirds or any bird using fluttering flight.
8. Stork
9. Trumpet Swan
10. Bee Hummingbird of Cuba - 2.25" long
11. Kiwi, Penguin, Ostrich
12. It appears blue because of reflection and diffraction of light due to the structure of feathers.



Animal Footprint Casts

Animal footprint
Small shovel
Cardboard or plastic containers
Plaster
Piece of Cardboard, wood, or trowel
Paint

The boys would probably enjoy having a permanent record of critters in the area. This activity shows you how to do just that.

First, find footprints. Check your garden or flowerbeds. A walk through the park or woods will undoubtedly yield some interesting signs of life. Dig up the prints with a small shovel, maintaining enough dirt on all sides to keep it from falling apart.

Carefully place the footprint in a cardboard box or plastic container.

When you return home, mix up a batch of plaster (buy it at the hardware store and follow the directions). Pour the plaster into the footprint and let it harden. (If the soil containing the print is dry, moisten it with a spray bottle first so you'll have a smooth cast.) Even the top of the plaster with a piece of cardboard, wood, or trowel.

Once the plaster has dried, after fifteen minutes or so, brush off the dirt, turn over the cast, and you should have an excellent replica of the bottom of the animal's foot. Allow the cast to dry completely overnight and then paint it, if you like. Let your child's friends and relatives guess its origins.

Now, just what is that creature that's been prowling around the backyard?

Jar Seed Germinator

Obtain a wide mouthed jar such as a mayonnaise, peanut butter, or wide mouthed canning jar. Soak some seeds in some water overnight, these seeds can be edible seeds like beans, lentils, peas etc. or those packaged for growing in a vegetable or plant garden, get some paper toweling or blotting paper and fit snugly around the inside of the jar. Stuff the middle of the jar with paper towels to help hold the paper toweling in place. Also saturate the paper toweling with water until no more can be held. Remove most of the excess water. Place the seeds between the paper towel and the glass about an inch or so down from the top of the toweling. Place them in different positions evenly spacing the seeds. During the next few days the seeds will absorb the moisture from the toweling (Don't let the toweling dry completely it needs to stay damp) and the seeds will sprout, the roots will always try to grow down and the stems and the leaves upward, regardless of the position of the seed. This is called geotropism and shows that plants respond to the earth's pull of gravity. As a reminder, don't place the jar in direct sunlight.

Worm Condo

Materials: Plastic container, Screen or piece of stocking, Rubber band, Dirt, Worms

Collect wiggly specimens in the yard or garden and observe them for a few days in a luxury "worm condominium"--even the most squeamish scout will feel safely separated from the condo's inhabitants. First you'll need a clear plastic container. Place another container, an inch or so in diameter, inside the larger container; the idea is to create a narrow enough space between the two containers that you'll be able to see the worms' tunnel. Put a piece of screen or stocking on top so you have good airflow (use a rubber band to secure it). Place fresh soil in the condo so your guests will have a supply of food (don't use potting soil--it's been zapped). Make sure that the soil is moist but not drenched--the worms will appreciate it. Watch how the worms move and tunnel, and explain how they aerate the dirt in your garden and lawn, enabling plant roots to grow. Once your scout has observed the worms for a few days, return them to their native habitat, where they can do our gardens a good turn.

SKIT: Smokey's Deputies

Characters: Narrator, 3 boys in Smokey Bear costumes with "Deputy" badges, clown.

Scene: Outdoor scene with cardboard trees and buses. Posters as indicated in script.

Narrator: Ladies and gentlemen. For the first and only time, in our stage we present a trio of performing bears directly from Yellowstone Park. (Gesturing with sweep of hand.) Take it away bears!

Bears: (enter singing...Tune: "Polly Wolly Doodle")

Oh, bears like cake, and bees like pie And a little bit of honey is fine'

But we don't like sparks in our national parks, And in forests of spruce and pine.



So beware, so beware, Put your campfires all the way out.
Let the fire burn down, sprinkle water all around. Put them out without a doubt.

Bear 1: Listen friends. Before you strike one match in my forest, check the Forest Ranger or an adult camping guide.

Bear 2: Never build a fire without an adult to help you.

Bear 3: That's right! Remember to have a bucket of water or dirt handy, right next to the fire.

Bear 1: And when you're through with the fire, don't go away and leave it. No sir. Let the fire burn down. Break up the coals with a stick. Sprinkle water or dirt on the fire until it is cold.

Bear 2: Be sure to check the fire to see that it is cold out before you leave the campsite.

Bear 3: Now everybody, please join us in the chorus of our song:

So beware, so beware put your campfires all the way out

Let the fire burn down, sprinkle water all around. Put them out without a doubt.

(During the chorus, clown crosses stage carrying sign which reads: "You are no Match for Fire" When he reaches mid-stage, he turns sign over. On back side it reads: "Don't clown around with fire.")

Bird Word Scramble

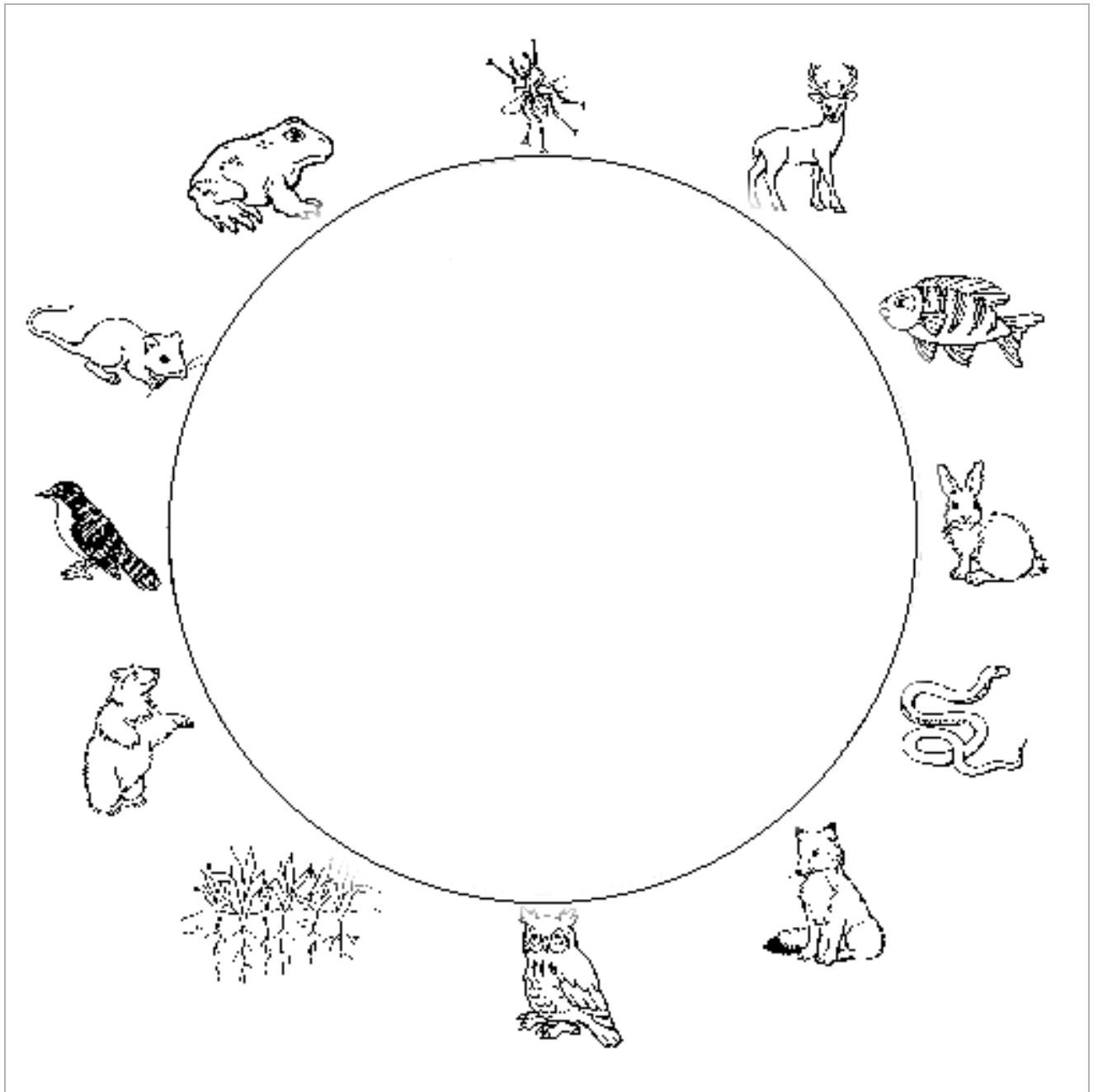
Unscramble the letters to spell names of birds.

- BOIRN _____
- NEW R _____
- KEDIA CEHC _____
- CUDK _____
- NAILCRAD _____
- AWNS _____
- ROTKS _____
- EYRUTK _____
- ROOLIE _____
- ARKEPATE _____
- YALEJUB _____
- LAGEE _____
- HENCCIK _____
- SOGEO _____
- YANCRA _____
- ILOMFNAG _____
- SIBI _____
- NUTCAO _____
- GNPNEIU _____
- ACCEKOP _____
- DHGNOFICL _____
- ALRACIND _____



Food Web

Draw a line from each animal to the thing it would eat.
Decide if each animal is a carnivore, herbivore, or omnivore.



Species of Nature

Fill in all the empty category squares with words beginning with the letter for that row. If you cannot think of a name for that category, leave it blank and go on.

	Animal	Bird	Fish	Flower	Tree
N					
A					
T					
U					
R					
A					
L					
I					
S					
T					

OUTDOORSMAN

Activities:

- ❖ Show boys how to make an improvised sleeping bag or bed.
- ❖ Study and learn fire safety rules including no flame lights in tents and no liquid starter for charcoal fires.
- ❖ Learn aluminum foil cooking techniques. Practice preparing foil dinners. These can be cooked with charcoal in a backyard grill.
- ❖ Have a den cookout.
- ❖ Build charcoal stoves. Vent them at top and bottom with can opener. Teach boys how to build a fire in them.
- ❖ Make a first aid kit.



- ❖ Practice camping in the backyard.
- ❖ Practice laying fires for regular wood fires or charcoal, so boys will know how to lay fires for cooking or campfires. Practice building a fire for cooking and for a campfire, and have a den cookout.
- ❖ Have a tent-making project of a simple tarp tent, which will provide shelter for two boys.
- ❖ Make lists of items needed for backyard camping and adult partner and Webelos Scout camping.
- ❖ Have a joint Webelos/adult partner planning session to discuss details for the overnighiter.
- ❖ Practice putting up different kinds of tents.
- ❖ Plan a menu for three meals. Go to the grocery store and price the food.
- ❖ Make and display knot board with uses of knots listed below them.
- ❖ Take hikes at different times of the year and have boys notice the differences in their surroundings.
- ❖ Have a knot-tying contest or play knot-tying games to learn and improve skills.
- ❖ Make some camp gadgets.
- ❖ Invite a member of the district or council camping committee to talk about low impact camping.

Planning an Overnighiter

Everything must be planned ahead. The original planning session should be conducted by the Webelos leader and attended by the assistant Webelos leader(s) and several adult partners who will be going on the overnighiter. At the start of the planning meeting, consider the following:

Health and Safety – follow the Camping Health and Safety Rules found in Chapter 8, Cub Scout Leader Book. Fill out and submit a tour permit to the reservation desk at the council office. If camping at a council camp, a camping permit must be turned in two weeks prior to leaving to reserve your campsite.

A Big Event – Point out that the Webelos adult partner –Webelos Scout overnight campout will be a big event in the life of each boy. It should be a good experience for him. A well-run overnighiter will whet his appetite for the more advanced fun of scouting. A poorly planned, poorly run campout could discourage him from becoming a Boy Scout.

Have A Written Plan-Planning is simply being able to “see” with the mind’s eye the things that are going to happen. Imagine the experience and write down the things that need to be done. A written plan is essential. Make sure everyone know his responsibilities.

Location-If a privately owned campsite is selected, arrangements should be made with the owner well in advance. Alternatives-Stress that the campout plan should be flexible and provide alternatives, such as what to do if first choice of sites is not available, what to do in case of bad weather, etc.

Campouts Should Include activities that boys enjoy. The following are good activities to schedule:

1. U.S. Flag-Explain that Boy Scouts of America camps fly the U.S. Flag. Have a ceremony as it is raised and again as it is lowered.
2. Activity Badge Work-The campout is a good time for boys to complete the requirements for several badges, especially the Outdoorsman.
3. Campfire Program-This is one of the most exciting parts of a campout. It should be planned carefully so it will be successful.
4. Outdoor Games-Games such as “Three-legged races,” “Tug of War,” and “Sack Races,” are good. Involve both adult partners and boys in the games.
5. Worship Services-Remember, Duty to God is a big part of the Boy Scout program. The campout can be planned to end early enough to have everyone back home in time for Sunday worship. If not, be sure to include an evening vesper or Sunday worship service as part of the campout program. It does not need to be a long drawn out service just sing a few songs, say a prayer, and read a short devotion. Since Scouting is non-sectarian, the worship service should be non-denominational and attendance optional but encouraged. “When Scouts Worship,” “The Scout Oath in Action,” and “The Scout Law in Action” are good resources for worship.
6. Fishing-If there is a lake or stream nearby; this is a good adult partner-Webelos Scout activity. Be sure dads have fishing gear and licenses. Teach good citizenship by stressing conservation-keep only the fish intended for a meal and release all others.
7. Swimming-If facilities are available; these are good activities, which the boys will find enjoyable. Use Safe Swim Defense when in the water. See the Webelos Scout Book for the Safe Swim Defense Plan.



Preparing the Boys

Preparing the boys goes beyond informing them about the campout that has been planned. This period of preparation for the campout offers many opportunities to introduce materials, which will be helpful to the boys in their Webelos training. Some of the opportunities are:

1. Discuss and plan the campout with the boys. This is one of the requirements for the Outdoorsman Activity Badge.
2. Discuss fire safety and its need. This is another requirement for the badge. An excellent set of fire safety rules is contained in the Webelos Scout Book. A review of the Outdoor Code will help prepare the boys to be good campers and will complete one of the requirements for the Webelos Badge.
3. Teach the boys the taut-line hitch. They will need to know this to set up their tents. Practice all knots and have a knot-tying relay race.
4. Include the Den Chief in the campout planning. His experience in Scouting will be helpful. He could help teach the taut-line hitch and the basic rules of fire safety. He should go along on the campout.
5. About one week before the campout, send home an individual checklist with each boy, along with a letter giving final details as to when and where to meet, when the boys will return, etc.

Campout Checklist

Departure and Arrival

- From what point do you leave?
- How long will it take to travel to the campsite?
- When will we return?

Campsite

- Have you filled out a local tour permit? (At least two weeks before departure)
- Are reservations or other permits required?
- Does the campsite lend itself to conservation service project?
- Is firewood available or do we need to bring it from home?
- Is the water supply safe or do we need to bring our own?

Transportation

- Do we have enough cars and qualified drivers to carry boys, adults and equipment?
- What about car-pooling?
- What about public transportation?

Participation

- Is there an adult to accompany every boy?
- Are any substitutes/adults needed?
- Is the den chief coming? Was he involved in the planning?
- Will anyone from the troop be there?

Equipment

- Do the boys and adults know what to bring?
- Who will bring bow saws for cutting wood?
- Who will bring the first aid kit?

Meal Preparation

- Have we planned a simple menu? Hearty ingredients?
- How many meals? Which ones? Snacks?
- Are there utensils to match the menus?
- What about eating utensils? Paper plates and cups for easy disposal?

Activities

- Games? What kind? Who will lead them?
- Campfire? Who is responsible for what? Hikes? Swimming? Fishing? Boating? Who?

Suggested Equipment Check List (Personal Gear)

- Pack or bag for clothes
- Clothing changes: underwear, shirts, pants, (1 pair per day), socks (2 pair per day)
- Sweater or jacket



- Poncho or raincoat
- Knife, fork and spoon
- Mess kit (plastic or metal)
- Toilet kit (soap, toothbrush & paste, comb, towel)
- Sleeping bag or two blankets
- Ground cloth
- Flashlight
- Extra batteries
- Insect repellent
- Canteen
- Shoes suitable for the program

Equipment and Tents

1. Explain the plans for the overnight campout and distribute a personal equipment checklist to each boy-adult team. Review the checklist and discuss plans for obtaining tentage.
2. Have instruction and practice in pitching the tents you will use. Also have practice in making a ground bed.
3. Ask the den chief to lead practice in tying knots needed for the campout.
4. Review the outdoor code.

Tent Hints

- Each tent should have its own bag and should be labeled.
- Never pull a stake out by pulling on the grommet or canvas.
- Never leave a stake in the ground without a rope.
- If tents must be packed wet, be sure to set them up to dry out as soon as possible.
- Loosen ropes when canvas is wet so that the canvas won't tear while drying.
- Waterproofing solutions are available through Sears, Army Surplus, and other distributors of tents and awnings.
- Use a ground cloth under your tent, but be sure to tuck all the edges, all the way under the tent's floor.

Fire Building

1. Practice fire lays for cooking and council fires. Stress safety in preparing fire sites, lighting, and putting out fires. Use the same type fuel (wood or Charcoal) that you will use for cooking fires on the campout.
2. Discuss the menu for the campout and show how to prepare the food.
3. When fires are ready, end with a marshmallow roast.

What do most boys want to do on a campout?

- (1) Use their knife
- (2) Start a fire

Knife Safety

For (1) use their knife

It will be best if no boy even brings a pocketknife if they haven't earned their "whittlin chip." Before camping or on a campout teach the "whittlin chip" class, (this is in the Bear Book as an activity) so scouts have the opportunity to learn the safe way to open, close, sharpen and use their knife. Until this chip is earned, have them leave it at home or in the adult's care. Know also – any infraction of the rules of knife handling allows a corner of the chip to be removed. If & when the forth corner is lost – so is the use of the knife until he retakes the whittlin chip class & proves he can handle it responsibly. He will have to take a similar class as a Boy Scout to earn his "totem chip." The same rules apply. Boy Scout rules do not encourage sheath knives. A small pocketknife (3 ½" or less) is very functional. The Boy should keep their whittling chip card on their person to be able to show to anyone who asks that they have earned it.

To Open and Close A Pocket Knife

To open a pocketknife, hold in left hand, put right thumbnail into nail slot. Pull blade out while pushing against hinge with little finger of left hand. Continue to hold on to handle and blade until blade snaps into open position. To close pocketknife, hold handle with left hand with fingers safely on the sides. Push against back of blade with fingers of right hand, swinging handle up to meet blade. Let knife snap shut; "kick" at base of blade keeps edge from touching inside of handle.



Ways to Use a Knife

For course cutting, grasp handle with whole hand. Cut at a slant. Always cut away from you. You can cut brush with a pocketknife if you bend the stem until grain is strained, then cut close to the ground with a slanting cut. Trim a branch by cutting twigs from thick end toward end. Push knife against twigs, or pull twigs against blade.

Pocket Knife Safety Circle

To establish a safety circle, grasp a closed pocketknife in your hand, extend your arm and with the closed knife straight in front of you, rotate body to either side while continuing to extend the closed knife-arm. No one or thing should be in the imaginary circle you have created. Also check your overhead clearance as this is part of your safety circle.

To Pass and Open Knife

The person handing should hold knife by the blade, passing the handle to the other person. In this way the handler has control of the edge of the knife.

Whittling Chip Card

After completing Shavings and Chips Achievement #19 in the Bear Cub Scout Book and demonstrating knowledge of and skill in the use of a personal pocket knife, a Cub Scout earns a Whittling Chip Card which states he has earned the right to carry a pocketknife at Cub Scout functions.

Care of Your Knife

All Cub Scouts should learn that knives are valuable tools and how to take care of them.

- Knives should be kept clean, dry and sharp at all times.
- Never use it on things that will dull or break it.
- Keep it off the ground. Moisture and dirt will ruin it.
- Keep it out of fire. The heat draws the temper of the steel. The edge of the blade becomes soft and useless.
- Wipe the blade clean after using it. Then close it carefully.

Knife Sharpening

A dull knife won't do its work. And what is more, it is dangerous. More fingers are cut by dull knives than by sharp knives. A sharp knife bites into the wood while a dull one tends to slip off. A camper should always carry a little sharpening stone in his pocket along with his knife. The knife and the stone are partners and where one is the other should be also. Such stones are called whetstones or carborundum stones. One measuring $\frac{3}{4}$ of an inch by 3 inches is large enough and is a handy size to carry. A whetstone using water is more practical in camp than one requiring oil, for water is always at hand, but there never seems to be any oil when it is needed. Whetstones are made to provide a grinding surface, and come in varying degrees of coarseness. Coarse stones are used for heavy tools, like axes; fine stones for knives or for finishing the edge.

Rules for sharpening a knife

1. Place the stones on a level surface.
2. Wet the stone with a little water or oil.
3. Place the blade of the knife flat on the stone, then raise the back edge about the width of the blade itself, keeping the cutting edge on the stone.
4. Draw the knife straight back toward you, or move it straight back and forth putting pressure on it only when you pull it toward you. This is always better than moving it in a circular fashion.
5. Turn the blade over and repeat on the other side an equal number of times.
6. Finish off on the sole of your shoe.

It will take half an hour to sharpen a dull knife, but once sharp, a minute a day will keep it in perfect shape.

Building a Fire Outdoor Fire Safety Rules

- (1) Follow all the rules of your campsite.
- (2) Clear all burnable materials from your 10-foot fire circle. Don't build the fire under overhanging branches of trees or shrubs or near roots of trees.
- (3) Never leave your fire unattended.
- (4) Should always have two water buckets at your fire ring at all times in case sparks start a fire away from the fire circle. There should also be two water buckets near each tent.



(5) When you are finished cooking, make sure the fire is out. Spread the coals and ashes and sprinkle them with water stir and sprinkle until the site is cold. Feel it with your hand to make sure. The universal indicator of a dead fire is a stick stuck up in the middle of the dead fire. A fire needs three different kinds of fire material.

Tinder – Kindling – Fuel

Tinder – should start to burn as soon as it is touched with a lighted match. Use thin twigs (pencil lead size), tops of dried weeds, thin wood shavings, dead or dry pine & cedar, etc. Remember to keep it tiny tinder. At least enough to make the size of an adult fist (two fists is even better). If you are in a forested area – look down – tinder is everywhere. Gently poke a small “cave” into the center of the tinder pile for an ignition place. Now start stacking the kindling on top of the tinder.

Kindling – small sticks about the size of a pencil. The Webelos book says thumb size –get a good size stack of pencil size first. Stack it about as tall as a big coffee can and then start with the thumb size pieces. If you will take the time to do the tinder & kindling, this is the most work involved in fire building. Do not attempt to light it until you have a supply of fuel ready.

Fuel – the larger pieces of wood needed to keep the fire going. Arm size & up – a saw is usually needed to cut them to useable size. Always collect up enough in the evening so you’ll have plenty for your morning fire. Keep a tarp or plastic sheet over the woodpile in case of rain. Keep a large coffee can full of tinder in a dry area – wet tinder just won’t do well. You’ve kept the ignition cave open through the kindling – if the wind is blowing, place your back towards the wind to block it & cup your hands around the match. Place the lit match through the kindling into the tinder – gently blow to help it ignite. Once the tinder has started, the kindling burning – gently keep feeding larger fuel to it. Too much too fast could put it out. Take your time – do it right. Take all the steps & do it once. Impress your friends & relatives. If you learn this skill well – you will be one of the minorities that will always be able to start and keep a campfire going. Most good cook-fires are the coals that have just enough fuel wood added to keep the coals going. Flame cooking is a good way to ruin food.

Campfire Safety Keep the boys at least a legs length away from the fire. Have a designated fire guardian, otherwise they all want to feed and poke the fire. Everyone stays clear of the fire during cooking time except the cooks. Absolutely no horseplay around the fire.

Charcoal Cooking Charcoal is a very efficient source of heat, particularly when used with cast iron pans & Dutch ovens. However, a #10 or larger tin can (large coffee can) makes a very adequate stove to use for the scouts mess kit on or even larger utensils.

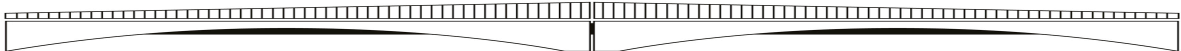
Cooking with Charcoal To start charcoal fires, make and use fire starters, or a starter can. Charcoal starts slowly. Allow at least 30 minutes before fire is ready to use. To start charcoal, use one of the following methods:

- (1) Place small twigs or fire starters close together as a base. Leave an air space beneath starters. Place charcoal on top of this. Light the fire starters and gradually add a few more briquettes, one at a time.
- (2) Use a starter can. Charcoal will be grey-white in the daylight and red at night when ready. Starter Can - Cut both ends from one-gallon can, or large juice can. Make vent holes with a pop can opener around one end of the large can. To use, place can inside grill or on a pan or tray, crumple three full size sheets of newspaper into balls. Place newspaper in bottom of starter can or fill it halfway with twigs. Cover with charcoal. Light the newspaper through the vent holes. When charcoal is glowing, remove can with a pair of pliers. One charcoal briquette equals 40 degrees of temperature.

Charcoal Stove You need: Tin can (#10 or larger), roll-type can opener, punch opener, wire for handle, three pieces sturdy wire screen

- (1) Remove top of can with roll-type can opener. Punch air holes with punch opener around top and bottom of can.
- (2) Stick ends of wire through two of the holes at top and twist to make a handle.
- (3) Push wire screen halfway down into can to make a grate. This holds charcoal near top for cooking and keeps air under charcoal. To keep screen from slipping, curl second piece of screen into a coil, and put between grate screen and bottom of stove. To Use Charcoal Stove – Set the stove on cleared ground and put tinder on the grate. When tinder is burning briskly, drop charcoal into fire. Swing the stove by the handle now and then to keep the charcoal burning.

Vagabond Stove You need: #10 tin can, pair of tin snips, gloves, roll-type can opener, punch opener, hammer



- (1) Remove lid from tin can using roll-type can opener. This open end will be the bottom of your stove.
- (2) Cut door in stove. Wearing gloves, take the tin snips and cut from the open end two slits three inches apart and three inches long. Bend this piece of tin back into can and hammer it flat.
- (3) Punch with the punch opener two or three small holes at the top of the can on the side opposite the door. These are your air holes and serve as a chimney. To Use Vagabond Stove – Find a level spot for the stove so food will not run over the side. If stove is not level put a twig under the low edge. Press the stove in the dirt so that it makes a ring. Then put it aside. Make a small fire of twigs in the ring. Keep fire small but steady. You can also use a Sterno can or other form of “scout heat.” Put the stove over the twig fire or Buddy Burner. The stove will get very hot so do not touch it.

*The first time you use your stove you will have to wipe the finish off the tin can after the stove has heated up. Hold stove with a potholder and wipe off with a paper towel.

Webelos Outdoor Cooking

Cooking and eating are an adventure. Eating is fun and so is fixing food to eat. There are so many activities that offer an opportunity to cook and eat. There is just something about camp cooking that is special. Cooking outdoors requires a different set of rules and equipment. Take time to plan some activities that will include food preparation, whether it is brought in a paper sack or food that will be prepared by the boys. Even cooking a hot dog or marshmallow can be a real challenge - having it cook just right and not burnt. Cooking is a skill and cooking outdoors with charcoal, wood or a buddy burner will take some skill. Take time to talk about what you plan to cook, discuss safety and practice fire building. It is fun to beat eggs, mix pancakes, and make a milkshake or cherry cobbler. It can be lots of fun as long as you know what you are doing. Don't be too ambitious to start with, remember the age of boys you are working with. Do simple recipes and progress as their skills develop. Outdoor food does not have to be cooked. A good lunch can be part of the day without having to take time out to cook. Maybe the first venture could be an after school snack.

Safety and Good Cooking Habits

Start out by getting yourself ready to cook.

- Protect your clothes from spills by putting on an apron; then wash your hands.
- Read the entire recipe carefully.
- Organize the bowls, spoons, pans and other equipment that you will need.
- Read and know about making fires and fire safety.
- Have all the ingredients for the recipe. Measure ingredients accurately.

Follow the recipe mixing the ingredients.

- While the product is cooking, put things away and clean up your work area.
- Stay near your food. If you forget them, they will cook too long and burn.
- Turn pot handles away from the edge so no one will bump the handle and cause pot to spill.
- Always use potholders when handling hot pans. Keep all towels, potholders, clothes, and hair away from the flames.
- Learn how to use a knife.

Outdoor Cooking Hints

- Pack charcoal in a paper egg carton and tie shut. When ready to use, just light the carton.
- For a wood fire, use candle pieces wrapped (like candy) in wax paper. Light the paper and the wax will keep it going long enough to ignite your kindling.
- Handy fire starters (never-fail) can be made by placing one charcoal briquette in each section of an egg carton (paper kind). Cover with melted wax. Tear apart and use.
- Handy fire starter. Save lint out of lint filter in clothes dryer. Place lint under kindling and use as tinder.
- Put a burger fresh from the grill into the bun and place in a plastic bag for about a minute. The bun will be steamed warm.
- Let a pan or bucket of water heat on the fire while you eat and your dishwasher will be ready when you are.
- Melted paraffin, applied inside and outside a cooler leak will seal it.
- A bar of soap will stay clean on a cookout if kept in the end of an old stocking and hung in a tree.
- For safety, always keep a bucket of water nearby when cooking outside.
- When camping, choose foods that keep well with little or no refrigeration. Check out instant and dehydrated foods.
- Cool the ice chest before you fill it. The ice will last much longer.
- Cans of frozen juice can help keep other foods cold when packing your ice chest.



- Freeze fresh meat before putting in cooler. It will last longer and also help keep other foods cold. Even make hamburger patties and freeze with double paper between each.
- Give yourself plenty of time to start a fire and wait for wood or briquettes to be ready.
- Brush grates of a grill with oil to prevent meat from sticking.
- Don't forget to rub the outside of metal pans with liquid dish detergent - it sure helps when it comes time to clean up.

Fire Starters

Buddy Burner

This is a fire starter, which is used with a tin-can stove. They can also be used as emergency road flares (keep one or two in your car). You'll need:

One 6-ounce tuna or cat food can

Strip of corrugated cardboard

Paraffin

String

1. Cut a long strip of corrugated cardboard. The width should be slightly less than the height of the can. Remove the paper from one side. Roll the cardboard in a tight coil and place on edge in tuna can. The tighter the cardboard is rolled, the longer it will burn.
2. Insert a piece of string in the center for the wick.
3. Melt paraffin in a clean 1-pound coffee can set in a pan of water. Pour melted paraffin over cardboard in can until can is three-quarters full. Let wax harden.

Trench Candles

These are also called paraffin logs or "fire bugs" and are useful in building wet-weather fires. Tear several thickness of newspaper into 2-inch strips. Roll to make a log about 1-inch thick and tie with a string. Roll to make a log about 1-inch thick and tie with a string. Melt paraffin in a double boiler. Holding the newspaper roll with tongs, dip it into the melted paraffin. The saturated string becomes a wick. Trench candles produce a high, steady flame to help get the fire going.

Another way to make "fire bugs" is to roll up four newspaper sheets, beginning at the short side. Tie strings 2 inches apart. Cut between the strings to make 2-inch "bugs." Soak in paraffin as directed above.

To provide a little more burning area, create a candle effect with the "fire bugs" using your finger to push out some of the middle. When completed, you can use the string for a wick and also light the small "top" end of the candle.

Egg Cup Burner

Mix $\frac{3}{4}$ cup sawdust with enough melted paraffin to saturate it. Put in a 3-ounce paper cup or a cup cut from a cardboard egg carton. Insert a string in the center for a wick.

Match Bundle

Tie six to eight kitchen matches together with a string and dip in paraffin.

How To Plan Camp Menus

*** NOTE: BOYS SHOULD BE DOING ALL OF THESE STEPS – WITH GUIDANCE AS NEEDED. THEY LEARN NOTHING IF ADULTS DO EVERYTHING FOR THEM !!!

1. Find out any dietary restrictions of those going.
 - Health (allergies)
 - Religious
 - Extreme dislikes
 - Lifestyle choices (vegetarian or ADD/ADHD restrictions)
2. Find out what people like.



3. For each meal, brainstorm ideas. Be sure to use camp recipe books or other resources. Make sure that each boy submits ideas for each meal.
Try something new each time you go out.
4. Decide menu. Write everything down. (Examples: pancakes, butter, syrup
Or steak and steak sauce, or hot dogs and buns and ketchup and mustard and Coney sauce.
5. Decide what is needed (ingredients and cooking equipment) to:
 - Prepare each item (mixing bowls, spoon, whisk, can opener, foil, knives)
 - Store items (cooler, ice)
 - Cook each item (pots and pans, charcoal, tongs, water, foil, Dutch oven)
 - Serve each item (hot pads, serving utensils such as ladles or spatulas)
 - Eat each item (each person should have their own plate, bowl, cup and eating utensils and dunk bag)
 - Clean up each item (dish soap, scouring pads, dish rag, plastic tubs (3))
6. Prepare shopping list
 - Decide who will shop and how food will be paid for
7. Shop
8. Prepare equipment list. Gather equipment.
 - Don't wait until the day that you are leaving. Get all equipment in one place for packing.
 - Double check that you have everything
 - Re-package it if necessary
 - Be sure to take recipes along with you.
9. Prepare duty roster.
 - Give everyone responsibilities (include which adult will be supervising which boys at which job)
 - Put in sheet protector or other waterproof protection
10. At camp, be sure that menus, recipes and responsibilities are known and posted. Make sure everyone knows where to look for equipment and food.

One Pot Meals

Ground Beef and Noodles

1 lb. ground beef	1-6 oz. package noodles
1 Tblsp. cooking oil or margarine	1 can mixed peas and carrots
1 pkg. onion soup mix	

Brown meat in oil or margarine, then add onion soup mix and noodles, plus 2 cups of water. Cover and simmer 20-25 minutes. Spread peas and carrots over mixture and cook additional 5-7 minutes. Serves 6-8.

Mock Tacos

1 lb. ground beef	chop and place in individual bags or dishes:
1 jar spaghetti sauce	tomato
1 bag of corn chips	green onions
lettuce	black olives
grated cheese	

Brown hamburger and drain. Add spaghetti sauce and simmer, keep warm.
Place on each plate or bowl, a layer of corn chips, then add spaghetti sauce, top with individual toppings as desired.

Hunter's Stew

1 lb. ground beef
1 can tomato soup
1 can vegetable soup

Brown meat in large pot. Drain, add both cans of soup. Cook until just to a boil, stirring often.

Chicken and Noodles

2 pkgs. Ramen Noodles
1 can canned chicken



Cook Ramen Noodles as directed on package. Add can of chicken. Heat through.

Chicken and Rice

- 1 can cream of chicken soup
- Minute Rice.
- 1 can canned chicken

Make soup with water as directed, adding can of chicken at the beginning. When brought to a simmer, add one soup can of Minute Rice. Remove from heat and let stand 5 minutes. Fluff with fork before serving.

Pot of Gold

- | | |
|--------------------------|------------------------------|
| 3 lbs. ground beef | 6 cans tomato soup, diluted |
| 4 large onions, chopped | Tube biscuits (2 per person) |
| salt and pepper to taste | 1/4 lb. yellow cheese, cubed |

Using large kettle, brown meat and onions. Drain. Add the six cans of tomato soup, diluted as directed on the can, using water. While soup mixture is heating, cube cheese (1/2 inch square) and press one cube into the center of each biscuit. Fold the biscuit over the cheese and pinch it on top. Be sure the cheese is covered completely. When the soup is boiling, add the dumplings to it and cover. Cook for 20 minutes. DO NOT PEEK! This amount will serve 12. To increase this amount for larger groups, add 1 pound ground beef and 2 cans soup and 1 onion for each additional four persons. Make extra dumplings. This is a filling one pot meal, served with celery and carrot sticks.

Giant Square Knot

Each Webelos Scout holds the free end of a 10-foot rope in his right hand. He tries 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 feign a move with his hand he will be disqualified. An 8 to 10 foot length of rope will do.

Knot Trail

Tie several pieces of rope of varying thicknesses together, using several different know (square, sheet bend, bowline, etc.) You may use one knot more than others.

Knot Easy

Divide into two teams. Give each team captain a 12-in. length of clothesline rope. At signal, the captain ties a double knot in the rope and passes it to the next in line. The second person unties the knot and passes it to the third person, and so on down the line. The first team to finish wins.

Knotty Knots

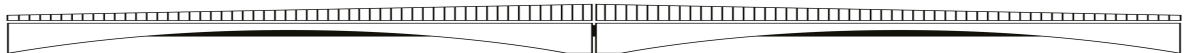
Knot Descriptions

Match each description on the left to the appropriate knot name on the right.

- | | |
|---------------------------------------------------------------------------------|------------------|
| For tightening and loosening a rope easily and on guy lines. | Square Knot |
| For tying a rope to a post or ring; it's strong but easy to loosen. | Tautline Hitch |
| For tying a rope to a tree or post. | Clove Hitch |
| Used when you want a loop that will not slip or close up; used for rescue work. | Sheet Bend |
| For tying two ropes together and for tying bandages in first aid. | Bowline |
| For tying two ropes together, especially when one is thicker than the other. | Two Half Hitches |

Forget-Me "Knots"

Draw a line from the knot name to the correct picture.



Square Knot

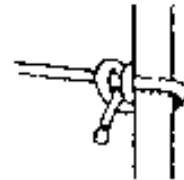
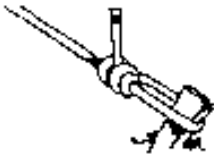
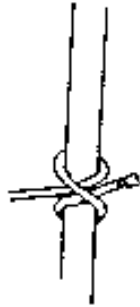
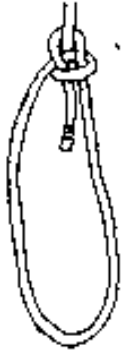
Sheet Bend

Tautline Hitch

Bowline

Clove Hitch

Two Half Hitches



If You're Lost

in the Woods

Fill in the blanks with a word from this list. All words should be used once.

dry fire head hole leaves nightfall run sheltered signal wander

1. Stop, sit down, and try to figure out where you are. Use your _____, not your legs.
2. If caught by night, fog or a storm, stop at once and make camp in a _____ spot.
3. Build a _____ in a safe place.
4. Gather plenty of _____ fuel.
5. Don't _____ about. Travel only downhill.
6. If injured, choose a clear spot and make a _____ (smoke) fire.
7. Don't yell, don't _____, don't worry, and above all, don't quit.
8. If caught out during _____, find shelter quickly - a ledge, a large boulder or a fallen tree.
9. If without a sleeping bag, build a fire in a deep _____, cover 6 inches of hot coal (wood) with 6 inches of earth and sleep on the warmed earth.
10. Use _____ and branches as a blanket to shelter yourself.

Fire Safety

Mark each True statement with T and each False statement with F

1. _____ Build fires close to your tent.
2. _____ Be sure fire is downwind from tents.
3. _____ Keep cooking fires as large as can be. They'll cook faster.
4. _____ Clear an area ten feet in diameter of all burnable material, or as required by local law.
5. _____ Place ten fire buckets filled with water at each tent.
6. _____ Always extinguish fires and other flame sources before you go to sleep.
7. _____ Put fires dead out with any liquid you have on hand.
8. _____ Never leave a fire unattended.



Checklist for a Perfect Campsite

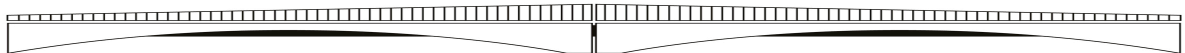
Place a checkmark in front of every item that is needed for the perfect campsite:

- Sheltered by trees to the west and north
- Open to avoid danger of falling branches
- Sheltered from prevailing winds
- Open to expose tents to early morning sun
- Sheltered from prying eyes of nosy neighbors
- Open to afford a pleasant view
- Elevated to avoid morning fog
- Low to avoid harassment of mountain lions
- Sloped for drainage of water
- Level for a comfortable night's sleep
- Abundant in wildlife and nature
- Devoid of insects, snakes, skunks, p-ivy
- Grass covered to absorb rain
- Sparsely vegetated to avoid grass fires
- Stocked with wood for fuel and projects
- Cleared of all stumps, sticks, logs, brush
- Private (forget highway median strips)
- Close to home
- Safe from flash floods (buffalo stampedes)
- Well supplied with water for drinking, swimming, fishing, boating and even washing.

READYMAN

Activities:

- ❖ Discuss first aid. Practice the treatment for “hurry cases.”
- ❖ Put together a first aid kit for your den.
- ❖ Practice mouth to mouth resuscitation on a mannequin.
- ❖ Talk about where and how to get help in various emergency situations.
- ❖ Consult the Boy Scout Field Book for safe bicycling tips.
- ❖ Make and display 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.
- ❖ Plan a bicycle reflector campaign.
- ❖ Have a bicycle obstacle course competition.
- ❖ Review safe swim defense plan.
- ❖ Ask an off duty local rescue squad or ambulance corps to demonstrate some first aid situations and techniques.
- ❖ Visit a Red Cross Center
- ❖ Visit a hospital or trauma center
- ❖ Invite a local E.M.T., nurse, or doctor to a den meeting. They can cover requirements #1 through #5 in this badge. In coordination with the Aquanaut Activity Badge, study the safe Swim Defense. Be sure Webelos can explain it and its importance.
- ❖ Make a Buddy Board and have Scout make their own tags. Invite a police officer to a den meeting. Ask him to speak on bike and/or car safety. See Traveler activity badge for car safety rules.
- ❖ Visit a fire station. Have a fireman talk to the Webelos about the need for a fire escape plan. Have Webelos draw up a home fire escape plan.
- ❖ Discuss home safety hazards. This coordinates with the Family Member activity badge requirement #3.
- ❖ Take the Webelos to observe the district or council first aid meet. Attend your district roundtable for information.
- ❖ Join a local troop meeting when a first aid demonstration is being given. Call Scoutmaster--they're going to do it sometime during the year.
- ❖ Stage a mock disaster involving injuries and have the boys treat the injuries. This could be done in conjunction with a patrol from a nearby Troop. With the Scouts demonstrating more complicated skills and acting the part of the injured.
- ❖ Display posters showing how and where accidents commonly occur in the home.



- ❖ Demonstrate the proper way to refuel a power mower, with the motor off and cool.
- ❖ 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 a telephone conversation asking for emergency help.

Items for a Family Safety Kit

It's a good idea to put together a family safety kit and store it in a new plastic garbage can (that way it is portable and you can use it later to store water). Some items to put in your kit include the following:

Canned food like canned fish, meats, and poultry packed in water, canned fruits and vegetables.

Non-electric can opener

Bottled water

Flashlight

Portable radio

Extra batteries

Fire extinguisher

Essential medication

First aid kit

Blankets

Practice For Emergency Situations

- You awaken in the middle of the night. Your bedroom door is closed and you smell smoke. Mother and father are out of town and your grandmother is sleeping in their bedroom. What should you do?
- You are returning home from a baseball game and see a grass fire in a vacant lot near your home. What should you do?
- You see smoke coming out of a window in an apartment building across the street. What should you do?
- A stranger in a blue Volkswagen stops you on your way home from school and offers you a ride. What should you do?
- You find your 18-month-old baby brother playing with a bottle of aspirin that has been opened. What should you do?
- A kindergarten child is bitten by a dog on the way home from school and you are a witness to the Incident. What should you do?
- A first grade boy falls off a swing and lands on his back. You are the first person to arrive at the accident scene. What should you do?
- You are a witness to an auto accident in which a car strikes a girl on a bicycle and leaves her lying in the street. What should you do?
- You awaken in the middle of the night and hear the baby crying. The baby-sitter is asleep in front of the TV set. What should you do?
- A group of kids in your neighborhood are playing by locking one another in an old refrigerator they found in the alley behind a neighbor's garage. What should you do?
- A gang of boys have been teasing a neighborhood dog. The dog is a family pet, but he is growling and shows signs of anger. What should you do?
- The fire bell rings at school and two of the girls decide they'll play a trick on the teacher and hide under the library table while the class goes out for a fire drill. What should you do?
- A first grade boy steps on a rusty nail in the sandbox. It goes through the sole of his tennis shoe and makes a slight scratch on his foot. He doesn't want to go to the school nurse. What should you do?

Pressure Pad Relay

Equipment - Each boy using his own neckerchief

One boy has about 30 feet in front of the team with arterial "bleeding" of the left wrist. There is one judge for each victim. On signal, the first boy from each team runs up and applies a pressure pad over the simulated wound. When correct, the judge yells "off," the boy removes the pad and runs back to the team, tags off the next boy who repeats the operation.

Bandage Demonstration

Equipment - As needed. One member of a den is the patient; the rest are first-aiders. On "Go" Number 1 runs to the patient and ties a head bandage and runs back; Number 2 ties cross chest; Number 3, thigh; Number 4, ankle



bandage; Number 5, sling for arm; then Numbers 6 and 7 go up and be chair carry transport for the patient back to the starting point. No time element. (Note: In case of a small den, one or more boys may go up twice, until the project is completed). Base scoring on excellence.

Stretcher Race

Equipment - 2 staves, 1 blanket, and one inflated balloon for each team. Teams line up in relay formation with two victims from each team lying from 30-70 feet in front of the team. On signal, two members of the team run up to the first victim with the blanket and staves, make a stretcher, and put the victim on it. When carriers are ready to lift the stretcher, a judge places the inflated balloon on the victim. The victim is carried to the starting line without the balloon falling off (to ensure care in handling the victim). If the balloon falls off, the judge counts off 20 seconds, places the balloon back on the victim's chest, and the team continues on its way. When they reach the starting line, the second team from the group dismantles the stretcher and runs forward to bring in the second victim using the same procedure and rules as the first team the first team to bring the second victim over the starting line is the winner.

Look and Remember Game

Select items from a First Aid Kit bandages, tape, scissors, tweezers, gauze, etc, and lay them out on a table and cover them with a towel. Divide the den into two groups, have the first group come over to the table with paper and pens. Uncover the First Aid Kit and allow the first group to look at the kit for about 30 seconds then cover the kit up again. While the second group is looking at the kit, have the first group write down as many items as they can remember. After the second group has written down all the items they can remember, then uncover the First Aid Kit. Hold up each item and have the boys identify the item and tell how to use it and when to use it. The boys check off each item that they wrote down on their list. The group that remembered and identified the most items from the First Aid Kit wins.

Fireman's Drag Relay

Preparation: Neckerchiefs; participants divided into 2 teams. Two teams – half the members of each team are firemen, the other half are victims and are laying on their backs. On signal, the first fireman runs up to his victim, ties his wrists together with a neckerchief, and pulls him back to the starting line with the fireman's drag. He touches off the next fireman, who then rescues his victim. First team to bring in all their victims wins.

What's wrong with me?

Write down several different accidents or afflictions. (example: A broken leg, A nosebleed, Choking, Shock, etc...) Place these in a hat and have the boys draw them out one at a time. The boy that drew will have to act out that particular problem. The first boy to identify the problem must show how to treat it, he now gets to pick and act out an accident.

Save the Baby

This game is played by fire fighters to keep up their skills in searching a building for people. Use it to teach a simple way to get out of a smoke filled building. Always remember that smoke makes a room very dark and it makes people very disoriented. Stress that no one should ever enter a burning building. A doll and a blindfold are needed for this game. The doll is hidden and the boys are blindfolded. The object of the game is to find the baby and get to the exit the fastest. The best method for searching is to lay on your belly with your arms and legs stretched out. Feel around then creep on. Always maintain contact with a wall with the same hand. That prevents you from back tracking over an area already searched. If playing on teams, the team must maintain physical contact during the game. They must find the exit together.

What Should I Do?

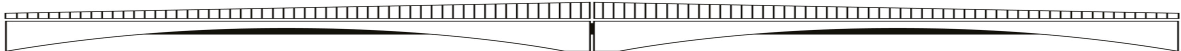
This game is a fun way to practice the skills the boys will learn. Write emergency conditions on cards. A Scout draws a card and then must demonstrate or explain the appropriate actions. The Heimlich maneuver, rescue breathing, and CPR should be explained. Have a phone (disconnected of course) and first aid kit available.

Bicycle Safety

Circle true or False for each statement

T F 1. Obey all traffic laws, signs, and signals.

T F 2. Ride single file, close to the right-hand curb. Ride against traffic, not with it.



- T F 3. Ride in a straight line except when you have to weave in and out of traffic.
- T F 4. Look, then signal before turning or stopping. Use arm signals.
- T F 5. After dark, you can only carry two passengers safely.
- T F 6. Give pedestrians and motor vehicles the right of way.
- T F 7. Slow down and look carefully before crossing intersections.
- T F 8. Ride bike as fast as you can across railroad crossings and busy intersections.
- T F 9. Don't hitch onto cars and trucks.
- T F 10. Don't shoot out of blind driveways and alleys.
- T F 11. Be alert for other vehicles, like cars pulling out from curbs and driveways.
- T F 12. Don't try to squeeze in between cars and trucks.
- T F 13. If bike isn't in good mechanical condition, only ride in slow traffic areas.
- T F 14. Be sure your bike has good brakes and a horn or warning bell.
- T F 15. Be courteous. Respect the rights of other cyclists, drivers, pedestrians.

Answers To Bicycle Safety

- 1. True.
- 2. False. Ride with traffic, not against it.
- 3. False. Never stunt, race, or weave in and out of traffic.
- 4. True.
- 5. False. Don't ever carry passengers.
- 6. True.
- 7. True.
- 8. False. Walk your bike across railroad crossings and busy intersections.
- 9. True.
- 10. True.
- 11. True.
- 12. True.
- 13. False. Keep bike in good mechanical condition or don't ride it.
- 14. True.
- 15. True.

Items for a First Aid Kit

The contents of a home first aid kit should be clearly marked, and individually wrapped to keep things sterile. You don't need a lot of things in such a kit - just the basic essentials to take care of immediate needs until you can receive professional care.

You should have:

- 1 package of assorted size sterile bandages ("Band-Aids")
- 1 package of 8 to 12 two-inch sterile gauze pads.
- 1 package of 8 to 12 three-inch sterile gauze pads
- 1 roll of hypoallergenic adhesive tape
- 8 to 10 moistened towelettes (come in individual packages)
- 1 bar of regular soap (liquid soap will dry up)
- 3 triangular bandages
- 3 rolls 2" sterile roller bandages
- 3 rolls 3" sterile roller bandages
- 1 pair of scissors
- 1 pair of tweezers
- 1 needle
- 1 safety razor blade
- 1 can antiseptic spray
- 1 package of matches

All of these items should be packaged in a sturdy metal or plastic container, preferably one that is water and airtight. You may find that making your home first aid kit is less expensive in the long run than buying a prepackaged kit.



All of the recommended items for your first aid kit have a very long shelf life, and remain useful over many years. Periodically, you should check the contents of your first aid kit and replace any items that have been opened, are dirty, or on which the dates have expired or are missing.

HELP LIST
My Safety Notebook

Our Important Phone Numbers	
Contact	Phone Number
MOM at WORK	
DAD at WORK	
FIRE DEPARTMENT	
POLICE DEPARTMENT	
POISON DEPARTMENT	
Neighbor: _____	
Neighbor: _____	
Neighbor: _____	

SCHOLAR

Activities:

- ❖ Invite a schoolteacher to your den meeting. Maybe one the boys know, to talk about the importance of school.
- ❖ Invite a grandparent to your den meeting to talk about how school was when they were children. If not a grandparent try a retirement home.
- ❖ Have boys make a list of the things they like about school. And another list of the things they don't like. Discuss them.
- ❖ Let the boys talk about what's going on in school. Don't try to change any of their ideas, but guide the discussion in such a way that they will see the value of an education.
- ❖ Prepare a chart of the school system and explain and discuss with boys.
- ❖ Discuss & do a den service project for the school.
- ❖ Invite the parents of Webelos to come to a den meeting dressed in the type of clothes they wore to school. Have them bring along such things as class pictures, yearbooks, report cards, etc. and allow each ample time to share his/ her school days with the den.
- ❖ Have a panel of parents with various jobs explain their schooling and training for these jobs
- ❖ As a den, talk about good study habits.
- ❖ Have someone from the public library talk about the local literacy project.
- ❖ .
- ❖ Play a Newspaper Search game looking for articles about education.
- ❖ Encourage boys to find out all they can about schools in your community, the different types and how they work, the problems and opportunities. Discuss these at a den meeting. Have the boys make a list of the things they like about school and another list of the things they don't like about school. Give these lists to the principal.
- ❖ Have the boys make a daily time schedule and use it to determine if they are making the best use of their time.
- ❖ Invite a speaker, such as a teacher, college professor, school principal, or librarian.
- ❖ Plan a trip to the library to have the librarian demonstrate the use of a microfilm or microfiche viewer.
- ❖ Briefly visit a school board meeting. Let them know you are coming. They may be interested to know the boys are working on the Scholar Activities Badge.



Do You Know Your Alphabet?

What letter is:

- | | |
|-----------------------|------------------------|
| 1. A vegetable? | 7. A drink? |
| 2. A body of water? | 8. Command to a horse? |
| 3. Part of the head? | 9. An exclamation? |
| 4. A female sheep? | 10. An insect? |
| 5. Part of a house? | 11. A bird? |
| 6. An actor's signal? | 12. A question? |

Answers to "Do You Know Your Alphabet"

1. P 2. C 3. I 4. U 5. L 6. Q 7. T 8. G 9. O 10. B 11. J 12. Y

Aptitude Test

1. If you went to bed at 8:00 at night and set the alarm to get up at 9:00 the next morning, how many hours of sleep would this permit you to have?
2. Do they have a 4th of July in England?
3. Why can't a man living in Winston-Salem, N.C. be buried west of the Mississippi?
4. How many birthdays does the average man have?
5. If you have only one match and enter a room in which there is a kerosene lamp, an oil heater and a wood burning stove, which do you light first?
6. Some months have 30 days; some have 31. How many have 28?
7. If a doctor gave you three pills and told you to take one every half-hour, how long would they last?
8. A man built a rectangular house. Each side has a southern exposure. A big bear comes wandering by. What color is the bear?
9. How far can a dog run into the woods?
10. What four words appear on every U.S. coin?
11. In baseball, how many outs are in each inning? (
12. I have in my hand two U.S. coins, which total 55 cents. One is not a nickel. What are the two coins?
13. A farmer had 17 sheep. All but nine died. How many did he have left? (nine)
14. Divide 30 by 1/2 and add 10. What is the answer?
15. Take two apples from three apples and what do you have?

Answers to Aptitude Test:

1. one hour
2. yes
3. he has to be dead first
4. one
5. the match
6. all of them
7. one hour
8. white
9. halfway
10. United States of America or In God We Trust
11. Six
12. A half dollar-which is not a nickel and a nickel
13. Nine
14. 70
15. two apples

Three Men in a Boat

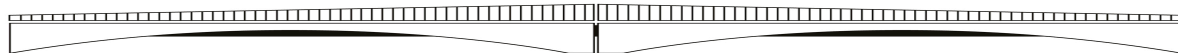
Materials:

Tri-wall cardboard base 2" x 8"

6 dowels

2" long nails

Colored markers



What to do:

1. Mark off seven evenly spaced dots in a row on the cardboard.
2. Make a hole with the nail at each dot.
3. Widen the holes with a pencil so that the dowels will fit into them easily.
4. Color three dowels yellow and three dowels red.
5. Decorate the base with colored markers.

Rules of Play:

1. Place the yellow men in three spaces at one end and the red men in three spaces at the other end. Leave the middle space empty.
2. Try to reverse the positions of the red and yellow men.
3. Move men forward only, never backward.
4. A man may move into the neighboring space, or if that space is occupied, he may jump over it.

Take an active part in school activities or service:

Here is an activity that would fulfill a requirement for this badge, but would also be an excellent environmental project for the entire school.

Speak with your teacher about organizing your class to sponsor a paper-recycling project for the entire school.

Meet with your principal and discuss ways to recycle the papers used in the classrooms.

- Research the types of paper that will be accepted at the local recycling center and make a list to present to administration at your school.
- Contact area stores for boxes to be used in each room in the school by the various classes. (You will need at least one per class.)
- With your teacher's permission have your class decorate these boxes, attach to the box a list of all types of paper accepted and distribute boxes throughout the school. (These boxes are to be used for the recyclable paper.)
- Your class collects these papers on a weekly basis.
- On a rotation basis, devise a list of parents' will to help take the collected papers to the recycling center.

Survey

Get permission from the administration to take a survey of the students and also their parents in your school. Use the questions provided below.

- ◆ What do you think are the best things about our school?
- ◆ What are its main problems

Following the survey, compile your results and meet with your principal along with a representative from each grade level (student council representative possibly). Working as a team, see if you can resolve some issue that is common among the students and the parents. (You may want some representatives from the school board or home and school involved as well.)

Peer Tutoring

With permission, check with the lower grade level to see if you or a group from your class could begin helping younger students in various subject areas.

OR

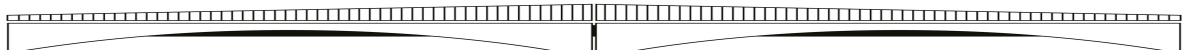
Possibly working with the grade's teacher, helping out with an art project once a month. This would involve you doing the more involved cutting, etc., but not doing the project completely. (This works well in Kindergarten and First Grade levels especially.)

Research

Do some research on one of the following individuals and their impact on education in the United States. Share your findings with your unit.

Benjamin Franklin
Noah Webster
Thomas Jefferson
William MacClure

Horace Mann
Ella Flag Young
William T. Harris
Francis Wright



Seven Hints for Studying

Studying is work, but so is football practice or putting together a model rocket. It's the right mental attitude that can make the difference in your study habits. On the football field, the coach has planned your workout systematically. So much time for drill, so much for tackling, and so on. And a good way to achieve better grades is to plan a study system that's just right for you.

Here are seven study hints:

1. Choose a regular time for study; an hour right after dinner, for example. That will leave you with time for play after school and time for television, meetings, and friends afterwards.
2. Make it a habit so that you don't even think about it - as natural as breathing.
3. Practice reading for speed so that you can get more work done in less time.
4. Start off each school term by working twice as hard as you thought you could. The momentum you build will carry you right through the term. Your grades will pick up, too.
5. Listen carefully in class. Make notes. Use study periods for homework and study.
6. On exams, do the problems that seem the easiest first. Then tackle the more difficult ones.
7. And no radio, television, or talking with a buddy while you're doing homework.

Tips on How to Talk To Your Teacher

A good conversation with your teacher can increase your chances of making better grades, participating in clubs, working on new projects or earning school awards.

1. Set talk goal and decide exactly what you want.
2. Prepare what you will say with a parent or friend. Make notes on information you might need or questions you need to ask.
3. Select a time when your teacher isn't busy. Make an appointment. Be polite, act natural and be honest. Ask for a chance to earn what you want and for suggestions on ways to improve your skills or behavior. Be sure to thank your teacher.
4. Check your attitude. Are you willing to work to improve?
5. After your talk, write down what you said and your teacher agreed on. Follow through on the suggestions and fulfill your commitment. Keep trying even if it's hard. If you need help, ask for it.

The following is a sample letter that can be sent to a Webelos scout's teacher.

Dear _____,
 _____ is working at this time on his Scholar Activity Badge in our Webelos Den, Cub Scout
 Pack _____.

It is required that he does the following:

1. Have a good record in attendance, behavior, and grades at school _____
2. Take an active part in a school activity or service _____
3. Discuss with a teacher or principal the value of having an education _____

Would you please sign the above items that _____ has completed. If you feel he is not, could you please help me by discussing this with him and setting goals with him, so that he may be able to earn this activity badge?

I do appreciate the extra time this takes and feel _____ will benefit from it. If you have any questions please call me at home at 555-1000 or at work at 800-555-1001.

Thank you very much,

 Webelos Den Leader
 Pack _____
 _____ Council

SCIENTIST

Activities:

- ❖ Talk about the various branches of science and how they differ.
- ❖ Do the atmospheric pressure tests or balance tests in the Webelos Book.
- ❖ Make Fog.
- ❖ Make Crystals.
- ❖ Do the inertia experiments in the Webelos Book.
- ❖ Invite a local Weatherman to your den meeting to talk about the climate during the year. How is weather different in the Southern Hemisphere?



- ❖ Plan a scientific experiment to be demonstrated at the pack meeting.
- ❖ Visit an industrial lab
- ❖ Visit the Museum of Natural Science
- ❖ Visit a planetarium
- ❖ Visit a TV news weather station
- ❖ Visit a high school or college science lab
- ❖ Go to a community science fair
- ❖ Have a magic show with each boy doing an optical illusion
- ❖ Visit an eye specialist and learn how the eyes work.
- ❖ Visit the control tower of the Metropolitan Airport or visit a Municipal Airport. Learn about the principles of flight.
- ❖ Tour an airplane and look at all the control dials.

Optical Illusion

Materials:

A sheet of paper about 11 inches long.

What to do: Roll the paper into a tube one-inch in diameter. Hold the tube to your right eye and place the side of your left hand against the middle of the tube, with your left palm directly toward your left eye. Keep both eyes open as you look through the tube and you will "see through" your left hand.

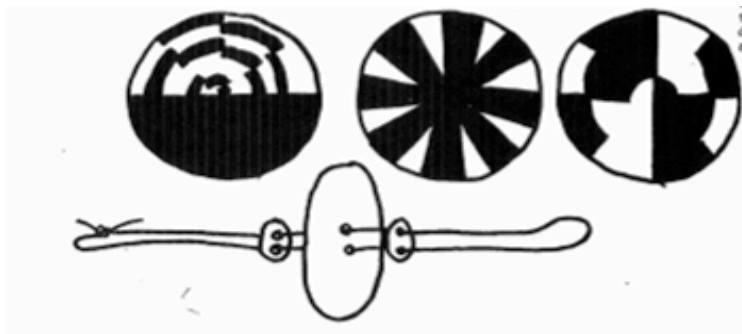
What is happening: Since one eye is looking through the tube and the other is looking at the hand, the two views blend to form an optical illusion of a hole in the center of the left palm. A slight shifting of the tube may improve the illusion.

Illusion Circles

Need: Cardboard or poster board, scissors, pencil, string, ruler, circle compass, buttons, markers.

With a circle compass, draw a circle on the cardboard, about 4 to 6 inches around. Cut out the circle. Draw two of the three patterns shown, one on each side of the circle. The pie-like design is colored in using two different colors alternately. The other two patterns should be partially colored in black, as illustrated. Find the exact center of the circle by finding the compass hold. Punch two small holes on opposite sides of the point with a pencil point – about 3/8" from the middle works the best. It's important that each hole is equal distance from the center or the

wheel will wobble. Find two big buttons whose holds line up with the holes in the circle. Cut a piece of strong string about 3 feet long. Thread the string through the circle and the buttons. Tie the two free ends of the string together. Hold one end of the string loop in each hand. The illusion circle should be in the middle. Have a friend wind up the circle or it can be done by holding the string a little slack, and winding the edge of the circle against the body. When the circle is wound about ten or fifteen times,



pull the string. The circle will spin as the string unwinds, and as the string winds again in the opposite direction. By alternately pulling the string taut and giving some slack, the illusion circle is kept spinning back and forth. Observe under bright light and experiment with the various color combinations the boys have picked and the different designs.

The Pendulum Phenomenon

Fasten a white disc 3/4 inch in diameter on a 3-foot piece of white thread. Most any small object on a string will do. Have someone hold the thread so the disc can swing like a pendulum. Start the disc swinging in a perfectly straight line and view it from a distance of three feet against a plain wall. Notice how the disc swings in a line like a pendulum. Hold a sunglass lens over one eye only. Any plain sunglass will do. Observe the path of the swinging object again. The movement will no longer be in a line but in a circle. If you switch the dark lens to the other eye, the movement will appear to be in the opposite direction. For example, coming closer to you rather than farther as it swings from right to left.

The Principle: You see best if your eyes are as nearly equal as you can get them. Shows the importance for the two eyes to receive similar images.



Diving Raisins

Materials needed:

raisins club soda clear drinking glass

Cut a raisin into four equal pieces and drop all the pieces into a glass of clear soda. They should sink to the bottom. After a few minutes of observation, you will note that the raisins will rise to the surface, dive to the bottom, then rise and dive repeatedly.

Why? Look closely at the raisins. What do you see? Tiny gas bubbles have become attached to each piece of raisin. The raisins and their accompanying gas bubbles rise after their combined weight becomes less than the weight of the water they displace. Eventually, when enough gas bubbles break loose and escape, the raisins sink to the bottom of the glass and the process repeats.

Condiment Diver, World's Simplest Cartesian Diver

Materials needed:

unopened condiment packet (soy sauce, ketchup, etc.) from fast food or take out order

clear plastic bottle with tight fitting lid (water bottle, soda bottle, etc.)

glass or cup of water

First, you have to figure out if your condiment packet is a good Cartesian diver candidate. Fill a glass with water and drop in your packet. The best packets are ones that just barely float. After you have found the proper packet, fill an empty, clear plastic bottle to the top with water. Shove your unopened condiment packet into the bottle and replace the cap. You're done! Squeeze the bottle to make the diver sink and release to make it rise. Why? Many sauces are denser than water, but it is the air bubbles at the top of the sauce that determines whether the packet will sink or swim. Squeezing the bottle causes those air bubbles to shrink. These smaller bubbles are less buoyant and the packet sinks.

Inertia

"Inertia is the tendency of a thing at rest to remain at rest and a thing in motion to continue the same straight line."

1. Get a small stick about 10 inches in length and the diameter of a pencil. Fold a newspaper and place it near the edge of a table. Place the stick under the newspaper on the table and let about half the stick extend over the edge of the table. Strike the stick sharply with another stick. Inertia should cause the stick on the table to break into two parts.
2. Get a fresh egg and a hard-boiled egg. Give each of them a spinning motion in a soup dish. Observe that the hard-boiled egg spins longer. The inertia of the fluid contents of the fresh egg brings it to rest sooner.

Air Pressure

The Upside-down Glass That Won't Spill

Fill a drinking glass to the very top with water. The water should spill over the top a bit. Carefully lay the cardboard square to completely cover the top of the glass. Holding the cardboard on top, turn the glass over until it is straight upside down. Stop holding the cardboard on. It will stay on by itself.

The Undrinkable Drinks

Using a can opener make a small hole in a can of juice. Try to drink the juice. What happens when you punch another hole in the can? Open a bottle of juice. Add enough water to fill the bottle to the very top. Put in a straw. Use clay to completely block the opening of the bottle around the straw. Try to drink the juice.

What is happening: There is no air in the glass of water to punch down on the cardboard. The air pressure pushing up on the cardboard is greater than the weight of the water. And the juice won't come out of the hole unless air can get in to push down on it; you need a second hole to let air in. Juice won't go up the straw because no air is getting in to push down on the juice.

Air Cannon Hockey

This game will demonstrate air pressure. Use round cardboard oatmeal boxes. Cut a hole the size of a penny in the tops. Fasten the lid back to the box tightly. Use a table for a field, with a goal at either end. Have a boy sit at each end of the 'field' with a cannon (box) and put a Ping-Pong ball in the middle of the table. By tapping the back of the box and aiming it at the ball, try to score by putting the ball through your opponent's goal. The Webelos leader can



demonstrate the effectiveness of his oatmeal box cannon by using it to put out a candle. Fill cannon with smoke, then aim at candle, tap back of box, and flame will be put out. These cannons are effective up to about six feet.

Homemade Barometer

Use a milk bottle, a soda straw, a piece of a penny balloon, and a length of string. Cover the mouth of the milk bottle with the piece of balloon, tying it in place with the string. Glue one end of the soda straw to the middle of the balloon. Make a scale on a piece of cardboard, by making 1/2 inch long marks about 1/8 inch apart. Superimpose the free end of the straw across the scale, but don't let it touch the scale. Mark the scale from 1 to whatever number of lines on the scale. Ask one of the boys to be in charge of the barometer for a month. Have him mark the number on the scale that the barometer points to each day at a certain time. This way there can be a check between your barometer and the actual air pressure as given in the newspaper each day. Remember that as the air pressure increases, the straw will point higher on the scale.

Bottle Target

Webelos take turns seeing how many toothpicks they can land in a milk bottle that is placed on the floor an arm's length away. Players drop the toothpicks one at a time. They may lean forward, but can't move their feet.

Scientists Quiz

(True or False?) (This makes a good gathering activity)

(Make copies of this quiz for all the Webelos to try.)

1. Electric current was discovered in Italy in 1781.
2. Vulcanized rubber was an accidental discovery by Charles Goodyear.
3. Madame Curie was the second woman to win the Nobel Prize.
4. Mark Twain was the first author to submit a typewritten manuscript to a publisher.
5. "Disks for the Eyes" was the original name for contact lenses.

ANSWERS To Scientists Quiz

1. True, by Luigi Galvani
2. True, in 1839
3. False, she was the first woman. It was in Chemistry, for the discovery of radium.
4. True, Life on the Mississippi in about 1875.
5. False, the name for eyeglasses that were made in Italy in 1280

A Real Attention-Getter:

Inflate a balloon and affix 3 - 4 squares of plastic tape to it. Have a boy stick a pin through the center of each piece of tape. To everyone's amazement, the balloon will not burst. When the pins are removed the balloon still will not burst. What is happening: The adhesive substance on the tape acts like a self-sealing automobile tire, adhering to the pin as it is pressed inward. When the pin is removed, the adhesive is forced outward by the air pressure from within the balloon, automatically sealing the tiny pinholes.

Air Currents

Hang two apples about 1/2 inch apart. Blow between them - as hard as possible - you will discover that the force of breath alone won't blow them apart. Instead, it will cause the apples to bump together.

2. Take a small wad of paper (paper should be a little over 1 inch square), and put it about 1 inch inside the neck of an empty soda bottle. Now lay the soda bottle on its side and blow into the bottle. You would think that the paper would be blown into the bottle, but will come flying out.

3. Get an ordinary kitchen funnel and blow into it while holding a lighted match opposite the center of the funnel. Your breath will blow the flame toward the funnel instead of blowing it out or away from you.

4. Line up three glasses. Hold your mouth about 2 inches in front of the first glass and a lighted match behind the last glass (about 2 inches from it). When you blow you will be able to blow the match out.

Game

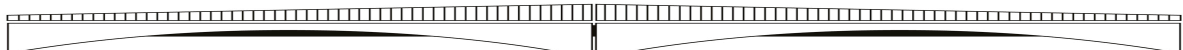
Equipment:

Pop bottle (1 for each player)

Balloon (1 for each player)

Vinegar

Baking Soda



Into each pop bottle put three tablespoons of vinegar, and into each balloon put two tablespoons of baking soda. At the word go, have each boy put his balloon on his pop bottle. When the soda mixes with the vinegar the balloon will expand. Have the boys tie off the balloons to see which is the largest. (Suggestion: Do this outside)

Bernoulli's Principle

Daniel Bernoulli was a Swiss scientist born in 1700. He discovered that fast moving air exerts less pressure than slow moving air. This same principle makes airplanes and gliders fly.

Paper Strip Experiment

Cut a piece of paper 2" by 6". Hold the narrow end, with the other end hanging down, in front of your mouth and blow across the top. Most people think the paper should go down as you blow across the top but surprisingly the paper rises up. This is because the air you blow is moving faster than the air under the paper. That means there is more pressure on the underside than the top.

Ping-Pong Balls Experiment

You need: 2 Ping-Pong balls, two 12" pieces of string, tape, and a ruler. Tape one end of the string to the Ping-Pong ball and do the same on the second one. Tape the other ends of the strings to the ruler so that the Ping-Pong balls are hanging about 1" apart. Hold the ruler up so that the balls hang freely. Now, blow between the balls from a distance of about 3". The balls should pull toward each other. This is because the air traveling over the curved surfaces of the balls is faster and therefore has less pressure than the air on the outside of the balls.

Paper Wing Experiment

Cut a 4" by a 8 1/2" piece of paper and fold it in half. Tape the narrow edge one-inch from opposite edge so that a wing with a flat bottom and curved top is formed. Slip a ruler through the wing loop end opposite the taped end with the curved side up. Now, blow directly at the folded part. The wing should rise up. This shows how Bernoulli's principle applies to wings and flight.

The Ball and Funnel Challenge

Materials: Ping-Pong balls, a few large funnels

Experiment: Let the scouts know that it is time to have a little contest--you are going to see who can blow a Ping-Pong ball out of a funnel the easiest. All you must do is give a ball and funnel to each participating scout, have them place the ball in the funnel, and then try to blow the ball out as far as they can. The ball won't move! In order to blow the Ping-Pong ball out of the funnel, you must blow across the top of the funnel. This activity can also be done by hooking a blower hose to the end of the funnel in order to provide a constant blowing air supply. The funnel can then be held upside down, swung around, etc., and the ball still will not fly out!

Water Up a Straw

Materials: a tall glass of water, drinking straws

Place one straw into the glass of water, holding it upright and keeping the bottom of the straw just off the bottom of the glass. Next, blow a short, hard blast of air through the second straw, holding it so that it is perpendicular to the first straw and their ends are touching. Water will come spraying out of the first straw into the air.

By blowing over the top of the first straw you decrease the pressure in that area (due to the increased air velocity). This causes the water to be pushed out of the top of the straw by the higher pressure at its base.

Egg in the Bottle

Peel one or two hard-boiled eggs just before doing the demonstration. Set a small piece of paper on fire and drop it into the bottle. Place the hard-boiled egg on top or the opening of the bottle, small end first. The egg will be pulled into the bottle after the heated air from the fire has contracted. (As the air was heated, it began to expand. When the fire was extinguished, the air began to cool and contract. The egg seals the bottle. There is less air in the bottle causing unequal pressure to occur between the air in the bottle and the air outside the bottle. The air pressure on the outside pushes the egg into the bottle equalizing the air pressure inside and outside the bottle. Air pushes on all surfaces that it touches. This push is called air pressure.

What's In A Cloud?

Greater St. Louis Area Council

This activity will help you understand how clouds form and what is inside them.

Materials: Two small clear plastic cups, flashlight (optional), magnifying lens



Fill one of your plastic cups 1/3 full of hot water. Take the second plastic cup and place it upside down on the first cup. Make sure the rims meet evenly and the cups are sealed.

Observe what is happening in the cups. Turn the lights out and use a flashlight to observe your cloud. You may also get a better view using a magnifying glass. A cloud contains billions of tiny water or ice droplets that form around dust or salt. Clouds form when water vapor (a gas) changes into liquid and warm or cold air meet. In this activity, the warm moisture-saturated air in the bottom of the cup moved upward and met the cooler air at the top of the cup.

Static Electricity

Greater St. Louis Area Council

This activity will create static charges from a variety of materials.

Materials: Rice Krispies, 2 balloons, paper plate wool cloth, pepper, salt.

Inflate one balloon, knot it, rub it on your head or with a wool cloth, and try to stick it on a wall. Observe what happens.

On your paper plate make a combined pile of salt and pepper. Then, rub the already inflated balloon with the wool cloth and place it just above the salt and pepper. Observe what happens.

Put 6-12 Rice Krispies inside the second balloon, inflate it, and knot it. Then rub it with the wool cloth, touch one of your fingers to the balloon where the Rice Krispies are, and observe what happens. Rubbing the balloon on your head or with a wool cloth creates a negative charge. The wall which has a positive charge attracts the negatively charged balloon, allowing the balloon to stick to the wall. The same thing occurs with the balloon and the pepper. The Rice Krispies jump inside the balloon because the balloon has been given a negative charge from the wool cloth. As your finger approaches the balloon it picks up a positive charge through magnetic induction just like the Rice Krispies and the two like charges repel each other.

SHOWMAN

Activities:

- ❖ Have a story-telling session. Have each boy come prepared to tell the best true-life story he knows about something that happened to himself or a friend or family member. This is an opportunity to emphasize the importance of good listening and the value of sharing ideas.
- ❖ Tell a funny or silly story and just as you get into the plot, ask the boy next to you to continue the story for a while. Let him carry it for a while and pass it to the next boy. It will be wacky for sure. It is fun to see the plot jump around, change and bounce back again.
- ❖ Try to find a very simple but easy to do 'old melodrama' with the villain in black and sweet heroines etc., and see if the boys can do it pantomime using signs as language and exaggerated facial expressions to communicate the ideas. It could be real crazy and fun.
- ❖ The den could produce a video, one with a story or not, demonstrating an activity or skill or just about anything. It could be narrated and could be good entertainment for a pack meeting.
- ❖ Scouts like silly or gross songs. (Songs about eating worms, etc. are great.)
- ❖ Invite a drama teacher to speak, put on a program for the pack meeting.
- ❖ Make puppets, and a stage. Write and put on a puppet show.
- ❖ Visit a nursing home and perform music or a play.
- ❖ Make a stage and costumes for a play.
- ❖ Play Charades.
- ❖ Assist with an advancement ceremony at your pack meeting.
- ❖ Talk about sound effects and let the boys try some of them
- ❖ Write a one-act play for pack meeting.
- ❖ Plan a family entertainment night - let the boys show off their talent to their parents.
- ❖ Exhibit props used or built such as puppets, costumes, etc.
- ❖ Demonstrate talent - musical, puppet show or skits.

Soda Straw Harmonica

Cut a strip of corrugated cardboard with large corrugations, 8" long and 1 1/2" wide.

Cut 8 straws into the following lengths:

8 1/2", 7 3/4", 6 3/4", 6" 5 1/4", 4 1/2" 4 1/4"

Push the straws between the sections of the cardboard beginning about 1/2" from one end and leaving four empty corrugations between straws. The shorter the vibrations, the higher the pitch. To play, blow over the straws.



Face Paints

6 T's corn starch, 3 T's water, 3 T's cold cream, food coloring, 6 C muffin tin
In each cup of the muffin tin, put 1 teaspoon of cornstarch, 1/2 teaspoon each of cold cream and water. Add a different color food coloring to each cup.

Newspaper Magic

Announce that you can perform a strange feat. You take an ordinary sheet of newspaper, lay it on the floor and have two people stand on it, facing each other. Say they will be unable to see or touch each other. Make your claim come true by laying the paper in the doorway, with the door closed. One person stands on each side of the door.

Name That Tune

Record the first line of about 15 different songs on a tape player. The Webelos who can correctly name the most songs wins.

Musical Chairs

Cub Scouts move around chairs as music is playing. When the music stops, all must sit in a chair. However, there is always one less chair than there are boys. The boy not seated is out of the game. This game can be done with partners holding hands and remove two chairs each turn. This game can also be played without chairs by having the Cub Scouts sit on the ground when the music stops and having the last one down drop out. To make it more interesting have them balance books on their heads and kneel when the music stops. The last one down and anyone dropping his book is out.

Musical Numbers

Cub Scouts form a ring, join hands and march around the room until the leader calls out a number. The Cub Scouts must form smaller rings containing the same number as the one the leader called. The leader (knowing the number of players) should call a number that will force some to be left out of the game. The remaining players reform one circle again and continue until only two groups remain.

SPORTSMAN

Activities:

- ❖ Explain and discuss football signals.
- ❖ Invite a referee or umpire to talk with the den about signals and/or sportsmanship
- ❖ Parents and boys attend a high school or college football game.
- ❖ Go bowling as a den or at a district tournament if possible (belt loop)
- ❖ Have each boy list the sports in which he participated during the past year
- ❖ Attend a high school football/baseball game.
- ❖ Assign the scouts an Olympic event (gymnastics, swimming, luge, fencing, equestrian etc.). Have them find out the following:
 - ❖ How someone gets on the team.
 - ❖ Rules for the event.
 - ❖ How it is run
- ❖ Go fishing (belt loop)
- ❖ Have each boy list the sports in which he participated during the past year
- ❖ Decide on a demonstration for the pack meeting
- ❖ If you save cardboard Frozen Juice Cans you can play Tiddly-Croquet
- ❖ Learn a new sport.
- ❖ Learn what two individual and two team sports the boys will want to do.

Tiddly-Croquet

You need two sizes of frozen juice cans to make a Tiddly-Croquet game. Cut wickets of various lengths from the largest cans. Shoot the lids from the small cans through the wickets. Place one upside down on a smooth surface. Press hard on one edge with a "shooter" lid from a large can.

Games

See how many terms you can match the game it belongs to:



Spare	Hockey
Shell	Trap-shooting
Shuttlecock	Boxing
Fairway	Bowling
Slalom	Polo
Double fault	Skiing
Eight-ball	Basketball
Chukker	Archery
Clay pigeon	Boating
Technical K. O.	Football
Jump shot	Baseball
Puck	Figure Skating
Double play	Tennis
Field goal	Badminton
Headlock	Pool
Casting	Wrestling
Quiver	Golf
Jack-knife	Diving
Oar	Hunting
Figure Eight	Fly Fishing

Scoring:

- 1 - 5 Amateur
- 5 - 10 Novice
- 10- 15 Semi-Pro
- 15 - 20 Pro

Frisbee Baseball

Played according to regular baseball rules. The pitcher throws the Frisbee toward the "batter: who then catches it. If he misses it, it is a strike and if it is outside the strike zone, it is a ball. The "batter" who has made a good catch, then throws the Frisbee and proceeds around the bases. If it is caught the "batter" is out. The rest of the game follows baseball rules.

Sports Cards

Make a set of 10 x 10-inch cards. On one side put a copy of the official signals for the game (football, basketball, hockey, baseball, soccer, etc.) of your choice. On the other side put an explanation of what the call means. The game can be played several ways.

1. Hold up the picture and ask for the proper call.
2. Read the explanation of the call and ask for its name.
3. Execute the call and ask for its name.
4. The game can be played as a competition:
 - A. Divide den(s) into two teams and give one point to the first person to guess the answer.
 - B. Divide den(s) into two teams and assign each team a sport and show each team a card for its sport. Each team will have a different sport. The first team to get the answer gets a point.

Micro Hockey

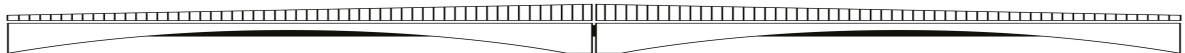
Use two cardboard boxes as the goals. Supply chopsticks and a checker for the puck.

Micro Soccer

Use the same boxes as you did for micro hockey. Players use their fingers to "kick" the ball (ping pong ball) across the "field" (a table).

Do You Know Your NFL Teams?

Army insects _____



- Seven squared _____
- A 747 _____
- Hostile attackers _____
- Helpers to relocate _____
- Various iron workers _____
- Sun tanned bodies _____
- I.O.U.'s _____
- Toy baby with fish arms _____
- Trained to kill _____
- Lubricators _____
- Six rulers _____
- Opposite of ewe _____
- Class of Boy Scouts _____
- American Gauchos _____
- Loyal Team _____
- Credit card users _____
- Indian leaders _____
- King of beasts _____
- Team of tigers _____
- A dollar for corn _____
- Ocean going bird _____
- Hot epidermis _____
- Six shooters _____
- Rodeo horses _____
- Heavenly team _____
- Grumpy person _____
- Game at Al's _____



Teams:

Giants	Jets	Packers	Browns	Dolphins	Oilers
Rams	49'ers	Cowboys	Patriots	Raiders	Chargers
Chiefs	Steelers	Lions	Bengals	Bills	Bears
Buccaneers	Seahawks	Falcons	Redskins	Colts	Vikings
Eagles	Broncos	Saints	Cardinals		

Ultimate Frisbee Contest

Equipment: Five Ultimates (Frisbees)

1. Draw the course as shown.
2. The object of the game is to throw for accuracy.
Add up points after each boy takes his turn throwing.

TRAVELER

Activities:

- ❖ Visit a travel agency or automobile club office, and find out what they do.
- ❖ Make a map of your neighborhood area with a key and have a den member follow it.
- ❖ Calculate cost and speed of a plane trip.
- ❖ Visit a train depot, bus terminal or airport, to see inside operations.
- ❖ Discuss timetables and how to read them. Plan a trip using timetables.
- ❖ Have a speed contest of locating specific destination and how to get there.
- ❖ Teach proper packing of suitcase.
- ❖ Locate points of interest on city and state highway maps.
- ❖ Prepare a list of travel agencies and transportation media available in your area.
- ❖ Have the boys develop a set of rules for family travel (subject to parental approval) including such things as using seat belts, behavior, responsibilities, etc.
- ❖ Be sure to let boys report on family trips.
- ❖ Visit a historic site nearby and teach the boys to read street signs, traffic signs, how to spot landmarks, see if the boys can tell you where North, South, East, and West are while you are traveling
- ❖ Have the boys call the bus, train, and airport and ask the price of a ticket to Los Angeles, California or New York City, New York from the city they live in.
- ❖ Make games to take in car for long trips

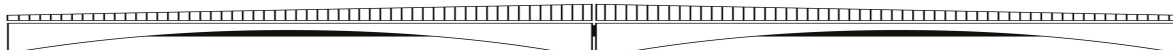
Safe Driving Tips For Families

- Allow enough time so you don't feel rushed. On long trips allow time for frequent stops.
- Have you car checked - tires, brakes, Lights, turn signals and wipers.
- Use seat belts - they save lives.
- Be alert to hazards - adjust driving speed accordingly.
- Use courtesy abundantly - everywhere - at intersections, while being passed or passing, and at night with headlights.
- Follow the rules of the road - signs, signals, and road markings for a safe trip.

Game

Match each of the states listed below with its state capitol. This is a good game.
Any number of states could be used.

	1. Utah	a. Helena
	2. Washington	b. Carson City
	3. California	c. Topeka
	4. Delaware	d. Santa Fe
	5. Montana	e. Atlanta
	6. Nevada	f. Olympia
	7. Kansas	g. Frankfort
	8. Georgia	h. Sacramento
	9. New Mexico	i. Dover.
	10. Kentucky	j. Salt Lake City



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Auto License Bingo.

Each player writes down 15 numbers on a sheet of paper. They may be any numbers from one to 99 and a player may list the same number several times. When everyone has written down his numbers, the umpire starts the game by calling out the last two digits on the license plate of each car that passes by. If the number called is on his sheet, the player draws a line through the lucky number and shows his sheet to the umpire. The one who crosses off five of the numbers first is the winner and calls "auto bingo" to claim victory.

Different Animals

Set a limit of 100 miles and see how many different animals you can observe in that distance. Make it a group project or keep score individually.

Loco Locations

A guessing game everyone in the car can play. "It" dreams up an unusual place to hide in the car (behind the rearview mirror, in the glove compartment, etc.) Then "it" asks, "Where am I in the guess becomes "it." Game can also be played at den meetings.

Automobile Relay

This is usually a pack event, but variations can make it usable for dens. For teams of eight players this is played like a relay race with the following variations: #1 has a flat tire, so he hops on his right foot. #2 has a flat tire, so he hops on his left foot. #3 can only go in reverse so he goes backwards. #4 has water in gas and goes two steps forward and one step backward. #5 must be cranked every fourth step, so he stops and cranks himself. #6 won't go, so #7 pushes him. #8 runs fine. Team to finish first wins.

Pretend Hide and Seek

Our player thinks of a place to pretend to hide in the car, such as "under the spare tire in the trunk" or "on top of the rearview mirror," and others try to guess the hiding place. The player who's "it" will tell them if they're getting warmer (guessing somewhere near the hiding place), or getting colder (guessing far away.)

My Name Is Alberta

The first player says, "My name is Alberta, and I came from Alabama with a load of artichokes." (Any names would be all right as long as they begin with A). The second player must repeat the sentence using B words, such as "My name is Bruce, and I came from Belgium with a load of bats." Go all the way through to Z.

Sphere of Influence Map

Mark the town where you live on a United States map using a different color pen for each group below, mark the map:

City where you were born

Other cities where you have lived

Cities you have visited

Cities where friends live

Cities about which you know one fact

You can now see how different towns play a part in your life. You'll probably be surprised to find out how far your influence reaches. Compare your map with the other Webelos in your den and find out how many cities you have in common.

Postcards

Most families have collected postcards as they traveled or have postcards received in the mail. Invite the boys to bring some postcards to the den meeting to show the other boys. Find the locations on the map.

Ways to Go

Divide den into two teams. In this relay the players are to travel from one end of the room to the other. Each team member must travel in a different way; however, the opposite team may use the same ideas.

Suggestions are: front rollovers, cartwheels, skipping rolling.



Map Study:

Divide den into small groups. Give each group a different state map. Ask them to complete the following questions in the next 15 minutes.

1. What is the state capital?
2. Name a town with population over 100,000 people.
3. Name a state park.
4. What is the name of the third town beginning with "H"?
5. What states are around the border of your map?
6. What is the mileage scale used on your map?
7. Name two towns, which have detailed city maps shown.
8. Name a town, park, or site of interest in area C-4.
9. Are there any towns that start with the letters "X" or "Z"?
10. List one interesting fact you found on your map.

When time is up, post a United States map on the wall. Ask the groups to come forward and point to their state. Let them tell the answers to a few of the questions depending how much time you have.

Air Route

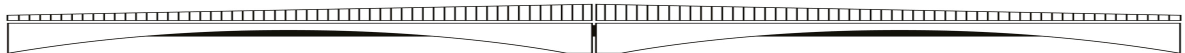
Players are seated in a circle. Each one is given the name of some city or airport. One player has no chair. He stands inside the circle and calls "All aboard for the plane from Oklahoma City to Boston." The two players representing the two cities must change seats. The caller tries to get a seat during the scramble. The player left without a seat becomes the caller. This is fun when the caller names a city that has not been assigned to anyone, thus causing confusion and excitement. Have each boy in turn name something that is found in a gas station. If a boy can't think of anything else or repeats something that has already been said, he is "out of gas" and out of the game until only one person is left and you can play it again.

How Much Per Mile?:

Webelos Woody's dad had offered to take him to the Nature Center to work on his Naturalist Activity Badge. Woody's father tells him that they could go by bus, taxicab, or he will drive the family car. The bus would cost \$1.50 each for Woody and his father. The taxicab would cost \$22.00 for both Woody and his father. The family car cost \$0.25 per mile to operate and the trip would require 2 gallons of gas at \$1.00 per gallon. Woody's father says that they can leave as soon as Woody figures out what it would cost per mile to travel to the Nature Center by bus, by taxicab, and by car. The Nature Center is 20 miles away. Answers: Bus \$0.15 per mile, Taxi cabs \$1.10 per mile, and car, \$0.35 per mile.

Find The Mystery City: Divide the den into two teams. Give each team captain a state highway map. Call out the names of various cities in the state and have the team locate them on the map. The first team to locate the city wins the round (win or lose, make sure both teams locate the town before moving on to the next). The team that locates the most towns first wins.

20 Questions: One person thinks of a person, place or thing for everyone else to identify. The rest of the family members may asked questions that can be answered "yes" or "no". If no one guesses after 20 questions have been ask, the person who thought of it has stumped the others and is declared the winner. Take turns presenting the mystery to be solved.

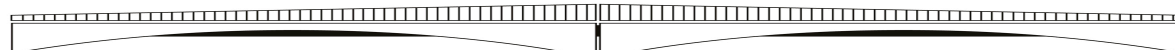


WEBELOS TO BOY SCOUTS TRANSITION HINTS

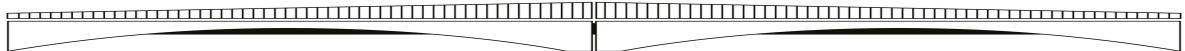
Hints for Webelos Leader

This is a list of points for a Webelos den leader to keep in mind to ensure a successful transition of scouts into a Boy Scout troop. The preparation begins before the Webelos program starts, but no matter where in the program you currently are, you can make changes to improve now.

1. Attend Webelos Den Leader training before you start your program.
2. Understand, believe in, and always use the Guide to Safe Scouting - always.
3. In the spring while your scouts are Bears, talk to the current Webelos leaders for ideas, suggestions, and advice.
4. Start your program in May or June for fourth grade Webelos to get all of them to Arrow Of Light and have opportunities to try every activity badge.
5. Plan ahead - make a schedule for the next 20 months, which activity badge for each month.
6. Remember the 5th grade program ends in February - they transition to Boy Scouts in March.
7. Share the load - have a sign-up sheet so every parent can lead one or two activity badges.
8. Have a Parent Meeting at the start of the program to explain differences between Cub Scouts, Webelos, and Boy Scouts and what you expect of them.
9. From the very start of the program, expect the boys to become Boy Scouts. Never say 'if', always say 'when' and keep them looking forward to being in a troop.
10. Plan outdoor badges like Naturalist and Outdoorsman to fall in prime outside seasons. Artist, Family Member, .. can be done more easily indoors.
11. It is important that boys experience camping before joining Boy Scouts. Start early to get boys ready for camping. Have backyard campouts.
12. A parent must be with a Webelos scout on all campouts, but the scouts can do all the work.
13. Keep the program going during the summer between 4th and 5th grade.
14. Fun summer activities like backyard campouts or campfires, hikes, swimming will give scouts a good taste of what to expect in Boy Scouts.
15. Encourage scouts to attend Webelos Camp before 4th and 5th grades.
16. Help scouts create duty rosters and menus for campouts. Healthy meals during Boy Scout camping is one of the bigger challenges so making the habits now is good.
17. Plan a service project for school, church, or community each summer.
18. Start presenting the requirements for 'joining Boy Scouts' early in the program and continually until they finish.
19. Keep your program outdoors as much as possible - a little rain or snow won't kill you.
20. Employ experts to present skills for more excitement and value, for example a retired Forest Ranger for Forester or Paramedic for Readyman.
21. Using a trained Den Chief from a local troop gives the scouts great exposure to what a Boy Scout is - get one!
22. Attend the Roundtable meetings to pick up information and ideas from others.
23. Meet the Scoutmasters of local troops. Arrange some visits for your scouts to see the Boy Scouts in action.
24. Work together on requirements to earn the Webelos badge. Try to have all scouts earn it and receive it at one pack ceremony.
25. After reaching the Webelos badge, transition to individual progress. Each scout is responsible for completing a badge, not all together as a den.
26. Make the scouts more and more responsible for the program, from leading games, to leading entire meetings, to planning the upcoming month's outings. As Boy Scouts, they will plan and execute their entire program.
27. Become thinking as a Patrol rather than a Den once everyone earns their Webelos badge. This is a good time to transfer to tan uniforms. The patrol also chooses a patrol name, emblem patch, patrol yell, and makes a patrol flag. These are all things they'll do in Boy Scouts too.
28. Proper insignia placement on the tan uniform is important - it will carry over to Boy Scouts.
29. Present EVERY activity badge. Get another adult to lead those that require different skills than what you have.
30. Offer a hike at least every other month.



31. Teach how to safely camp, and have the scouts CAMP often.
32. Teach how to safely cook, and have the scouts COOK often. Healthy, tasty, hot food is critical to success in scouting.
33. Teach how to safely use knives, and have the scouts USE them often. Every scout should have his Whittling Chip card.
34. Teach how to safely build fires, and have the scouts BUILD them often. A scout should build all campfires and you should have many fire-building contests.
35. Encourage inactive parents to participate. A successful scout needs the support of his parents.
36. Buy a Boy Scout Handbook for your reference, and to make your Webelos drool.
37. Ask a Boy Scout troop representative (scout and adult) to come to your den and tell you all about Boy Scouts.
38. Work with your Cubmaster to ensure a good AOL ceremony with Order of the Arrow participants.
39. Know which troops your scouts are going to so the Scoutmaster can be at the ceremony. Contact the Scoutmaster well before the ceremony and ask him to attend.



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