Webelos Activity Badge: Forester

How Old is It?
Look at a cross section of a tree.
1. Can you tell how old it was?
   - count the rings
2. Can you tell which years the growing conditions were more favorable?
   - where the rings are wider apart, there were better growing conditions
3. Can you tell if the tree was injured? What might have caused the injuries?
   - maybe the bark shows injuries, or there are depressions into the rings
   - injuries are caused by lightning, by breaking branches, by animals

Leaf Identification
Make a couple sets of tree leaves mounted on paper. If possible, include a seed or some bark of the tree as well. Wrap them in clear covering and they should last for many years so other dens in the pack can use them. After the participants have studied them, have a contest to see who can correctly identify the most.

Hiking Sticks
Find a good sturdy hardwood (birch, maple, oak, ash) branch about as tall as you. Personalize it with gadgets and trinkets. Ideas: compass mounted in top, leather handle or wristwrap through a hole drilled near the top, first aid items wrapped under fishing line or parachute cord or small rope or rubberbands, cut grooves at one end every inch for twelve inches, rubber tip to protect bottom

Measuring Tree Diameter & Height
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
1. Cut a strip of flexible paper or cardboard about 1/2" wide and 45" long.
2. Begin at one end of the strip and make ink marks 3.14" apart. Number these marks consecutively with 1 on the left end of the tape. (3.14" on tape = 1" of tree diameter)
3. To measure tree diameter, wrap the tape wound the tree at chest height (about 4.5' above ground). The diameter of the tree will be at the mark nearest where the tape overlaps the zero end.

Tree Height
1. Glue a strip of hard paper or cardboard on one side of a yardstick.
2. Begin at one end and make ink marks 6.15" apart.
3. Label the left-most mark 1 and continue numbering the ink marks consecutively.

To measure tree height, stand 66' from it. Hold your arm horizontally and the stick vertically at arm's reach (about 25" from the eyes). Slide the stick up or down until the top of the stick is in line with the top of the tree. Without moving yourself or the stick, sight the bottom of the tree on your stick. Be sure the stick is still vertical. The ink mark nearest the bottom sight of the tree is the number of 16' lengths in the tree. If the figure is 2, the tree is 32' high.

Webelos Activity: Forester

Play On Names
Match each statement on the left to the appropriate tree on the right.

_____	1. This tree comes in twos	A. Date
_____	2. This tree is nearest the sea	B. Aspen
_____	3. This tree is a romantic evening for 2	C. Locust
_____	4. This tree keeps you warm	D. Pear
_____	5. This tree was an Egyptian plague	E. Tulip
_____	6. The tree we offer when we shake hands	F. Beech
_____	7. This tree is used in kissing	G. Weeping
_____	8. This tree is always crying	H. Palm
_____	9. This tree is a Colorado ski slope	I. Fir

(Answers: 1-D 2-F 3-A 4-I 5-C 6-H 7-E 8-G 9-B)

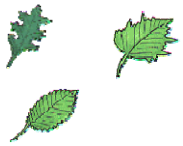
What Wood Would You Use?
Match the products to the appropriate tree on the right.

_____	1. baseball bats, tool handles	A. redwood
_____	2. furniture, lumber, barrels	B. black walnut
_____	3. paper, soft lumber (derby cars)	C. pines
_____	4. gunstocks, cabinets	D. maples
_____	5. bowling alley lanes	E. ashes
_____	6. lumber for outdoor decks	F. oaks

(Answers: 1-E 2-F 3-C 4-B 5-D 6-A)

Webelos Activity: Forester

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

Useful Wood Products from Trees
Write the letter of the wood product on the right, next to the correct tree variety on the left.

___ 1. Cedar	A. pulpwood for paper, lumber
___ 2. Redwood	B. lumber, turpentine, tar
___ 3. Long Leaf Pine	C. lumber, telephone poles
___ 4. Pecan, Oak, Ash	D. shingles
___ 5. White Pine	E. furniture
___ 6. Douglas Fir, Ponderosa Pine	F. weather-resistant lumber

(Answers: 1-D 2-F 3-B 4-E 5-A 6-C)

Lumber Production in the United States
Circle the correct answer in each set of braces {}.

1. The major { softwoods OR hardwods } are Douglas fir and Southern pines.
4. Production of lumber in the United States is { 15% OR 85% } from softwoods, { 15% OR 85% } from hardwoods.

(Answers: 1- softwoods 2- 85%; 15%)

Webelos Activity: Forester

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

(Answers: 1-Elder 2-Rubber 3-Orange 4-Walnut 5-Locust 6-Spruce
7-Oak 8-Apple 9-Pine 10-Sumac 11-Ash 12-Mesquite)

Forest Plants Useful to Wildlife
Match the forest plants to their best uses.

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

(Answers: 1-C 2-B 3-D 4-A 5-F 6-E)

Webelos Activity: Forester

Junior Forest Ranger Quiz

1. Campfire permits are required for: (a) indoor fireplaces (b) outdoor areas, depending on local laws, or (c) lighting Halloween pumpkins.

2. The safest way to start a campfire is with: (a) a pile of leaves (b) gasoline, or (c) small pieces of kindling wood.

3. The best place to ask where forest campfires can be built is: (a) sheriff's office (b) sporting goods store, or (c) ranger or fire warden stations.

4. When staying overnight in the forest, before going to bed you should: (a) place heavy logs on the fire (b) put out your campfire, or (c) arrange to get up every 2 hours to check the fire.

5. To cook properly over a campfire, you should: (a) cook over the flames of a large fire (b) build a small fire and cook over the embers, or (c) burn a lot of paper to make the fire hot.

6. The best way to put out a campfire is: (a) spread out the embers and cool with dirt or water (b) cover it with rocks, or (c) let it alone and it will burn itself out.

7. The best spot for a campfire is: (a) inside a rotten log or stump (b) under a green tree, or (c) in a cleared open space away from trees.

8. For camping or burning trash, the following is the most important and practical tool to carry in a car: (a) shovel (b) bucket of water, or (c) wet blanket.

9. If a fire gets out of hand, you should: (a) get your parents and run to your car and drive away (b) report it immediately to a forest ranger, or (c) get other Junior Forest Rangers to fight it.

10. If your clothes happen to catch on fire, you should: (a) keep calm, do not run - roll a blanket around you to smother the flames (b) run for help, or (c) jump up and down real fast.

11. Camp matches should be: (a) kept in a metal container (b) stored near outboard motor fuel, or (c) placed in the hot sun.

12. A person who is careless and starts a forest fire: (a) is made honorary fire chief (b) receives a fire prevention award, or (c) can be fined and sent to jail.

13. Well-managed forests give us: (a) Smokey Bear (b) wood, water, wildlife grass and outdoor fun, or (c) just lumber, paper and walnuts.

14. A match or cigarette thrown from a car window: (a) is permissible if no one is looking (b) is permissible if it looks like it has gone out, or (c) is never safe.

15. Before lighting an open fire: (a) people should leave the neighborhood (b) local fire laws should be checked and obeyed, or (c) drink three glasses of water.

(Answers: 1-b 2-c 3-c 4-b 5-b 6-a 7c 8-a 9-b 10a 11-a 12-c 13-b 14-c 15-b)

Webelos Activity Badge: Geologist

Making a Volcano
Using a small juice can as the crater, build a volcano. Use wadded newspaper to build up the sides of the hill and cover with paper mache (made from torn newspaper strips and liquid starch). Remember to put the can in at the start. When dry, paint it earth colors.

When ready for the demonstration, pour **4 Tbsp. of baking soda** into the can. Add **several drops of red food coloring** to **1/4 cup of vinegar** and pour this into the can. The volcano will erupt over the sides. (Be sure to have a protective covering over the table before beginning.)

Paleo Cookie Dig
Make a pan of rice krispy bars, but be sure to mix in some "finds:" M&Ms, peanuts, chocolate chips, sunflower seeds, etc. Don't put in an even amount of these and don't space them out evenly.

1. Explain that the concept of systematic investigation of an area of soil is dividing the area into squares called "quadrants". Now cut the pan of cookie bars into quadrants.
2. Give each participant a quadrant on a paper plate and ask him to carefully pick it apart using a toothpick. All parts of his quadrant should be grouped by type on their plate, e.g. all M&Ms together.
3. The rice krispys are also placed in a large pile (on the plate).
4. After digging apart their quadrants, have them count how many of each type of material is on their plate.
5. Construct a bar graph using circle stickers on a poster board grid.
6. Challenge them to analyze the graph to see if all the quadrants were the same or different.

Geological Formations
Supplies: 1/4 lb each of 4 colors of clay, knife, pencil
Try to demonstrate various geological formations as listed below.

A - Depositing the Layers - one layer on top of the previous
B - Folding the Layers - push in sides to make wavy formation
C - Eroding the Surface - cut off a layer or more; look at the cut edge sideview
D - Depositing More Layers - add another layer on top of uneven previous layer
E - Making an Intrusion - insert pencil at angle through the bottom, but not through top
F - Volcano Constructed - insert pencil all the way through, build up cratered "mountain"

Make Fossils
Press seashells firmly into common play-doh or clay. Carefully remove the shell and look at the pattern that remains. Many fossils are exactly like this but are preserved in rock.

A Sour Trick
1. Put a few drops of lemon juice on each of four different rocks.
2. Put a few drops of vinegar on each of the four other rock samples.
3. LOOK and LISTEN carefully each time you add the lemon juice or vinegar.

Lemon juice and vinegar both contain weak acids, which can dissolve rocks that contain calcium carbonate. The lemon juice and vinegar should have bubbled or fizzed on limestone, calcite, and chalk, which all contain calcium carbonate. There should be no reaction on quartz which does not contain calcium carbonate. Water often contains acids that dissolve rocks containing calcium carbonate and other minerals.

Webelos Activity: Geologist

Like a Rock

Use these words to fill in the blanks below.

volcanoes	mountains	geologist's hammer	magnifier
chisel	igneous rock	sedimentary rock	safety glasses
geyser	fossil	metamorphic rock	earthquake

_____ 1. Rock made by the cooling of magma; not layered; examples are granite and basalt.

_____ 2. Sediment that underwent great pressure becomes rock; it is layered; examples are sandstone, shale and conglomerate.

_____ 3. Baked rock or rock that has changed form; examples are marble and quartzite.

_____ 4. Used to pull rocks out of the hillside and for breaking them apart.

_____ 5. Used with a hammer to chip stone as well as for digging things loose.

_____ 6. These help protect eyes while digging and exploring.

_____ 7. This is a special type of glass that is used to make things appear larger so they can be examined more closely.

_____ 8. Holes in the ground through which streams of melted rock pour out of the earth; may form into a mountain peak.

_____ 9. Steam and boiling water that is blown into the air.

_____ 10. Rocks in one area (under great pressure from other rocks) that crack together and cause the phenomenon of "shaking" earth.

_____ 11. This land feature can be formed by volcanic action, erosion, or by uplift.

_____ 12. A trace of animal or plant life from millions of years ago that has hardened into rock.

(Answers: 1-igneous rock 2-sedimentary rock 3-metamorphic rock 4-geologist's hammer 5-chisel 6-safety glasses 7-magnifier 8-volcanoes 9-geyser 10-earthquake 11-mountains 12-fossil)

Webelos Activity: Geologist

Word Scramble
Unscramble these words that deal with geology.

_____ L O S F I S
_____ O A T M N U N I
_____ A Q E T E U K R A H
_____ Y E S R E G
_____ L O N O V A C
_____ F I E R M A G N I
_____ T A E F S Y - - - S S L G A E S
_____ E H I L C S
_____ 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

(Answers: fossil, mountain, earthquake, geyser, volcano, magnifier, safety glasses, chisel, hammer, metamorphic, sedimentary, igneous)

Minerals and Metals
Match the mineral or metal with its definition:

____	1. Gold	A.	metallic element resembling magnesium in making galvanized iron, alloys, and as an element in voltaic cells
____	2. Silver	B.	a ductile, malleable, silver-white metallic element - used for making machinery, tools
____	3. Zinc	C.	precious yellow metallic element, used in coins, decorations, etc.
____	4. Iron	D.	metallic element, light, reddish-brown color used as an electrical conductor - manufacturer or alloys such as brass and bronze
____	5. Lead	E.	steel gray, hard, light metallic element used in coppers - in springs
____	6. Copper	F.	white, ductile metallic element used in coins, ornaments, table utensils
____	7. Beryllium	G.	a heavy, malleable, bluish gray metal used in bullets

(Answers: 1-C, 2-F, 3-A, 4-B, 5-G, 6-D, 7-E)

Webelos Activity: Geologist

Geologists Study
Label each of the pictures with one of the words below.

Earthquake Damage Fault Geyser Stalactite Stalagmite
Igneous Rock Metamorphic Rock Sedimentary Rock Volcano

_____

_____

_____

_____

_____

_____

_____

_____

_____

(Answers: Row 1: Earthquake Damage, Stalactite, Volcano
Row 2: Metamorphic Rock, Igneous Rock, Sedimentary Rock
Row 3: Geyser, Fault, Stalagmite)

Webelos Activity Badge: Naturalist

Ideas for Den Meetings:

1. Make insect zoos or terrariums or bug cages.
2. Learn to identify poisonous plants and reptiles.
3. Make bird migration maps, using large USA maps. Then you can go bird watching and see how many species you can identify.
4. Take a nature hike and look for animal tracks. Take plaster casts of these.
5. Study wildlife homes.
6. Make various bird feeders, then observe which birds use them.
7. Have boys keep a nature notebook, jotting down discoveries on field trips.
8. Make a list of all plants in a given area.
9. Visit a zoo or nature exhibit.
10. Make a leaf and nut collection.
11. Make an ant farm.
12. Invite a conservationist to a den meeting to talk about some aspect of nature.
13. Collect tadpoles to keep in an aquarium. Help them grow.
14. Make nature observation calendars and have boys write down something they observe about nature each day.

Terrarium

Materials: 1 gallon glass jar Gravel, marbles, aquarium gravel, etc.
Purchased potting soil 3 small bedding plants
Option: Small glass/china/resin figure of your choice

Place a 1/2" layer of gravel in the bottom of your jar. Add a thick layer (approx. 5") of potting soil. Remove the plants from plastic container. If in a "peat" container plant the whole thing. Place your plants into the potting soil at the same depth they were growing in the container. Gently pat the soil so there is good contact. Very gently add water to your soil so the soil is just damp. Place it in a window that gets the morning sun and watch the plants grow.

Fieldtrips!

- Hikes
- Zoo
- DeSoto Bend
- Woods
- Parks
- Country Meadows

Webelos Activity: Naturalist

Scrambled Eggs
Unscramble these names of birds.

Y A N C R A	_____	N E W R	_____
K E D I A C E H C	_____	C U D K	_____
N A I L C R A D	_____	A W N S	_____
A C C E K O P	_____	R O T K S	_____
A R K E P A T E	_____	R O O L I E	_____
Y A L E J U B	_____	L A G E E	_____
H E N C C I K	_____	B O I R N	_____
I L O M F N A G	_____	S O G E O	_____
N U T C A O	_____	S I B I	_____
G N P N E I U	_____	E Y R U T K	_____

(Answers: Canary, Wren, Chickadee, Duck, Cardinal, Swan, Turkey, Stork, Parakeet, Oriole, Bluejay, Eagle, Chicken, Robin, Flamingo, Goose, Toucan, Ibis, Penguin, Peacock)

Rare Bird Facts
Fill in the correct answer(s).

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: 1-Swifts 2-3,000 ft. 3-Western Meadowlark 4-Passenger Pigeon 5-incubate eggs
6-Cardinal, Oriole, Bluejay 7-Hummingbirds 8-Stork 9-Trumpet Swan
10-Bee Hummingbird 11-Kiwi, Penquin, Ostrich 12-Blue!)

Webelos Activity: Naturalist

Naturalist Categories

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. Then, compare answers with the others.

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

Webelos Activity: Naturalist

Naturalist Quiz

Circle the one correct answer for each question.

1. All birds have:
   a. feathers b. two legs c. teeth

2. An annual flower blooms:
   a. every year b. twice a year c. only once

3. A monsoon is a:
   a. flower b. animal c. wind

4. In a hive, the worker bees are called:
   a. drones b. workers c. queen bees

5. A starfish has:
   a. three arms b. four arms c. five or more arms

6. A salamander is a:
   a. shrub b. amphibian c. fish

7. A snake's shedding of its skin is called:
   a. pelting b. molting c. sloughing

8. A geyser is a volcano of boiling:
   a. water b. oil c. lava

9. Rats belong to the family of:
   a. felines b. rodents c. reptiles

10. Watering soil to make it fertile is called:
    a. rotation b. selection c. irrigation

11. A fungus is:
    a. tropical tree b. plant growth c. wild animal

12. A whale is a:
    a. fish b. amphibian c. mammal

Score:
10-12 right - Super Naturalist
7-9 right - Almost made it
4-6 right - Read your Webelos book
1-3 right - Back to the backyard for you

(Answers: 1-feather 2-only once 3-wind 4-workers 5-5 or more 6-amphibian 7-sloughing 8-water 9-rodents 10-irrigation 11-plant growth 12-mammal)

Webelos Activity Badge: Outdoorsman

Pack Your Backpack
Pack a backpack with TONS of stuff. Have the boys evaluate what should and shouldn't go in it. Sleeping bag or bedroll, blanket, fresh batteries & flashlight, poncho or raingear, comfortable shoes or boots, warm clothes, coat, hat that covers ears, soap, washcloth, towel, toothbrush & toothpaste, knife & fork & spoon, mess kit including cup, toilet paper, personal first-aid kit, Webelos handbook

Fun Tents
Take some heavy trash bags and cut them into miniature "tents". Each team of two boys gets "stakes" and a "tent" and some thin rope. They have to pitch their tent FIRMLY and SECURELY using sheet bends, two half hitches and clove hitches, as appropriate. You might need to make a knot guide available nearby. If they aren't familiar enough with the knots, you can offer to tie one for them, but ask them to be very positive about which knot it should be.

Inexpensive Cold Weather Sleeping Mat
Stuff two large heavy duty plastic garbage bags with crumpled up newspaper balls. Leave room to tie off the bag. Remove excess air and flatten the bag to make an insulated sleeping mat. An extra blanket can be wrapped around it burrito style and pinned if you tend to slide off.

Hands-on Experience
Ask one buddy team to set up a firelay. Ask a second team to light it. Ask a third team to extinguish it in the proper manner and clean up the area. If wood fires are not permitted, show how to lay and start a charcoal fire in a grill.

Folding Your Foil Food Pack
1. Use a large square of heavy-duty aluminum foil.
2. Place food items in the center. Be sure to put the foods that require longer cooking time on the bottom (potatoes, carrots)
3. Fold one side up over top of the food. Fold up opposite side over the top of the food.
4. Roll up the remaining ends toward the center.
5. Mark your foil pouch with a marker.

Edible Fire
Teach the art of fire building by letting the participants make an edible fire. Make sure you OK the fire before they consume it! Use frosting to assemble one of the following lists into an edible fire:

Large cookie = base
Peanut M&Ms = rock ring
Potato Sticks = kindling
Pretzel Sticks = logs
Candy Corn = fire
Tootsie Rolls = fuel wood
Granola = dirt
Small cups = water buckets

Napkin = base
Small Marshmallows = fire ring
Flaked Coconut = kindling
Red Hots or Raisins = coals
Candy Corn = fire
Pretzel Sticks = logs
Small cup Kool-Aid = water to put out fire

Webelos Activity: Outdoorsman

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

Square Knot	Tautline Hitch	Clove Hitch
Sheet Bend	Bowline	Two Half Hitches

_____ 1. For tightening and loosening a rope easily and on guy lines.

_____ 2. For tying a rope to a post or ring; it's strong but easy to loosen.

_____ 3. For tying a rope to a tree or post.

_____ 4. Used if you want a loop that will not slip or close up; used for rescue work.

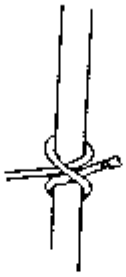
_____ 5. For tying two ropes together and for tying bandages in first aid.

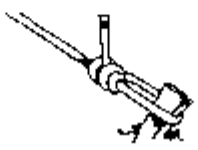
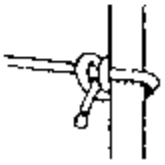
_____ 6. For tying two ropes together, especially when one is thicker than the other.

(Answers: 1-Tautline Hitch 2-Two Half Hitches 3-Clove Hitch 4-Bowline 5-Square Knot 6-Sheetbend)

Forget-Me "Knots"
Match the knot picture to the knot name.

Square Knot	Taut-line Hitch	Clove Hitch
Sheet Bend	Bowline	Two Half Hitches

(Answers: Top Row: Bowline, Clove Hitch, Sheetbend; Bottom Row: Square Knot, Tautline Hitch, Two Half Hitches)

Webelos Activity: Outdoorsman

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 be 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 _____, 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. Use _____ and branches as a blanket to shelter yourself.
10. 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.

(Answers: 1-head 2-sheltered 3-fire 4-dry 5-wander 6-signal 7-run 8-nightfall 9-hole 10-leaves)

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 fire 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.

(Answers: 1-F 2-T 3-F 4-T 5-F 6-T 7-F 8-T)

Webelos Activity: Outdoorsman

Wood for Campfires
There are three kinds of wood used to build a fire. Use the following key to decode them.

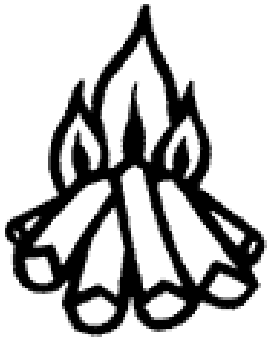
D	E	F	G	I	K	L	N	R	T	U
$	@	%	?	*	<	+	&	=	-	#

1. ___ ___ ___ ___ ___ ___
   - * & $ @ =

2. ___ ___ ___ ___ ___ ___ ___ ___
   < * & $ + * & ?

3. ___ ___ ___ ___
   % # @ +

(Answers: 1-Tinder 2-Kindling 3-Fuel)



Types of Wood
Fill in the blanks with the appropriate answer from the above puzzle.

1. _____ can be anything that is light and dry and not thicker than a match. Make little bundles of tiny twigs.

2. _____ should snap when broken. In general, dead branches from lower limbs of trees are best to use. Sticks lying on the ground could be damp.

3. _____ includes sticks that are not green. Use these only after a hot fire is started.

Just For Your Information
- Wood that crumbles is rotten. It will smolder and smoke without giving off heat.
- Split wood burns well. The inside of a log is drier than the outside.
- Softwood (produced by trees that grow quickly such as pines, spruces, cedars, gray birch, aspen) burns quickly. It is good for starting fires or for quick, hot fires. It does not leave good coals.
- Hard wood (produced by trees that grow slowly such as oaks, hickories, yellow birch, maples, and ash) burns slowly. It leaves good coals that will last.

Webelos Activity: Outdoorsman

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, poison 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
_____ Legal (no "No Trespassing" signs)
_____ Safe from flash floods (buffalo stampedes)
_____ Well supplied with water for drinking, swimming, fishing, boating and even washing

(Answer: If you could find a campsite that offers/provides ALL the above, you've probably found heaven on earth. This is a good discussion tool for getting the boys to think about where/how they want to camp.)