

BEAR SCOUT ELECTIVES

1. SPACE

- a. Identify two constellations and the North Star in the night sky.
- b. Make a pinhole planetarium and show three constellations.
- c. Visit a planetarium.
- d. Build a model of a rocket or space satellite.
- e. Read and talk about at least one man-made satellite and one natural one.
- f. Find a picture of another planet in our solar system. Explain how it is different from Earth.

2. WEATHER

- a. Learn how to read an outdoor thermometer. Put one outdoors and read it at the same time every day for two weeks. Keep a record of each day's temperature and a description of the weather each day (fair skies, rain, fog, snow, etc.).
- b. Build a weather vane. Record wind direction every day at the same hour for two weeks. Keep a record of the weather for each day.
- c. Make a rain gauge.
- d. Find out what a barometer is and how it works. Tell your den about it. Tell what 'relative humidity' means.
- e. Learn to identify three different kinds of clouds. Estimate their heights.
- f. Watch the weather forecast on TV every day for two weeks. Describe three different symbols used on weather maps. Keep a record of how many times the weather forecast is correct.

3. RADIO

- a. Build a crystal or diode radio. Check with your local craft or hobby shop or the nearest Scout shop that carries a crystal radio kit. It is all right to use a kit.
- b. Make and operate a battery powered radio, following the directions with the kit.

4. ELECTRICITY

- a. Wire a buzzer or doorbell.
- b. Make an electric buzzer game.
- c. Make a simple bar or horseshoe electromagnet.
- d. Use a simple electric motor.
- e. Make a crane with an electromagnetic lift.

5. **BOATS**

- a. Help an adult rig and sail a real boat. (Wear your PFD.)
- b. Help an adult repair a real boat or canoe.
- c. Know the flag signals for storm warnings.
- d. Help an adult repair a boat dock.
- e. With an adult on board, and both wearing PFDs, row a boat around a 100-yard course that has two turns. Demonstrate forward strokes, turns to both sides, and backstrokes.

6. **AIRCRAFT**

- a. Identify five different kinds of aircraft, in flight if possible, or from models or photos.
- b. Ride in a commercial airplane.
- c. Explain how a hot air balloon works.
- d. Build and fly a model airplane. (You may use a kit. Every time you do this differently, it counts as a completed project.)
- e. Sketch and label an airplane showing the direction of forces acting on it (lift, drag, and load).
- f. Make a list of some of the things a helicopter can do that other kinds of airplanes can't. Draw or cut out a picture of a helicopter and label the parts.
- g. Build and display a scale airplane model. You may use a kit or build it from plans.

7. **THINGS THAT GO**

- a. With an adult's help, make a scooter or a Cubmobile. Know the safety rules.
- b. With an adult's help, make a windmill.
- c. With an adult's help, make a waterwheel.
- d. Make an invention of your own design that goes.

8. **CUB SCOUT BAND**

- a. Make and play a homemade musical instrument - cigar-box banjo, washtub bull fiddle, a drum or rhythm set, tambourine. etc.
- b. Learn to play two familiar tunes on any musical instrument.
- c. Play in a den band using homemade or regular musical instruments. Play at a pack meeting.
- d. Play two tunes on any recognized band or orchestra instrument.

9. ART

- a. Do an original art project and show it at a pack meeting. Every project you do counts as one requirement
Here are some ideas for art projects:
Mobile or wire sculpture, Silhouette, Acrylic painting, Watercolor painting, Collage, Mosaic, Clay sculpture, Silk screen picture.
- b. Visit an art museum or picture gallery with your den or family.
- c. Find a favorite outdoor location and draw or paint it.

10. MASKS

- a. Make a simple papier-mâché mask.
- b. Make an animal mask.
- c. Make a clown mask.

11. PHOTOGRAPHY

- a. Practice holding a camera still in one position. Learn to push the shutter button without moving the camera. Do this without film in the camera until you have learned how. Look through the viewfinder and see what your picture will look like. Make sure that everything you want in your picture is in the frame of your viewfinder.
- b. Take five pictures of the same subject in different kinds of light.
 1. Subject in direct sun with direct light.
 2. Subject in direct sun with side light.
 3. Subject in direct sun with back light.
 4. Subject in shade on a sunny day.
 5. Subject on a cloudy day.
- c. Put your pictures to use.
 1. Mount a picture on cardboard for display.
 2. Mount on cardboard and give it to a friend.
 3. Make three pictures that show how something happened (tell a story) and write a one sentence explanation for each.
- d. Take a picture in your house.
 1. With available light.
 2. Using a flash attachment or photoflood (bright light).

12. NATURE CRAFTS

- a. Make solar prints of three kinds of leaves.
- b. Make a display of eight different animal tracks with an eraser print.
- c. Collect, press, and label ten kinds of leaves.
- d. Build a waterscope and identify five types of water life.

- e. Collect eight kinds of plant seeds and label them.
- f. Collect, mount, and label ten kinds of rocks or minerals.
- g. Collect, mount, and label five kinds of shells.
- h. Build and use a bird caller.

13. MAGIC

- a. Learn and show three magic tricks.
- b. With your den, put on a magic show for someone else.
- c. Learn and show four puzzles.
- d. Learn and show three rope tricks.

14. LANDSCAPING

- a. With an adult, help take care of your lawn or flower beds or help take care of the lawn or flower beds of a public building, school, or church. Seed bare spots. Get rid of weeds. Pick up litter. Agree ahead of time on what you will do.
- b. Make a sketch of a landscape plan for the area right around your home. Talk it over with a parent or den leader. Show which trees, shrubs and flowers you could plant to make the area look better.
- c. Take part in a project with your family, den, or pack to make your neighborhood or community more beautiful. These might be having a cleanup party, painting, cleaning and painting trash barrels, and removing weeds. (Each time you do this differently, it counts as a completed project.)
- d. Build a greenhouse and grow twenty plants from seed. You can use a package of garden seeds, or use beans, pumpkin seeds, or watermelon seeds.

15. WATER AND SOIL CONSERVATION

- a. Dig a hole or find an excavation project and describe the different layers of soil you see and feel. (Do not enter an excavation area alone or without permission.)
- b. Explore three kinds of earth by conducting a soil experiment.
- c. Visit a burned-out forest or prairie area, or a slide area, with your den or your family. Talk to a soil and water conservation officer or forest ranger about how the area will be planted and cared for so that it will grow to be the way it was before the fire or slide
- d. What is erosion? Find out the kinds of grasses, trees, or ground cover you should plant in your area to help limit erosion.
- e. As a den, visit a lake, stream, river, or ocean (whichever is nearest where you live). Plan and do a den project to help clean up this important source of water. Name four kinds of water pollution.

16. FARM ANIMALS

- a. Take care of a farm animal. Decide with your parent the things you will do and how long you will do them.
- b. Name and describe six kinds of farm animals and tell their common uses.
- c. Read a book about farm animals and tell your den about it.
- d. With your family or den, visit a livestock exhibit at a county or state fair.

REPAIRS

- a. With the help of an adult, fix an electric plug or appliance.
- b. Use glue or epoxy to repair something.
- c. Remove and clean a drain trap.
- d. Refinish or repaint something.
- e. Agree with an adult in your family on some repair job to be done and do it. (Each time you do this differently, it counts as a completed project.)

BACKYARD GYM

- a. Build and use an outdoor gym with at least three items from this list.
 1. Balance board
 2. Trapeze
 3. Tire walk
 4. Tire swing
 5. Tetherball
 6. Climbing rope
 7. Running long jump area.
- b. Build three outdoor toss games.
- c. Plan an outdoor game or gym day with your den. (This can be part of a pack activity). Put your plans on paper.
- d. Hold an open house for your backyard gym.

SWIMMING Always have an adult with you who can swim.

- a. Jump feet first into water over your head, swim 25 feet on the surface, stop, turn sharply, and swim back.
- b. Swim on your back, the elementary backstroke, for 30 feet.
- c. Rest by floating on your back, using as little motion as possible for at least one minute.
- d. Tell what is meant by the buddy system. Know the basic rules of safe swimming
- e. Do a racing dive from edge of pool and swim 60 feet, using a racing stroke. (You might need to make a turn.)

SPORTS

- a. In archery, know the safety rules and how to shoot correctly. Put six arrows into a 4-foot target at a distance of 15 feet. Make an arrow holder. (This can be done only at a district/council day or resident or family camp.)
- b. In skiing, know the Skier's Safety and Courtesy Code. Demonstrate walking and kick turn, climbing with a side step or herringbone, a snowplow stop, a stem turn, four linked snowplow or stem turns, straight running in a downhill position or cross-country position, and how to recover from a fall.
- c. In ice skating, know the safety rules. From a standing start, skate forward 150 feet; and come to a complete stop within 20 feet. Skate around a corner clockwise and counterclockwise without coasting. Show a turn from forward to backward. Skate backward 50 feet.
- d. In track, show how to make a sprint start. Run the 50-yard dash in 10 seconds or less. Show how to do the standing long jump, the running long jump, or high jump. (Be sure to have a soft landing area.)
- e. In roller skating (with conventional or in-line skates), know the safety rules. From a standing start, skate forward 150 feet; and come to a complete stop within 20 feet. Skate around a corner clockwise and counterclockwise without coasting and show a turn from forward to backward. Skate backward 50 feet. Wear the proper protective clothing.
- f. Earn a new Cub Scout Sports pin. (Repeat three times with different sports to earn up to three Arrow Points.)

SALES

- a. Take part in a council- or pack-sponsored, money-earning sales program. Keep track of the sales you make yourself. When the program is over, add up the sales you have made.
- b. Help with a garage sale or rummage sale. This can be with your family or a neighbor, or it can be a church, school, or pack event.

COLLECTING THINGS

- a. Start a stamp collection. You can get information about stamp collecting at any U.S. post office.
- b. Mount and display a collection of emblems, coins, or other items to show at a pack meeting. This can be any kind of collection. Every time you show a different kind of collection, it counts as one requirement.
- c. Start your own library. Keep your own books and pamphlets in order by subject. List the title, author, and subject of each on an index card and keep the cards in a file box, or use a computer program to store the information.

MAPS

- a. Look up your state on a U.S. map. What other states touch its borders?
- b. Find your city or town on a map of your state. How far do you live from the state capital?
- c. In which time zone do you live? How many time zones are there in the U.S.?
- d. Make a map showing the route from your home to your school or den meeting place.
- e. Mark a map showing the way to a place you would like to visit that is at least 50 miles from your home.

AMERICAN INDIAN LIFE

- a. American Indian people live in every part of what is now the continental United States. Find the name of the American Indian nation that lives or has lived where you live now. Learn about these people.
- b. Learn, make equipment for, and play two American Indian or other native American games with members of your den. Be able to tell the rules, who won, and what the score was.
- c. Learn what the American Indian people in your area (or another area) used for shelter before contact with the Europeans. Learn what American Indian people in that area used for shelter today. Make a model of one of these shelters, historic or modern. Compare the kind of shelter you made with the others made in your den.

Let's Go Camping

- a. Learn about the ten essential items you need for a hike or campout. Assemble your own kit of essential items. Explain why each item is 'essential.'
- b. Go on a short hike with your den, following the buddy system. Explain how the buddy system works and why it is important to you to follow it. Tell what to do if you are lost.
- c. Participate with your den in front of the pack at a campfire.
- d. Participate with your pack on an overnight campout. Help put up your tent and help set up the campsite.
- e. Participate with your den in a religious service during an overnight campout or other Cub Scouting event.
- f. Attend day camp in your area.
- g. Attend resident camp in your area.
- h. Earn the Cub Scout Leave No Trace Award.