PARK DISTRICT
of OAK PARK

# Girl Scout Badges

## Daisy

**Petals**
Considerate and Caring
Use Resources Wisely
Make the World a Better Place

**Badges**
Buddy Camper*
Eco Learner
Mechanical Engineering (Badges 1-3)
Outdoor Art Maker
Robotics (Badges 1-3)
Snow Adventure
Space Science Explorer
STEM Career Exploration
Trail Adventure

## Brownie

Bugs
Eco Friend
First Aid*
Girl Scout Way
Outdoor Adventurer
Outdoor Art Creator
Pets
Space Science Adventurer
STEM Career Exploration
Trail Adventure*

## Junior

Eco Camper*
First Aid*
Flowers
Space Science Investigator
STEM Career Exploration
Trail Adventure*

## Cadette

Archery
Comic Artist
Eco Trekker*
Girl Scout Way
Good Sportsmanship
Outdoor Art Apprentice
Trees

## Senior

Adventure Camper*
Collage Artist
Game Visionary
Girl Scout Way
Science of Style
Sky
Space Science Expert
Voice for Animals

## Ambassador

Eco Advocate
Outdoor Art Maker
Public Policy*
STEM Career Exploration*
Space Science Master*
Survival Camper*

*On these badges, we can get you almost all the way there! Contact us for more information

PARK DISTRICT
of OAK PARK

# Cub Scout Badges

## Lion

Build It Up, Knock It Down
Champions for Nature
Fun on the Run
Gizmos and Gadgets
Let's Camp*
Mountain Lion
Pick My Path

## Bear

Bear Habitat
Balancing Bears
Champions for Nature
Forensics
Let's Camp*
Super Science

## Tiger

Champions for Nature
Curiosity, Intrigue, and Magical Mysteries
Designed by Tiger
Floats and Boats
Good Knights
Let's Camp*
Stories in Shapes
Tiger Bites
Tigers in the Wild

## Webelos

Art Explosion
Aware and Care
Champions for Nature
Chef's Knife
Earth Rocks
Let's Camp*
Math on the Trail
My Safety
Tech on the Trail
Yo-Yo
Webelos Walkabout

## Wolf

Adventures in Coins
Air of the Wolf
Champions for Nature
Code of the Wolf
Cubs Who Care
Digging in the Past
Finding Your Way
Germs Alive!
Let's Camp*
Paws on the Path
Running With the Pack
Spirit of the Water

## Arrow of Light

Estimations
Engineer
First Aid
High Tech Outdoors
Into the Wild
Into the Woods
Knife Safety

*On these badges, we can get you almost all the way there! Contact us for more information

# Camp Fire Activity Beads

## Trail to Knowing Me

### Fun & Games

- **KM100** - Learn and play two active group games.
- **KM101** - Learn and Play two new relay games.
- **KM102** - Learn and play two new games from other countries.
- **KM103** - Learn, play, and teach a game that could be played by a blind or deaf person.
- **KM107** - Learn, play, and teach two new clapping or hand motion games.
- **KM108** - Learn, play, and teach two new string games.
- **KM109** - Learn, play, and teach two new memory or chanting games.
- **KM110** - Learn and paly two games using any kind of ball.
- **KM113** - Learn two new techniques solo jump rope techniques.
- **KM114** - Learn and practice two new group jump rope techniques.
- **KM115** - Learn and practice two new jump rope chants.
- **KM121** - Learn about three different styles of kites, how they are constructed, and what makes them fly.
- **KM122** - Construct and fly a kite.
- **KM123** - Build two models from kits.
- **KM129** - Play two games in the snow, such as “fox and geese” or “statues”.
- **KM132** - Learn the rules and scoring for a board game such as chess, checkers, cribbage, or backgammon. Play several games.
- **KM133** - Learn the rules and scoring for a card game requiring more than one person. Play the game.
- **KM139** - Create a game board and pieces that can be used for chess, checkers, or backgammon.

### Water Fun

- **KM168** - Learn and demonstrate how to tie on a hook, sinker, and bobber.
- **KM169** - Make two types of artificial bait.
- **KM171** - Learn and explain the fishing laws in your area.

# Camp Fire Activity Beads

## Trail to Knowing Me

### Safety First

- **KM221** - Make a chart with emergency numbers.
- **KM233** - Learn what items should be stocked in a first aid kit. Explain what each item is for.
- **KM238** - Show how to take care of yourself in different kinds of weather. Include heat exhaustion/stroke and hypothermia.
- **KM246** - Learn how to use a thermometer to take a person's temperature.
- **KM247** - Put together an activity box for a young child who is confined to bed. Have it checked for safety and give it to the child.

### Look at Me

- **KM267** - Collect pictures of different hairstyles you like using drawings, photos, or collage. Include styles for all genders.
- **KM270** - Plan a wardrobe by collaging magazine and newspaper pictures. Estimate the cost of your wardrobe.
- **KM276** - Show different ways to protect your skin in different kinds of weather and why it is important to avoid overexposure.
- **KM277** - Learn about UV protection. Use the protection that is best for your skin type.

### My Family & Me

- **KM328** - Prepare an Identification Card for yourself, including emergency contacts, blood type, and any special medical problems.
- **KM329** - Find out how fingerprints are taken and what fingerprinting is used for. With your group, take your own fingerprints.

### The World

- **KM360** - Learn how to say five useful phrases in three different languages. Or, learn a song from another culture.
- **KM361** - Learn about the flags of several foreign countries. Show models or pictures of the flags to your group.
- **KM369** - Find out about a hero from another culture.

# Camp Fire Activity Beads

## Trail to Family and Community

### My Family

- **FC101** - Draw and cut out a paper doll that looks like each member of your family. Share these with family members.
- **FC102** - Write a poem. Express how you feel about your family in your poem. Share it with your family.
- **FC103** - Make a collage to acknowledge the achievements of your family members.
- **FC106** - Make and decorate a bulletin board, so your family can use it as a message center in your home.
- **FC108** - Make and decorate a calendar or book of family birthdays or special events.
- **FC109** - Design a family shield that tells something about your family. Use your shield on the cover of a card or thank you note.
- **FC116** - Think about the rights you believe children should have. Write your own personal Bill of Rights and find out how many are included in laws.

### My Community

- **FC214** - Discover which places in your community got their names from Indigenous American words. Learn which language they're from and their meaning.

### My State and My Country

- **FC242** - Draw a map of your state. Show points of interest on it.
- **FC243** - Draw a picture of your state flag. Tell what the colors, designs, and symbols on the flag mean.
- **FC244-247** - Find out who represents you: your state government, the U.S. House of Representatives, the U.S. Senate, your state governor or the U.S. President. Write a letter to each of them. State your ideas on an issue you think is important.
- **FC249** - Explain the meaning behind five symbols used by the United States on its flag, in its seal, or on its currency.
- **FC252** - Learn when Illinois became a state. Find out the names of the state bird, flower, and tree. Learn the state motto, song, and nickname.

# Camp Fire Activity Beads

## Trail to Creativity

### Picture and Paints

- **TC100** - Make a drawing for a repeat design, such as snowflakes, dolls, symbols, or flowers. Use it as a border on stationery.
- **TC101** - Paint a picture to explain different feelings and emotions without trying to make a picture.
- **TC102** - Create a message using symbols.
- **TC103** - Create a picture using colored sand or salt.
- **TC104** - Finger paint a picture or use a sponge instead of a brush.
- **TC105** - Make several designs using splatter paint,. Or, use ink/watercolors to make several blow paintings.
- **TC106** - Make a chalk drawing using one of the following methods: chalk on rough paper, on wet paper, or chalk dipped in buttermilk.
- **TC107** - Decorate an object with paint using a design typical of another country.
- **TC108** - Draw or paint a landscape, seascape, building, or street scene.
- **TC109** - Make sun prints using cyanotype paper. Experiment with different objects to make different designs.
- **TC110** - Make a crayon rubbing from a sculpture, piece of tile, or other textured surface.
- **TC111** - Make several ink sketches on moistened paper.
- **TC112** - Make sketches of scenes from your life using crayons, watercolors, pencil, charcoal or chalk pastel.
- **TC114** - Make and decorate one or more of these: a washable cover for a book, a bound recipe collection, labels for several containers or a family bulletin board.
- **TC115** - Make a holiday decoration such as a Christmas ornament, Easter eggs or a Hanukkah toy.
- **TC116** - Blow out the contents of an egg. Decorate the shells, using paint, crayon, glue and glitter or designs cut from paper.
- **TC117** - Decorate a piece of kitchen equipment such as a knife rack, canister set, breadbox, storage canisters or tray. Use paints, varnish, decoupage or stencils.
- **TC118** - Draw and cut out a paper doll that looks like you. Color or paint your paper doll and make some clothes for it.
- **TC119** - Make a map of an area you know well and color it. You could make a map of your neighborhood or a campsite.
- **TC120** - Draw and paint a familiar landscape such as your home, school, park or camp. Use acrylic, oil or tempera paints.
- **TC124** - Paint or decorate an article for outdoor use, such as a birdhouse or a lawn sign.

PARK DISTRICT
of OAK PARK

# Camp Fire Activity Beads

## Trail to Creativity

### Fiber Fun

- **TC152** - Make decorations for a party by wrapping string dipped in paste or liquid starch around balloons.
- **TC153** - Tie-dye a fabric article such as a shirt, curtain, tablecloth, scarf or napkin. Use at least two colors.
- **TC154** - Use a simple off-loom weaving method to make something such as a mat, basket, sit-upon or wall hanging.
- **TC155** - Weave an item using a loom such as cardboard, soda straw, or flat frame.
- **TC156** - Braid or knot cord to make an article such as a belt, bag, plant hanger or lanyard.
- **TC157** - Create a design. Embroider and/or appliqué it on an item such as a place mat, apron, dishtowel, baby blanket or wall hanging.
- **TC158** - Using a knitting spool, create an article such as a potholder, a mat or a bag.
- **TC160** - Stitch a design in needlepoint, petit point, bargello or crewel embroidery on an article such as a bag, book cover or pillow.
- **TC162** - Embroider or appliqué a decorative design on a piece of clothing.
- **TC163** - Make a needlework project from a kit. This might be stitchery, needlepoint or cross-stitch.
- **TC164** - Piece together scraps of materials in a pleasing design to make a quilt block, patchwork pillow or doll blanket.
- **TC168** - Demonstrate how to string a loom.
- **TC169** - Use surface printing— batik, tie-dye, silkscreen or direct dye—to make a design on a tee shirt, placemat, napkin, scarf or curtain.
- **TC170** - Dye a piece of fabric using natural dye made from berries, plants, animal fats or other natural material.

PARK DISTRICT
of OAK PARK

# Camp Fire Activity Beads

## Trail to Creativity

### A Stitch in Time

- **TC176** - Thread a needle and knot the thread. Use a thimble when doing hand sewing. Do this several times.
- **TC177** - Learn how to correctly sew buttons, hooks and eyes, and snaps onto clothes.
- **TC178** - Demonstrate the hand basting stitch, whip stitch and slip stitch. Explain when you should use each.
- **TC179** - Adjust the hem of a skirt or pants using hand stitching.
- **TC180** - Name and describe the different parts of a sewing machine to someone.
- **TC181** - Demonstrate the following skills in operating a sewing machine: winding the bobbin, threading the machine, adjusting the length of stitch, starting and stopping, stitching in reverse.
- **TC182** - Machine stitch on a straight line and a curve. Turn corners and show how to finish a line of stitching so it will not unravel.
- **TC186** - Lay, pin and cut a garment from a pattern.
- **TC187** - Baste a sewing project. Use pins, hand stitching or machine basting.
- **TC188** - Sew a piece of clothing. Use the sewing machine and hand sewing skill you have learned.
- **TC190** - Learn how to do one of the following jobs: fix a broken zipper, patch a hole or tear, or sew together a split seam
- **TC191** - Research the history of quilts and quilting. Create at least one quilt design.

PARK DISTRICT
of OAK PARK

# Camp Fire Activity Beads

## Trail to Creativity

### Paper and Prints

- **TC196** - Cut a design in a potato or carrot. Use it for block printing.
- **TC197** - Cut basic symbol designs out of felt, a sponge or an old rubber inner tube. Mount them on blocks. Use them to print an allover pattern.
- **TC198** - Make a picture using pieces of torn, colored construction paper or string and paint.
- **TC199** - Use kitchen items to make prints. Experiment with forms such as bottle tops, potato mashers, wooden or metal forks or spoons, tin cans and jars.
- **TC200** - Make a print by dipping nature items such as sticks, nuts, shells or wood scraps in ink or tempera paint. Create your own texture design.
- **TC201** - Use a printmaking technique to decorate paper to be used as a wall or window hanging, place mat or gift-wrapping.
- **TC202** - Design and make greeting cards or invitations using a printmaking technique.
- **TC203** - Make a collage using paper and glue, materials from nature or scraps from fabrics and rugs.
- **TC204** - Make and decorate some paper articles such as hats or masks to be used at a party.
- **TC205** - Print your own stationery using a relief printing method. Carve into a wood or linoleum block to make the relief.
- **TC208** - Make something out of papier-mâché or pulp such as a dish, holiday ornament or puppet head. Decorate with paint, cut paper or paper-punch mosaics.
- **TC210** - Make your own paper. Use your paper as stationery. Or, make a sculpture or wall hanging from paper you have made.
- **TC213** - Make beads using recycled paper. String them into a piece of jewelry.

PARK DISTRICT
of OAK PARK

# Camp Fire Activity Beads

## Trail to Creativity

### Models and Shapes

- **TC216** - Make a life-size snow or ice statue. Or, build a snow fort. Take a photograph or draw a picture of your creation so you'll remember it when the snow melts.
- **TC217** - Make your own clay such as bread dough or salt dough clay. Add color to the clay.
- **TC219** - Make a clay pot using the coil or slab method.
- **TC220** - Make jewelry from clay beads that you have made yourself.
- **TC222** - Make a clay gift for someone using the pinch pot method.
- **TC223** - Make designs on a clay piece by impressing buttons, tools or articles from nature to form textures or patterns.
- **TC226** - Make sand candles in different shapes. Add other nature objects as desired.
- **TC230** - Model or carve a shape or figure out of floating white soap, wax, or paraffin.
- **TC231** - Make candles by the dipping process or by pouring liquid wax into a mold. Follow safety rules to avoid being burned by hot wax.
- **TC232** - Combine colored tissue and wire to form a mobile or a stabile.
- **TC233** - Form soft wire into the shape of a person, symbol or animal.
- **TC234** - Make a mask, animal or other form using crushed aluminum foil or foil over papier-mâché.
- **TC235** - Create a figure by gluing together natural materials such as bark, twigs or seed pods.
- **TC236** - Design and make a decoration or centerpiece for a special occasion. It can be a mobile, a floral arrangement, a sculpture or anything you would like to make.
- **TC237** - Use materials such as broken china, seedpods, pebbles, colored sands or other nonfood, nonperishable materials to make a symbolgram mosaic.
- **TC241** - Carve an object out of balsa wood.
- **TC242** - Dip string or clothesline in plaster, drop on wax paper and quickly form into a desired shape.
- **TC243** - Model a piece of jewelry, dish, figure, doll or puppet head out of salt dough, sawdust clay or other claylike powder or pulp mixture.
- **TC244** - Visit a pottery studio and watch the potter at work. Learn about the clay, glaze and tools used in handmade pottery.

# Camp Fire Activity Beads

## Trail to Creativity

### Mixed Media

- **TC249** - Decorate a wooden article or gourd with paint or by carving.
- **TC251** - Make a wall decoration with pieces of wood and other materials.
- **TC252** - Make a stained glass window decoration using pieces of colored plastic, cellophane or glass.
- **TC253** - Use tile, glass, plastic or leather to make a mosaic design
- **TC254** - Make a piece of caged jewelry. Wrap stone or glass in copper, brass or silver wire and mount it as a pendant, necklace, earrings, bracelet or other piece of jewelry.
- **TC255** - Use coat hanger wire or other flexible wire to form wire figures. Suspend them or mount on blocks.
- **TC256** - Create a design in wood using a wood burning tool or the sun through a magnifying glass.
- **TC257** - Use wood or other material to make a simple toy or game.
- **TC258** - Make or decorate a wood box, footstool, shelf, set of bookends, plant or flower holder.
- **TC259** - Decorate a plastic or glass article with an etched, laminated, pierced or painted design.
- **TC260** - Decorate a metal article with stippling, paint, piercing, etching, liquid plastic or fired enamel.
- **TC261** - Make a simple leather article such as a sheath, key holder, coin holder, billfold, belt or bookmark. Decorate with a symbol or other design.
- **TC262** - Make and decorate with symbols something you can use or wear at Camp Fire ceremonials. This might be a candleholder, a mat to sit upon or a belt or bracelet.

# Camp Fire Activity Beads

## Trail to Creativity

### Music and Song

- **TC269** - Learn to sing or play a folk song from another country. See if you can find out something about its origin. Teach this song to a friend.
- **TC270** - Make and decorate a drum, tambourine, xylophone or other instrument. Play it in a waltz rhythm and then in a march rhythm. See if your friends can hear the difference in rhythm.
- **TC272** - Demonstrate how to use and care for a CD, DVD, or record player. Show how to handle and store your discs or vinyls.
- **TC278** - Fill glasses or bottles with different levels of water so you can play tones with different pitches. Play a melody on your bottles.
- **TC281** - Choose a recording of a piece of classical music. Listen to the recording until you can pick out some major tunes and hum them. Which instruments or groups of instruments can you hear?
- **TC284** - Listen to selections of five different categories of music such as folk, country, rock, classical, jazz, bluegrass, ragtime, rhythm and blues, hip hop, reggae or rap. Tell how you feel about each one.
- **TC285** - Identify several instruments in an orchestra. Draw or find pictures and label the woodwind, brass, string and percussion instruments.

### Drama

- **TC304** - Make three puppets out of a variety of materials including string, paper bag, stockings, paper and rod, or peanuts. Use your puppet in a game, play or story.
- **TC305** - Make a simple box stage and scenery for a puppet show. Use it to give a show.
- **TC306** - Make and decorate a mask made out of a paper bag, a paper box or cylinder, cloth, papier-mâché or a large paper plate. Use your mask in a play, pageant, game or party.

# Camp Fire Activity Beads

## Trail to Creativity

### Creative Writing

- **TC342** - Choose a favorite color. List as many things as you can that are that color. Think of how that color makes you feel. Write a poem about the color you choose.
- **TC343** - Write a collaborative poem with your group.
- **TC345** - Read poetry from another culture. Describe what you learned about that culture through the writings of its members.
- **TC347** - Read a book of haiku, a Japanese form of poetry. Learn the form for writing haiku and write several of your own.
- **TC351** - Collect favorite poems and song lyrics. Create a notebook to keep them all together.
- **TC353** - Create a poetry book and start a collection of poetry about your favorite nature subjects. Include authors and sources.
- **TC356** - Describe alternative uses for ordinary objects such as a brick, flowerpot or a kitchen utensil. Use your imagination to come up with some unusual uses for everyday items.
- **TC357** - Cut a picture out of a magazine or newspaper without reading the caption or accompanying story. Write a story that describes what's happening in the photo.
- **TC358** - Write a description of a familiar place from an unfamiliar point of view. Imagine you are an alien from another planet visiting your home, school or neighborhood. Describe what you see going on. Try to explain what is happening.

### Party Time

- **TC375** - Make your own invitations to a party you are giving. Include the theme of the party in the design of the invitations. Mail your invitations.
- **TC376 -** Make party decorations and favors that carry out a theme.
- **TC380** - Make personalized place cards for everyone in your family for special family dinner
- **TC382** - Make a flower arrangement out of fresh or dried flowers. Use it on the table for a special meal.
- **TC386** - Write a thank-you note for a party you attended. Decorate it in an original way.

PARK DISTRICT of OAK PARK

# Camp Fire Activity Beads

## Trail to the Environment

### Know About Nature

- **TE100** - In an interesting natural place, make a circle on the ground with a string one yard long. Make a list of everything that you find inside the circle. Include all living and non-living items. Choose three items on your list and learn more about them.
- **TE101** - Be able to recognize your state flower, bird and tree in their natural settings
- **TE102** - Visit a city park and take a ranger-guided nature hike. Share something you learned with your group.
- **TE104** - Find out what plants were used for food, clothes or other purposes by the indigenous peoples and early settlers of your area. Tell how these plants were prepared for use.
- **TE105** - Name several animals that live in your area. Find out how the indigenous peoples and early settlers of your area used these animals for food, clothing or other purposes.
- **TE106** - Make a scrapbook about your favorite things in nature. Use clippings, your own sketches, photographs or pressed leaves.

### Help Your Environment

- **TE115** - Look at a list of endangered species. These are animals, birds or plants that are in danger of becoming extinct. Find out which animals, birds or plants on the list live in your area.
- **TE116** - Learn about an animal or bird that has become extinct within the last 50 years. Tell why it became extinct.
- **TE119** - Learn how trees and forests help conserve wildlife, soil and water supplies. Point out examples of trees at work in your area.
- **TE123** - Make a wildlife conservation poster. Display it in a public place such as your school, a library or a store.
- **TE124** - Find out what is meant by minimum impact camping. Tell ways that you, your family and your group can camp without leaving a trace.
- **TE125** - Make a bird feeder. Find out what kinds of food birds in your area enjoy. Put the feeder where birds will use it.
- **TE126** - Give the birds a present. Decorate a shrub or tree with food that birds of your area will enjoy.
- **TE128** - Find out who Woodsy Owl is. Do something to help his campaign.
- **TE130** - Find out about your state’s conservation laws. Explain the ones that apply to people your age.
- **TE135** - Become aware of ways to conserve water. Make a poster that lists five ways to save water.

# Camp Fire Activity Beads

## Trail to the Environment

### Making Things from Natural Materials

- TE139 Arrange a bouquet or wreath of wild flowers, grasses, leaves or seeds. Use good conservation practices in selecting materials for your arrangement.
- TE142 Decorate your own stationery or make a picture for your room using items from nature. Make leaf prints or spore prints. Or, try splatter painting or crayon rubbings.
- TE143 Transfer a leaf pattern onto cloth. Do a crayon rubbing Or, hammer cloth placed over a leaf to make an imprint.
- TE144 Tie-dye material using natural dyes.
- TE145 Collect items such as driftwood, rocks, twigs, leaves and seedpods. Glue them together in the shape of birds, animals or creatures you make up.
- TE146 Make a loom and weave a mat on it. Use grass, rushes or other materials from nature.
- TE147 Weave a basket out of natural materials.
- TE148 Make a simple musical instrument using natural materials. Play your instrument.
- TE149 - Make rope or cord by twisting together natural materials like grass or corn husks.

PARK DISTRICT
of OAK PARK

# Camp Fire Activity Beads

## Trail to the Environment

### Earth Science

- **TE156** - Do an experiment to observe the affects of pressure in forming sedimentary rock . Find an example of sedimentary rock.
- **TE157** - Learn about minerals. Look at and study a mineral collection. Share your findings with the group.
- **TE158** - Investigate soil. Using a magnifying glass, look at the soil particles up close. Draw pictures or describe what you see.
- **TE159** - Learn about marble, which is a metamorphic rock. What kind of rock did marble used to be? Go to a place in your community and see polished marble. Examine it closely.
- **TE160** - Learn about volcanoes. What is a volcano? What does it do to the earth's surface? What is a volcanic mountain? How does it form? What is a lava flow? When did the last volcano erupt in the United States? What is that volcano's name? Where is it located?
- **TE161** - Do an experiment and make a model geyser. Describe what happens. Read about well-known geysers.
- **TE163** - Study a map of North America to find out where major rivers such as the Missouri River, the Mississippi River and the Ohio River start. Trace where they go.
- **TE164** - Learn about planting zones and climates. Name three plants that will grow well where you live. Name three that won't, and why they won't.

PARK DISTRICT
of OAK PARK

# Camp Fire Activity Beads

## Trail to the Environment

### Plant Life

- **TE168** - Observe wild flowers growing outdoors. Describe them to an adult. Learn how to recognize them at different times of the year
- **TE169** - Discover how plants are necessary to your life. Trace all the items in your lunch back to their original plant source. How could the meat in your sandwich come from a plant source? Show what you learned in a chart.
- **TE171** - Read about the life of George Washington Carver and his work with plants. Report your finding to the group.
- **TE172** - Identify several plants by their odor, feel or taste. Do this with an adult. Tell something about each
- **TE173** - Identify two kinds of plants that can injure people or animals. Tell why they are harmful.
- **TE174** - Without touching the plants, tell the difference between poison ivy and Virginia creeper, between poison sumac and harmless sumac, or identify poison oak and stinging nettles. Explain how to protect yourself against poisonous plants and what to do if you are exposed to them.
- **TE175** - Look for plants that grow in different kinds of conditions. Identify plants that grow best in shady or sunny places and in wet or dry soil.
- **TE176** - Do an experiment to discover how wind affects evaporation. Describe what happens. If you were a wild flower or plant needing a lot of water, where would you live?
- **TE177** - Find several different kinds of ferns growing outdoors. Notice the difference in color, texture and size. Know the names of two kinds of ferns. Draw a sketch of each.
- **TE178** - Recognize three kinds of trees by the shapes of their leaves, texture of the bark or leaf arrangement. Test yourself by identifying these trees blindfolded.

# Camp Fire Activity Beads

## Trail to the Environment

### Green Thumb

- **TE186** - Learn about the genetic modification of food, its current and future applications, and the concerns these modified foods raise.
- **TE197** - Make a chart, map, or poster showing where different vegetables, nuts, fruits, etc. were first domesticated. Include at least 10 different foods.
- **TE199** - Grow plants or flowers in a window box or decorative porch container. Or, grow an herb garden in a windowsill.
- **TE210** - Make a terrarium.
- **TE221** - Learn about Sequoia trees. How did they get their name? Where do they grow? How tall is the average Sequoia? How big around is the trunk? How old are most of these trees?
- **TE222** - Find out how to use a tree's rings to learn its age. Find a tree stump. Determine how old the tree was when it was cut down.
- **TE223** - Prepare a flower or plant arrangement for your home. Identify as many of the flowers or plants in it as you can.
- **TE224** - Read about the parts of a flower. Show a flower to your group and identify its parts for group members.
- **TE225** - Do an experiment to discover how water rises up the stems of plants. Describe what happens.
- **TE226** - Change the color of a carnation. Observe what happens.
- **TE230** - Collect seeds. Include seeds that fly, float, stick to a passersby or fall to the ground. Group them by the way they are moved from place to place. Identify and mount them on a piece of paper, labeling each seed.
- **TE231** - Collect and press several wild flowers, ferns or tree leaves. Label each with name, date and place found
- **TE233** - Mount and label leaves from trees and shrubs common in your geographic area
- **TE234** - Mount and label cones from several kinds of coniferous trees.

# Camp Fire Activity Beads

## Trail to the Environment

### Animals

- **TE238** - Learn and illustrate the different types of prehistoric animals.
- **TE239** - Draw or use pictures to illustrate the life cycle of a frog.
- **TE240** - Select ten different animals. Find out the names for their young.
- **TE241** - Name three different classes of animals. Name three animals that belong to each class. Learn an interesting fact about each
- **TE242** - Make a poster about cold-blooded and warm-blooded animals. Explain to your group the difference between them.
- **TE243** - Do an experiment to discover how temperature affects cold-blooded animals. Explain what happens.
- **TE247** - Identify several insects commonly found in your home or yard. Read about them and learn new facts about each.
- **TE255** - Read about the life cycle of a mosquito or a flea. Find out what you can do to keep mosquitoes or fleas from breeding in or around your home.
- **TE256** - Tell group members how insects are different from all other animals. Also explain the differences between insects, spiders, centipedes and millipedes.
- **TE261** - Learn about turtles. What is the difference between turtles, terrapins & tortoises? How big can they get? How long can they live?
- **TE263** - Describe snakes that are common in your area. Include those that are poisonous. Learn how snakes are helpful to humans.
- **TE265** - Observe three kinds of birds in the outdoors. Describe them to others.
- **TE267** - Recognize and identify several birds by their calls. Tape record these bird calls. Or, learn to imitate the birdcalls.
- **TE269** - Look for birds' nests. Tell where you see them. Photograph or sketch the nests. Describe what kind of birds may have used them.
- **TE272** - Draw pictures of bird beaks of different shapes. Find out how different shapes of beaks are clues to what kind of food birds eat.
- **TE273** - Find out what kinds of hawks and owls live in your area. Tell how hawks and owls are helpful to people.
- **TE274** - Find out what is meant by predator-prey relationships. Learn about five predators and make a list of each predator's prey.
- **TE275** - Learn about an extinct or prehistoric animal. Make a poster with a picture or sketch of the animal on it.
- **TE276** - Learn how different insects or animals protect themselves. Think about coloring, smell and shape. Describe how two kinds of insects or animals protect themselves.
- **TE282** - Learn about the winter habits of animals in your area. Find out which animals stay active all winter and which hibernate. Learn which animals migrate from your area to somewhere else or come to your area from somewhere else.

# Camp Fire Activity Beads

## Trail to the Environment

### Cooking Outdoors

- **TE291** - Make matches waterproof. Pack them properly for carrying.
- **TE292** - Lay, light, use and put out a wood fire outdoors. Follow safety practices while doing this. Be sure outdoor fires are allowed in the area.
- **TE294** - Build a fire and let it burn down to a bed of coals. Cook at least one item over the bed of coals.
- **TE295** - Lay a cooking fire. Keep it going while a meal is cooked.
- **TE297** - Construct a reflector oven. Use it to bake biscuits or some other appetizing dish.
- **TE299** - Cook a meal over a charcoal fire.
- **TE301** - Make and use fire starters.
- **TE304** - Make a tin can stove. Cook part or all of a meal on it
- **TE310** - Cook something using the sun as a heat source.
- **TE311** - Prepare two recipes outdoors in a Dutch oven.
- **TE317** - Make a bag for sterilizing your own dishes on a camping trip. Make your bag out of cheesecloth or dishcloths.

# Camp Fire Activity Beads

## Trail to the Environment

### Knots

- **TE323** - Collect samples of different kinds of rope or cord. Learn about the strengths and uses of each kind.
- **TE324** - Tie a slipknot and a square knot. Know how these knots are used.
- **TE325** - Tie a simple hitch, half hitch and two half hitches. Know how these hitches are used.
- **TE326** - Tie a clove hitch and a taut line hitch. Use them for a clothesline on your next camping trip.
- **TE327** - Tie a bowline knot. Explain how you can use this knot.
- **TE328** - Use a sheet bend to tie two rope ends together
- **TE329** - Using knots that you have learned, make a useful item. You could make a dog leash or bag handles.
- **TE330** - Using knots you have learned, macramé a decorative item.
- **TE331** - Make a piece of useful equipment using a square or diagonal lashing.
- **TE332** - Make a piece of useful equipment using sheer or continuous lashing.
- **TE333** - Make a table using two kinds of lashing.
- **TE334** - Whip the ends of a piece of rope to prevent fraying.

### Hike and Camp Out

- **TE357** - Set up a poncho shelter.
- **TE358** - Select a good location for a tent. With another person, erect a tent, take it down and fold it properly.
- **TE365** - Demonstrate two different ways of purifying water.
- **TE369** - Draw a map of an outdoor place you use or visit often. Show on it the location of trees, plants, flowers and shrubs.
- **TE373** - Learn the difference between magnetic and true north.
- **TE374** - Take and follow a bearing using a compass.
- **TE375** - Play a game using a compass. Do this with at least three other people.

# Camp Fire Activity Beads

## Trail to the Future

### Chemistry

- **TF110** - Do an experiment to see how the sun breaks down dye molecules.
- **TF111** - Do an experiment to see how bleach whitens and removes color.
- **TF112** - Do an experiment and compare which products contain the most starch.
- **TF113** - Do an experiment with bubbles to see which solution and wands work best.
- **TF114** - Make invisible ink.
- **TF115** - Do an experiment to see how heat causes air to expand.
- **TF117** - Do an experiment to see how acids and bases react.
- **TF118** - Do an experiment to see how fire extinguishers work.
- **TF119** - Do a water cycle experiment.
- **TF120** - Do an experiment to learn how candles work.
- **TF123** - Do a experiment to learn about chlorophyll in plants.
- **TF125** - Find out how plants use photosynthesis and make a poster that explains the process.

PARK DISTRICT
of OAK PARK

# Camp Fire Activity Beads

## Trail to the Future

### Physics

- **TF129** - Do an experiment to see which objects sink or float in water.
- **TF130** - Do an experiment to see how heat can be produced through friction.
- **TF131** - Do an experiment to see how light produces heat and how hot air rises.
- **TF132** - Recreate Galileo's Leaning Tower of Pisa experiment.
- **TF133** - Do a light refraction experiment.
- **TF134** - Do an experiment to see how inertia works.
- **TF135** - Do a centrifugal force experiment.
- **TF136** - Make bottle top gears and compare them to gears in everyday objects.
- **TF137** - Do an experiment to learn about pitch and sound waves.
- **TF141** - Do an experiment to learn about Bernoulli's principle.
- **TF142** - Do an experiment to see how speed effects force.
- **TF148** - Compare lifespans of people in the past to those of the present.
- **TF150** - Measure the length and width of rooms to figure out the area.
- **TF152** - Look at your favorite cookie recipe. Determine the measurements of each ingredient if you doubled the recipe.
- **TF155** - Figure the average height of members in your group.
- **TF156** - Learn how to use produce scales and figure out how much portions would cost "by the pound".
- **TF157** - Figure out what fossils are and learn what they tell you about the geological history of your area.
- **TF159** - Learn how volcanoes work and find out what kinds of lava may be formed.
- **TF160** - Do an experiment to find out how igenous rocks are formed.
- **TF161** - Make a collage using pictures of different kinds of rocks and how they are used in and around homes.

# Camp Fire Activity Beads

## Trail to the Future

### Water

- **TF167** - Find out what percentage of the human body is water. Learn how humans use the water in their bodies and how much water the average person needs per day.
- **TF173/174** - Learn about ground water, the water table, and how the Earth stores its water supply. Make a model of the water table.
- **TF179** - Do an experiment to learn about water condensation.
- **TF180/181** - Make a snow gauge to measure how much snow falls. Use it to compare how much water is in a unit of snow.
- **TF182** - Do an experiment to see how cold water sinks and hot water rises.
- **TF183** - Do an experiment to see ocean waves in action.
- **TF184** - Determine if ships can carry a heavier load in river water or salty ocean water by doing an experiment.
- **TF185** - Learn about the surface tension of water by doing an experiment.

### Air & Space

- **TF192** - Make a list of products we use daily which have resulted from space research.
- **TF194** - Read about America's first woman astronaut. What was her name and what year did she make her first spaceflight?
- **TF197** - Draw or paint pictures showing important historical events in aviation.
- **TF198** - Make a picture book of airplanes that have different purposes or uses. Label each plane by name.
- **TF199** - Figure out how much you and the members of your group would weigh on the moon.
- **TF200** - Do an experiment to learn why the moon looks so much bigger than the stars.
- **TF201** - Do an air resistance experiment.
- **TF202** - Do an experiment to see how the force of Lift works.
- **TF203** - Do an experiment to see how the force of Thrust works.
- **TF204** - Learn about aerostats and do an experiment to see how lightweight objects can be moved by air.
- **TF207** - Build a sundial and explain how it works.
- **TF208** - Play a Pictionary game using pictures to explain aerospace terms.
- **TF209** - Learn about Skylab, the experimental space station. Write a short story about life aboard it.
- **TF210** - Choose five items you would send to an inhabitant of another planet. Write a letter to them explaining the use of each item.
- **TF212** - Make crossword puzzle using space-related terms. Let a friend solve the puzzle.

# Camp Fire Activity Beads

## Trail to the Future

### Energy

- **TF216** - Learn about windmills and what they have been used for in the past.
- **TF222** - Do an experiment that demonstrates evaporative cooling.
- **TF223** - Do a static electricity experiment.
- **TF229** - Do an experiment to see how color affects heat absorption.
- **TF231** - Do an experiment to see learn about radiant heat.
- **TF237** - Learn about the legends and stories of early flight. Or, learn the early history of trains, cars, power ships, submarines, and space travel.
- **TF240** - Learn about the rapid rail mass transit system.
- **TF244** - Learn to read a road map of your state.

### Sky & Stars

- TF250 - Draw pictures of different types of clouds and label them.
- TF251 - Draw a picture of the water cycle and show what happens at each step.
- TF252 - Make a weather station with a rain gauge and barometer.
- TF254 - Learn about the formation of rainbows, rings around the moon, and the colors of a sunset. Draw a picture.
- TF255 - Learn a legend about the North Star that is told by people of a different culture. Locate it in the night sky.
- TF257 - Do an experiment to see how day and night cycles work.
- TF258 - Draw the planets on a chart to show their relative size.
- TF259 - Define the following words: asteroid, meteor, comet, and shooting star. Explain the terms to your group.

# Camp Fire Activity Beads

## Trail to the Future

### Business

- **TF265** - Compare the price of two different brands of the same product, checking quantity, ingredients, and claims. Tell why you would decide to buy one brand and not the other
- **TF281** - Write an illustrate your own ad for a product that you use.

### Communications

- **TF293** - Learn Morse Code and make up some messages in code. Teach these to a friend and send each other messages.
- **TF294** - Learn about ICS maritime signal flags. Spell your name using these letter flags.

### Archery

- **TF301** - Learn about the US National Archery Association and the services and information it provides.
- **TF302** - Learn and demonstrate safety rules and precautions for archery as they apply to your equipment, your audience, and yourself.
- **TF303** - Learn and demonstrate the parts of the bow and arrow. Explain the scoring values of different colored circles on the target.
- **TF304** - Learn and demonstrate the proper method of drawing arrows from the target and scoring.
- **TF305** - Learn and demonstrate how to find the point of aim. Tell why your aim changes as you move toward or away from the target.

### Sports Knowledge

- **TF474** - Find out how the Olympic Games bgan. Compare those ancient games with the modern Olympics.

# Camp Fire Activity Beads

## Trail to the Future

### Business In My Future

- **TF511** - Learn to operate a machine that would be used at a place of business such as a fax machine, scanner, or printer. Demonstrate that you can use this machine with a fair amount of accuracy.
- **TF515** - Talk to a person who interviews job applicants. Find out what this person looks for in potential employees
- **TF517** - Write a story or draw a picture ina business job you might have in the future.
- **TF519** - Find out why social security numbers need to be kept private for personal security.
- **TF522** - Find out what the laws are in your state on young people working. At what age can young people work? What kinds of jobs can young people have? Which hours and how many hours can they work?

**Business In My Community**

- **TF527** - Find out what a not-for-profit agency is. List several in your community. Find out where these agencies, such as Camp Fire, get their money.
- **TF529** - Choose a product that you and your family often use and trace it back to its original source. Where was the product purchased? Where did that store get it? Where was it manufactured?