DABBLER

COMPLETE FIVE ACTIVITIES.

A.1 Do at least two things that an astronomer, chemist, geologist, meteorologist, oceanographer, or physicist might do in her work:

- Look at some stars and planets through a telescope and identify five constellations.
- Read about pH in Chapter 7 of the *Junior Girl Scout Handbook* and do one of the activities.
- Collect and identify five rocks and minerals or visit a place of geological interest in your area.
- Make a barometer, wind vane, wind speed indicator, or rain gauge and use it at least three different times.
- Test household products to find out whether they are acids or bases. (Ask an adult to help.)
- Find out what makes things float. Compare how things float in salt water with how things float in fresh water.
- Make a battery.
- Turn a nail into an electromagnet.
- Think up your own project.

B.1 Take care of a plant or garden for two weeks and keep a record of what you did, the changes you observed, and some of the things you learned.

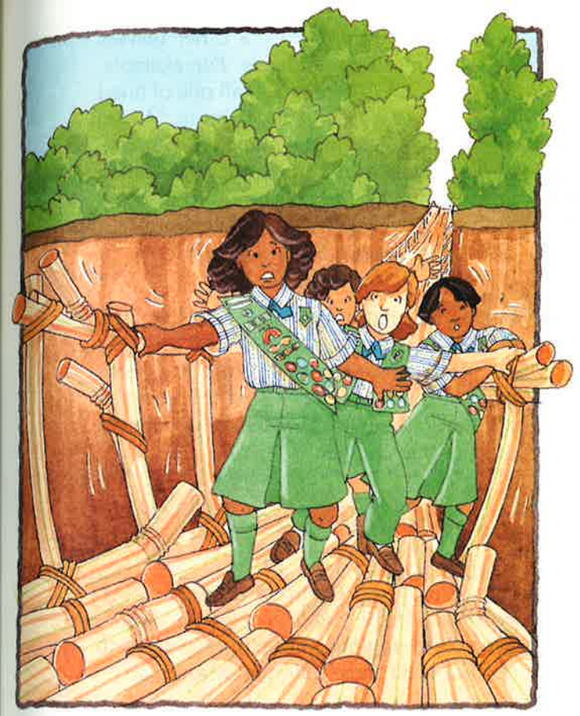
or

B.2 Keep a record of all the times that you use water in a single day. Review your record and determine the times you could have used less water or the times that water was wasted by not being recycled. Develop a personal water conservation plan that you can follow.

C.1 Visit a corporation, bank, real estate office, or other business and find out what kind of work is done there.

D.1 Design the ideal troop meeting place. Plan for a space that will hold 25 people or more. Determine what kinds of furniture and equipment you would want. Check phone directories and newspapers to develop a resource list of people who would be of help if you actually did construct your meeting place.

or



D.2 Make something that is powered by wind or water.

or

Be a paper engineer. Make at least two things out of paper. These could be a drinking straw, a building, a bridge, a statue, etc.

E.1 Find something that needs to be repaired and fix it yourself or help someone else fix it.

or

E.2 Volunteer to do a helpful job for your classmate or science teacher that involves scientific equipment or a science project. Find out why the task needs to be done and the best way to do it.

F.1 Make silver polish by adding a small amount of lemon juice to cream of tartar. Mix together with a plastic or wooden spoon until you have a paste. Then put a little of this paste on a cloth and clean tarnished silver by rubbing it gently. After the tarnish is gone, rinse the piece of silver in water and shine it with a soft towel or cloth. If you can't find any silver, test your polish on a piece of scrap metal.

or

F.2 Visit a science museum, planetarium, observatory, weather station, or laboratory. Ask questions about things you see and the activities that take place.

G.1 Find out about creatures that lived many years ago. Do one of the following:

- Learn about dinosaurs. Pick one that interests you and become an expert on it.
- Find out about ancestors of animals living today, such as the horse.
- Pick a point in time at least one million years ago and write a short story or create a picture or display about what a time traveler might see.
- Predict how you think a modern-day plant or animal might look in a million years.

or

G.2 Fingerprint yourself and the members of your family and notice any similarities or differences.

H.1 Watch the moon once a week for five weeks. Draw the moon's shape, and record the date and time with each of your five drawings.

H.2 Find five ways that science or math can help someone to do her job.

I.1 Asking questions and finding the answers are important parts of a scientist's work. Practice these skills by playing this game. One person thinks up an action or an event and the result or evidence of that action or event. She describes to the other players only the result or evidence. For example, she could say, "There is a small pile of dried twigs next to a tree." The action is, "A bird is building a nest in the branches overhead and during its work some pieces have fallen to the ground." The players try to discover the action or event by asking questions that can only be answered by a yes or a no.

or

I.2 Use a calculator to solve the following problems. After you do each one, turn the calculator upside down to read the word that the numbers "spell." At the end you will have a sentence that tells what one girl does in the summer.

	number	word
a $75 \times 75 - 87 =$	_____	_____
b $1000 \times 60 - 2265 =$	_____	_____
c $810 \times 710 + 2245 =$	_____	_____

Now make up your own math problems to spell at least three different words.

_____
Date badge completed

_____
My signature

_____
Leader's signature