

Choose your own adventure and take a science journey this summer. Start by finding a notebook and writing the word SCIENCE on the cover. Then choose a task each day from the one of the lists below and record your findings in your science notebook. Each entry can contain a drawing, observation, or explanation. Record an I or E in the journey map included based upon the column that you chose from. You should select items from each column so that no more than 2 consecutive spaces in the map are the same. See how far you can get before school starts!

## **Identify and Observe (I)**

- 1. Identify as many insects as you can find and draw them in your science notebook. How are insects different from other living things?
- 2. Identify as many different leaves as you can find and draw them in your science notebook. Don't forget that pine needles are one type of leaf. How can you sort the leaves (color, size, shape)?
- 3. Identify as many birds as you can see and draw them in your science notebook. How are birds different from other animals?
- Identify types of trees or different types of tree bark and draw them in your science notebook.
- Find and identify as many rocks and minerals as you can find. You might even want to start a collection. What can rocks and minerals be used for? Make a list in your notebook.
- 6. Look up at the clouds. Try to identify what type of clouds you see and draw what they look like. Do the clouds look like it's going to start raining? Do this activity for at least three days. What have you noticed?

## **Experiment or Build (E)**

- 1. With a rubber band and a cup, make a musical instrument, and draw it in your science notebook. When the rubber band is tighter on the cup, how did the sound change? How can you make the sound change?
- 2. Plant a few seeds and watch them grow over several days. Measure the growth each day and record the results in your notebook. Put one plant in the shade and another in the sun. Which one grows the most? Why?
- 3. Using a stick, make different drum sounds. What sounds the best or the loudest?
- 4. Fill a container of water and find items around your house that float or sink. Why do these items float or sink?
- 5. Build and fly a paper airplane. See how far it can fly, or how long it stays in the air. What changes can you make to have your plane stay up longer or fly farther?
- 6. Using sidewalk chalk, make a shadow sun-dial to tell time. Can you tell the time using the sun? What changes did you have to make to your sundial to find the right time?

## Summer Science Journey

- 7. Find a spider web and draw it in your science notebook. Do not disturb the spider if it's in the web. Describe the way a spider catches its food in its web.
- 8. Find a flower and slowly take it apart. Draw each part in your notebook. Figure out what each part of the flower does.
- 9. Dig into the ground, identify what you can find, and draw and list it in your notebook. What things did you find that are alive and things that aren't? How did you know they were alive?
- 10. Find and identify many types of flowers. Compare the flowers. How are they different and the same? Draw them in your science notebook.
- 11. Measure the growth of the grass each day and write it down in your notebook. Does the amount of sunlight affect growth?
- 12. Identify as many animal noises that you can hear when you are outside. What animals do you think are making those noises?
- 13. Identify as many seeds as you can find and draw them in your science notebook. How are the seeds different or the same? How did they get into your yard?
- 14. Record the eye color of as many people as you can see in one day and make a list in your notebook. What do you think might cause people to have different eye color?
- 15. Look through your Recycling Bin at home. Can you make something useful from the items in your recycling bin. Why is it important to be able to reuse some of your recyclables?

- 7. Make a food waste composter. At the end of a week, what has happened to the food scraps? Record your findings after two weeks, then after three weeks.
- 8. Using a rubber ball, see how high you can get it to bounce. Count how many times it bounces before it stops. Do different types of rubber balls bounce differently?
- 9. How many drops of water can you put onto a penny? What causes the drops of water to stay on the penny?
- 10. Make and fly a homemade kite. Why does your kite fly? How can you get your kit to fly?
- 11. Push objects down a slide. Why do some objects go faster and what can you do to change their speed?
- 12. Use a cup and a marker and make your own rain gauge to collect rainwater. How much rain did you collect?
- 13. Use a flashlight to shine through several different objects. Identify which objects block the light and which objects let the shine through. Why does this happen?
- 14. Fill a clear, empty soda bottle with water and create a rainbow from the sun. How many colors can you identify in your rainbow?
- 15. Using two cups and some string to make an old-fashioned telephone. Talk to a friend who is out of sight. How does this telephone work?
- 16. Using some string, dish soap and water, make a solution and create big bubbles. How big can you make a bubble?
- 17. Cut up a variety of fruit and leave some in the shade and some in the sun. Which turns rotten sooner? (Don't eat it!) Is there anything you can do to make the fruit last longer?
- 18. Using some string, a napkin, and a weight, create your own parachute. Can you make your parachute float to the ground as slowly as possible? How?
- 19. Take out some ice cubes and place some in the shade and some in the sun. Which melts faster? What can you do to make the ice cubes last longer before they melt?



Have fun and remember to put your drawings, notes, ideas, and results into your science notebook.

