I he Sounds of Spring

0

This is the final activity in our Family Reading Month series. We hope that you've celebrated the wiggly, wobbly, bouncy world of springs as you've participated in the activities.

> Have you ever made a tin can telephone...you know, where you attach a string between two tin cans to see if you can hear messages? This activity uses springs instead of strings to let you hear some pretty cool sounds.

What you'll need:

- 3 tin cans
- 3 toothpicks
- a string
- a wide rubberband
- a Slinky® or a long spring
- a nail

Try it!

- Create three different tin can phones to compare the differences in sound using a string, a rubberband, or a spring.
- **O** *Ask for help from an adult to prepare the tin cans.* Use the nail to poke a hole in the center of the bottom of each of the tin cans. Be very careful.
- **O** Tie the string to a toothpick and thread the string through the hole in the bottom of one of the tin cans. When the string is pulled all the way through, the toothpick should rest in the bottom of the tin can to hold the string in place.

- **O** Hold the tin can up to your ear, stretch the string taut and strum it so that it twangs. What do you hear? Do you think the sound will be different with a material that has more elasticity than string?
- **O** Cut the rubberband so that you have one long strip of elastic. Use the toothpick to poke a hole in the elastic, and leave the toothpick in the elastic. Thread the rubberband through the hole in the tin can so that the toothpick ends up inside the can. Now listen for the sound of the elastic as you strum it. Does it sound different from the string? In what ways?
- O Now try the Slinky® or a spring. Thread it into the hole of the third can and hold it there with your finger. Get a family member to help you by holding the other end of the Slinky®. Hold it up to your ear and listen. How is it different from the others? In what ways does it sound similar?
 - All sound travels in waves. The sound that you hear in the tin can travels along the vibrations of the string or spring, and the tin can amplifies or makes the sound louder. But, the springs and the elastic also move in wavelike patterns. The waves of the sound interact with the wavelike motion of the spring, causing a delay or echo.

Spring into The San Jose Mercury News

1. "She's acting like a spring chicken." "He has a spring in his step." "She's wound up tighter than a spring." "Spring into action." Have you ever heard these phrases? Metaphors and similes are special types of descriptions which use words to create new images. Although someone may not actually have a coiled spring in his shoe, his step may seem springy. While a person's body is not actually wound up like a spring, she may seem to be tense like a wound spring. Look through *The San Jose Mercury News* and try to find some other metaphors or similes.

Children's Discovery Museum

