Tuning a Fork

**What to do:** Tie one end of the string around the fork, as shown in the illustration. Lift the fork by the string so the tines hang straight down. Tap the bowl with the pencil and lower the fork so the tines are lightly touching the opposite side of the bowl.

**What happens:** When the fork touches the bowl its tines begin to vibrate. If you hold your ear close to the tines you can probably hear the tone. If you're working with a friend, have him or her tap the bowl again. This time press the string holding the fork against the outside of your ear, just as you did with the spoon experiment. Now you can hear the tone more clearly.

**Why:** The fork tines pick up the vibrations from the bowl. This is called "sympathetic" vibration. The string helps to conduct the sound, just as it did with the spoon that thought it was a bell.

**YOU NEED**

- 3 foot length of string
- dinner fork
- soup bowl
- pencil with an eraser