



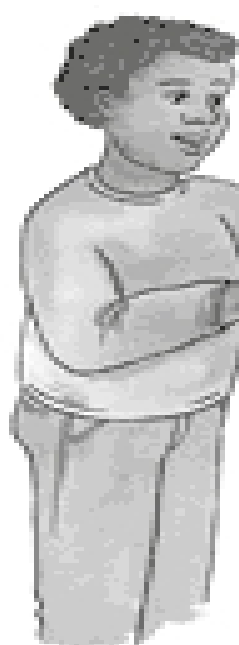
Loud or soft?

Background knowledge

In addition to pitch, *loudness* is another property of sound. If you hit a cymbal softly, it makes a soft sound. If you hit it hard, it makes a loud sound. The harder you pluck a guitar string, the louder the sound it makes. The harder you blow a whistle, the louder the sound it makes. All musical instruments work in the same way.

Science activity

Michael put some grains of rice on the skin of a tambourine. When he beat the tambourine, the rice jumped up and down as the skin vibrated.



What do you think will happen to the rice grains if Michael beats the tambourine harder?



Science investigation

Make a simple instrument called a kazoo by folding tissue paper over the teeth of a comb. To play the kazoo, you press it to your mouth and hum through it with your lips close together. Design and conduct an experiment to see how you can make the kazoo produce sounds of varying loudness.

