

# Balloon drum

## Materials

- Balloon
- Scissors
- Clean tin can with no sharp edges or rigid plastic beaker
- Tape (electrical tape works well)
- Wooden spoon or xylophone stick



## Instructions

1. Use the scissors to cut off the neck of the balloon.
2. Stretch the round part of the balloon tightly over the open end of the can.
3. Use tape to hold the balloon in place by wrapping tape around the top of the can.
4. Use the pencil or stick to hit the drum.

## What happens?

Hitting the balloon drum causes the balloon to vibrate and make a sound. All sounds start with something vibrating. When the drum skin vibrates, the air inside the drum and around the drum vibrates. The tin can acts as a resonator which helps to make the sound louder.

Hitting the drum harder will make a louder sound. Smaller drums tend to make higher sounds because the vibrations are faster. Larger drums or drums with thicker skins tend to make lower sounds because the vibrations are slower.

## Why does it matter?

By understanding how sounds are made by vibrations, we can create a range of sounds with different pitch (high or low) and volume (loud or quiet).

## Related activities

Experiment with a range of materials to make drums of different shapes and sizes: try different sizes of tin cans, plastic tubs and jars with drum skins made from giant balloons, stretched plastic, paper or leather.

Try making a drum with something inside it such as beads, water or rice.

Play with real drums and compare the sounds to homemade drums.

Listen to recordings or watch videos of people playing a range of drums from different cultures or see a live performance.

Clap out and count different beats and ask children to copy you on their drums.

### **Health and safety considerations**

- Children or adults with latex allergies
- Choking hazards for young children (balloons)