



CAN DRUMS

Make your own miniature drums with items from your house.

Materials

Empty can
Balloon or plastic wrap
Rubber band
Pencil with an eraser
Rice



Procedure

- Cut the mouth and neck off of the balloon.
- Stretch the balloon over the opening of the can until it is pulled tight.
- Secure the balloon tightly by wrapping the rubber band around the can over the ends of the balloon.
- Gently strike the middle of the balloon with the eraser of the pencil and observe. (A large eraser works better.)
- Sprinkle some rice over the balloon and strike it again. What does the rice do?

Results

The balloon will vibrate, making a sound like a drum. When the rice is put on the balloon, it will jump every time the balloon is struck.

Why?

Because the balloon is thin and stretchy, it vibrates when it's stretched tight and struck with a pencil eraser. The elasticity, or stretchiness, of the balloon makes it vibrate a lot more than materials that aren't stretchy. The empty can catches the vibrations from the balloon and amplifies them, making the sound louder.