

Sound effects

Make a candle flame quiver by flicking a yoghurt pot to create sound waves.

In the classroom

What you need

A candle, a small metal tray or saucer, some sand, an empty yoghurt pot, some stiff paper, glue or an elastic band, and a match.

What you do

Make a yoghurt pot drum by covering the mouth of a yoghurt pot with stiff paper either by gluing it or gripping it tightly with an elastic band.

Cut a 1 cm hole in the centre of this paper drumskin.

Support the candle in sand on a metal tray in a draught-proof area and light it.

Point the yoghurt pot drum at the candle, drumskin away from you, and flick the base.

The children will be surprised at the volume. Those nearest the drum will hear it best.

What happens

The candle flame will quiver when the drum is flicked.

Background Information

Why it happens

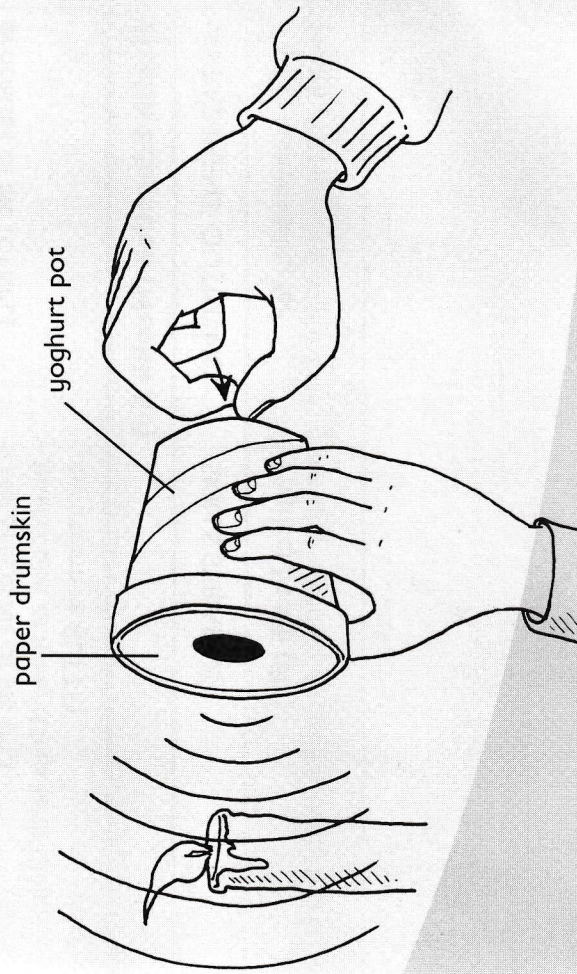
The yoghurt pot concentrates the sound. It also focuses all the sound in one direction. The sound is carried to the candle through the air as waves. The candle is burning in air, and when the sound wave reaches it, the change in air pressure makes the candle quiver.

By the way

The sound from the yoghurt pot changes the air pressure, unlike blowing which simply makes the air move. As a result, the air quivers or vibrates.



Take care when working with fire.



Curriculum links

KS2 Sc4 3e.g. QCA SoW 5F Changing sounds
Envl St/Science/E&F/PUE/Level E/T target 5