

Why do the shapes move?

Demonstrate how the hot air rising from a radiator or candle can make hanging shapes spin.

In the classroom

What you need

Some aluminium cooking foil and string. If the classroom radiator is not on you will also need a candle and matches.

What you do

Cut some shapes, e.g. spirals, out of the cooking foil and bend them in various ways.
Hang the shapes over the hot radiator, or a lit candle.
Observe what happens.

What happens

The shapes start to spin.

Background Information

Why it happens

The air above the radiator is being heated up and is rising. Hot air rises because it is less dense than cold air. As it rises, the hot air pushes the foil shapes and makes them turn.

By the way

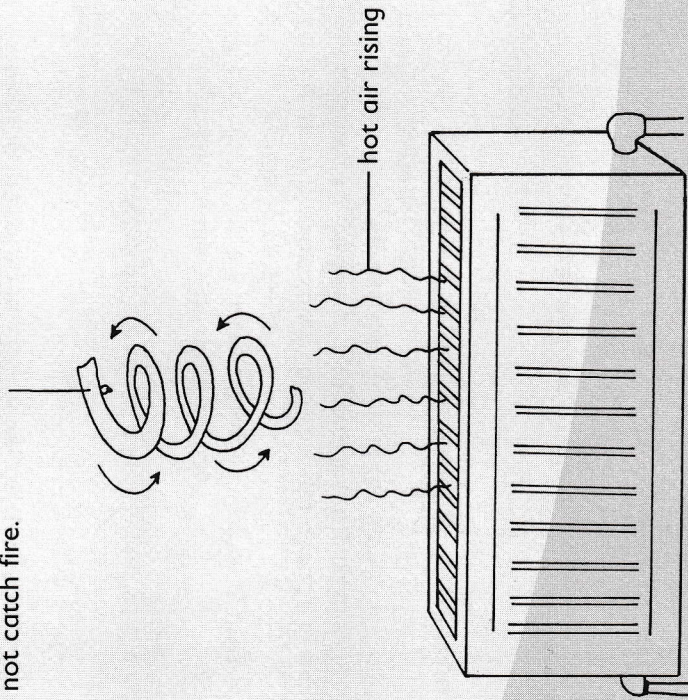
Loops, spirals and curves work best, offering shapes that can be easily turned by the rising air.

Talk about birds or hanggliders using columns of hot air (risers) to hover above the earth without using any effort.

Also discuss candle-driven Christmas decorations like 'angel chimes'.



If using a candle rather than a radiator take care that the shapes do not catch fire.



Curriculum links

KS2 Sc3 2b. QCA SoW 5C Gases around us
Envtl St/Science/E&F/PUE/Level E/Target 1