

The candle see-saw

Candle wax changes from solid to liquid which then drips, causing the candle to rock like a see-saw as it burns.

In the classroom

What you need

A long candle with a wick at both ends, a long nail, two drinking glasses, two saucers and a match.

What you do

Force the nail through the exact centre of the candle.
Balance the candle by the nail, between the two drinking glasses.
Put a saucer under each wick to catch the drips.
Light both wicks and observe what happens.

What happens

Both wicks burn. Wax drops from one end first and that end rises. Then the other end loses a drop of wax and rises while the first end drips again. The process of alternate drops of wax falling continues, and so the candle rocks back and forth.

Background Information

Why it happens

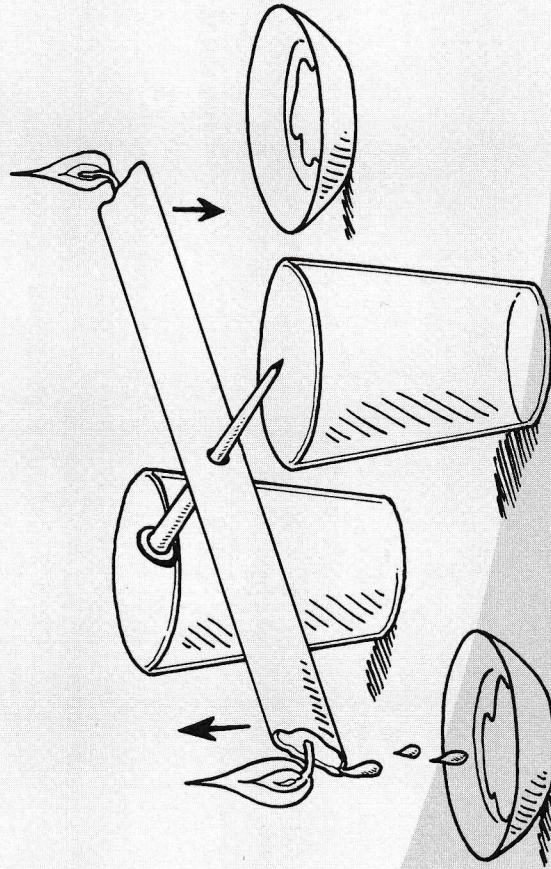
The solid wax fuel becomes liquid and burns. Some fuel is lost as gas (carbon dioxide) and some as water – both products of burning wax. Liquid fuel is also lost from each end in turn, changing the balance of the candle. The light end rises, the heavy end falls and so the candle rocks.

By the way

When wax burns, it produces carbon dioxide and water, and these are lost into the atmosphere. *But what about the liquid wax that runs down a burning candle? Does that still burn?*



Take care when working with fire.



Curriculum links

KS2 Sc3 2g. QCA SoW 5C Gases around us, 5D Changing state
Envtl St/Science/E&S/CM/Level D/Target 1