

Light and Shadow

Amazing Fact

You can buy a torch which is 20 000 times brighter than a regular torch. It can be used to start fires, melt polystyrene and even fry eggs!

Do you know how light travels?

Select the missing words from the torch below and fill in the gaps.

Challenge 1

Do you know how light travels?

Select the missing words from the torch below and fill in the gaps.

Light travels in (1) **straight lines** lines from a (2) **source** of light, which bounces off an object. We can see the object because the (3) **light** enters our eyes. Wood and cardboard are (4) **opaque** objects, which light cannot travel through. (5) **Glass** is a (6) **transparent** material which allows light to pass through. Tissue paper is (7) **translucent** which will let some light travel through. When an object blocks out the (8) **light**, a (9) **shadow** is formed. Shadows are (10) **shortest** at midday and (11) **longest at the end of the day.**

Challenge 2

Sort the materials into 3 groups: opaque, transparent and translucent.

Transparent	Opaque	Translucent
glass bottle (if it's clear glass)	chair	ice cubes (usually)
window	pencil	paper
sandwich bag	tin can	glass bottle (if not clear)
sticky tape (if clear)		sticky tape (if coloured)