

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?

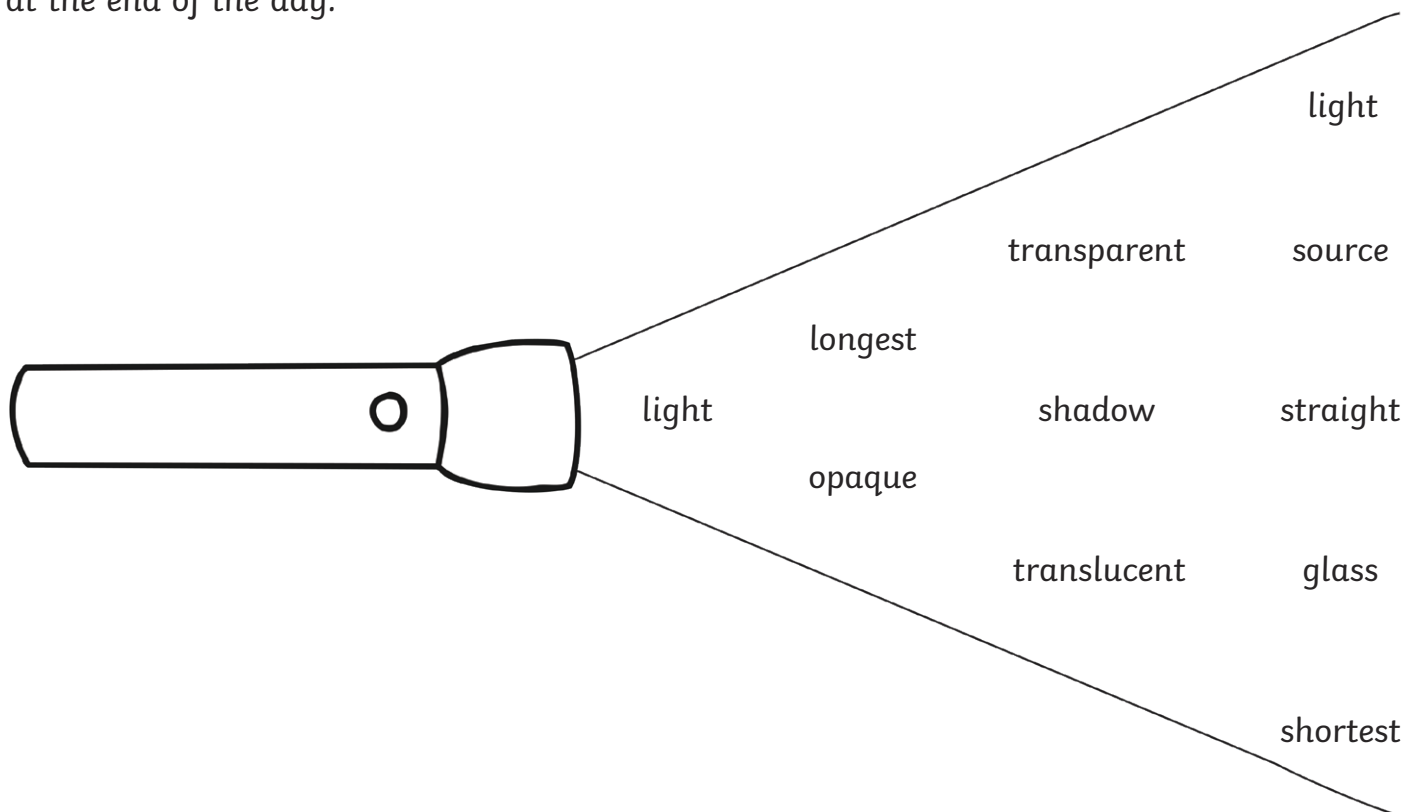
Select the missing words from the torch below and fill in the gaps.

Challenge 1

Do you know how light travels?

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

Light travels in _____ lines from a _____ of light, which bounces off an object. We can see the object because the _____ enters our eyes. Wood and cardboard are _____ objects, which light cannot travel through. _____ is a _____ material which allows light to pass through. Tissue paper is _____ which will let some light travel through. When an object blocks out the _____, a _____ is formed. Shadows are _____ at midday and _____ at the end of the day.



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Challenge 2

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

Transparent	Opaque	Translucent

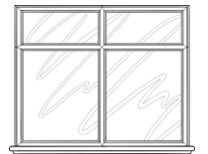
paper



ice cubes



window



pencil



sandwich bag



glass bottle



sticky tape



chair



tin can



You could also try to find out:

- what the brightest light on Earth is;
- how far searchlights can cast their beams;
- how far your torch at home will shine;
- about the relationship between light and heat.



Light and Shadow **Answers**

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

