



Where Does Light Come from?



When something gets very hot, it usually sends out light. Campfires and bonfires give us heat, but they also give us light. The sun gives us most of our heat and light. We need the sun for us to live on Earth, but it can also be harmful. The sun is so bright that it will damage your eyes if you look straight at it. Too much light from the sun can hurt your skin and give you sunburn.

I think light comes from our eyes.



If light comes from my eyes, why can't I see in the dark?

Ten Hot Sun Facts

1. The sun is a star.

2. The sun is a sphere.

3. The sun is very, very, very hot.

4. The sun gives us heat and light.

5. Light from the sun takes 8 minutes to reach Earth.

6. Light from the sun makes plants and animals grow.

7. The sun is much bigger than Earth.

8. Earth travels round the sun.

9. The sun is not solid (like a rock). It is made of lots of different hot gases.

10. The sun holds Earth in place. It stops it floating off into space.

A Write the correct answer for each sentence.

- The sun is a _____ . (rock, star, balloon)
- The shape of the sun is a _____ . (square, cube, sphere)
- The sun is made up of lots of _____ . (stars, rocks, gases)
- The sun's light takes 8 _____ to reach Earth. (minutes, hours)
- _____ travels round the _____ . (Earth, sun)
- The _____ is bigger than _____ . (Earth, sun)

SCIENCE



Materials

New Words








transparent **opaque** **flexible** **waterproof**

What does 'material' mean?

My shirt is made from cotton material.

My desk is made of two materials.

A Look carefully at these classroom objects. Write Yes or No.

	Transparent <i>(we can see through it)</i>	Opaque <i>(we can't see through it)</i>	Flexible <i>(bendy)</i>	Waterproof <i>(keeps out water)</i>	Does it work well?
 Small World book	No	Yes			
 My schoolbag					
 My eraser					
 My pencil case					
 My desk					
 Sticky tape					
 My coat					

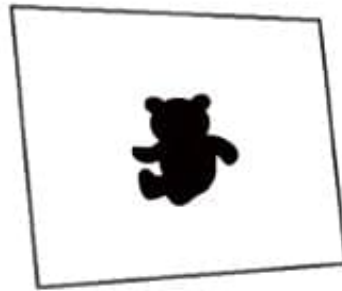


Find objects made from two materials, e.g. a plastic pencil case with a metal zip. Explain why the two materials work well together. Look at these objects: paper, door, window, desk, chair, coat. What materials are they made of?

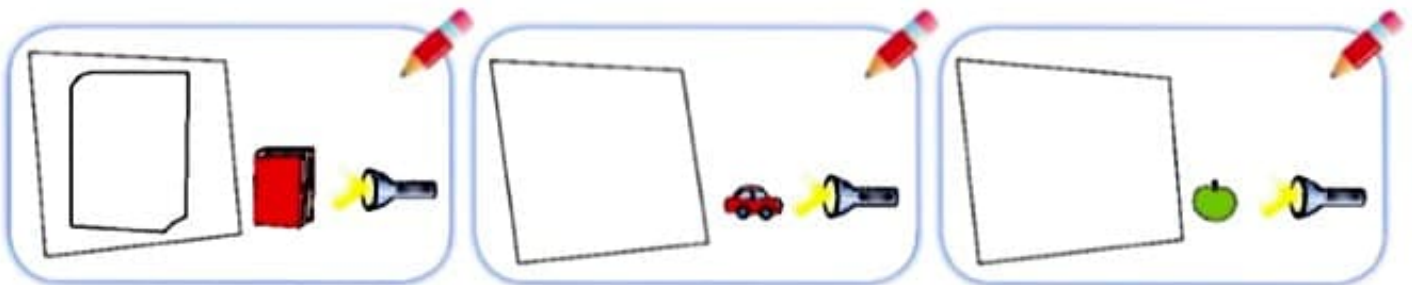


What Is a Shadow?

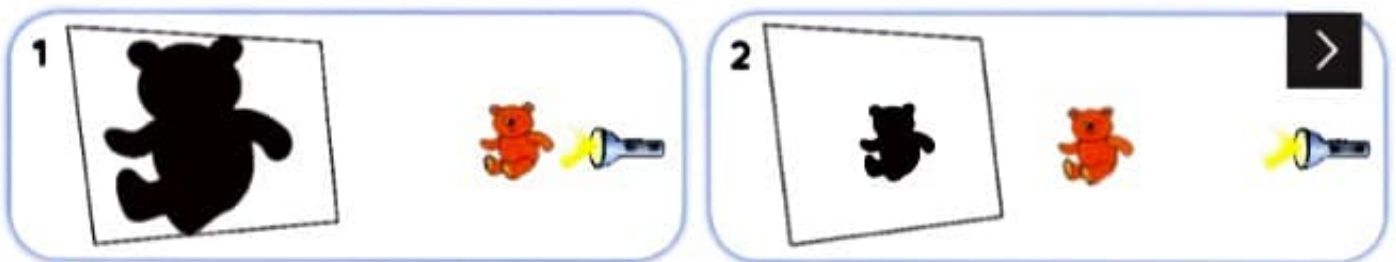
When an object blocks out light, we get a shadow. The object must be opaque to make a shadow. An opaque object is one that no light can get through, such as a teddy or an apple. A transparent object does not make solid shadows because it lets light through. A glass is a transparent object, so is a clear plastic bag.



A Shade in or draw the shadow that each opaque object makes.



B What is the difference between these two pictures?



C Shade in the shadow the sun makes at different times of the day.

When the sun shines on opaque objects it makes shadows. It makes the longest shadows at the beginning and at the end of the day. The sun is low down in the sky at these times (close to Earth). The sun makes the shortest shadows in the middle of the day, when it is high up in the sky (farther away from Earth).

