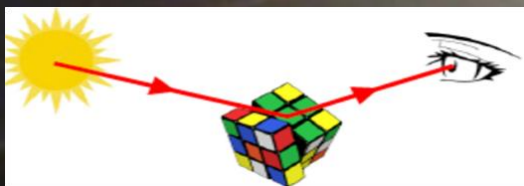


## Science Topic – Light – LKS2

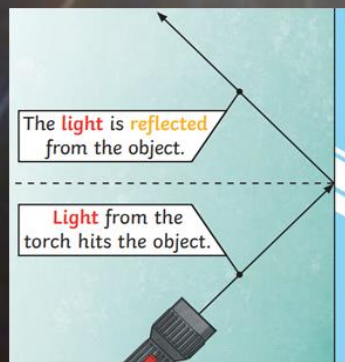
How does light affect the way we see the world?

### Sticky Knowledge

A **shadow** is caused when light is blocked by an opaque (solid) object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light.

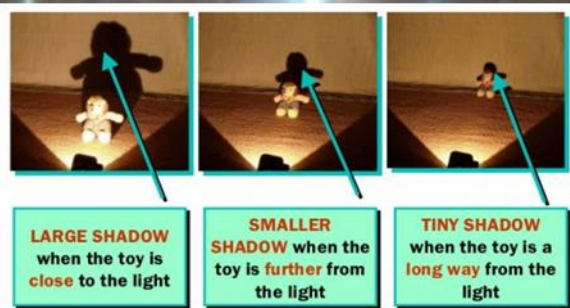


We need light to be able to see things. Light travels in a straight line. When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object. Darkness is an absence of light.



Light from the sun can be dangerous. You need to protect your eyes from direct sunlight. Wearing sunglasses is a great way to stay safe in the sun.

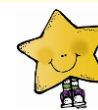
Some surfaces and materials reflect light well. These are smooth, shiny and flat, which is why a mirror reflects light so well and gives us such a clear image. Other materials (those with uneven surfaces) do not reflect light as well.



**LARGE SHADOW**  
when the toy is close to the light

**SMALLER SHADOW**  
when the toy is further from the light

**TINY SHADOW**  
when the toy is a long way from the light



### Homework: Topic Project

Use any materials to create a shadow puppet. Consider using a variety of shapes to block out different amounts of light. Extra challenge! Use the puppet to retell an Ancient Greek myth.

Due w/c 29<sup>th</sup> January.

### Key Vocabulary

Key word	Definitions
Light source	An object that makes its own light.
reflection	When light hits a surface and bounces back to our eyes.
ray	Waves of light are called light rays
shadow	An area of darkness where light has been blocked
transparent	Describes an object that allows light to pass through.
translucent	Describes an object that allows some light to pass through.
opaque	Describes an object that allows no light to pass through.