



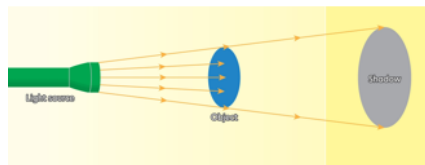
# Light

## Key Knowledge:

### How we see:

Light travels in straight lines.

The light rays from a light source reflect off the object we are looking at. The light travels in a straight line and enters the eye through our pupil.



### Shadows:

Opaque objects block the light rays so they can only travel around the edges of the object in straight lines. That is why a shadow is the same shape as the object.

The closer an object is to the light source, the bigger the shadow.

The further away the object is from the shadow, the smaller the shadow.

### Bending Light:

#### Reflection

Light reflects off shiny, bright or light surfaces. That is why you can see your reflection when you look in a mirror.



REFLECTION



#### Refraction

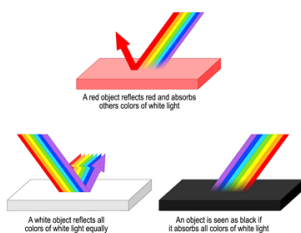
Water and bent shiny surfaces cause light rays to be refracted at different angles, meaning the reflection of the image is distorted.



### Colours:

White light is made up of the colours of the rainbow. When light is refracted through a transparent ob-

Absorption and reflection of light



ject, a rainbow is formed.

## Learning Questions

How does light travel?

What is reflection?

How can reflection help us see?

How do shadows change?

How can we show why shadows have the same shape as the objects that cast them?

What is light phenomena?

What else do you know?