

This half term our science unit of learning will be 'Light'.

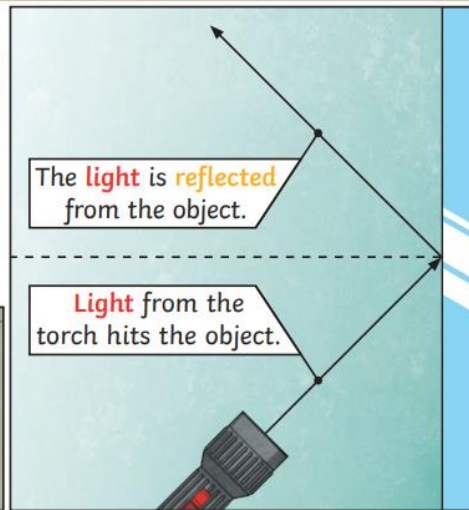
### Key Knowledge

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. Some surfaces and materials **reflect light** well. Other materials do not **reflect light** well. **Reflective** surfaces and materials can be very useful...



hi-vis jacket

cat's eyes



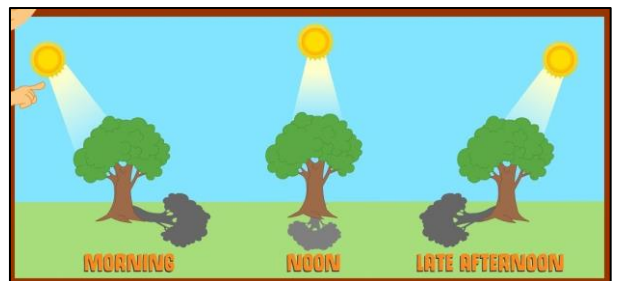
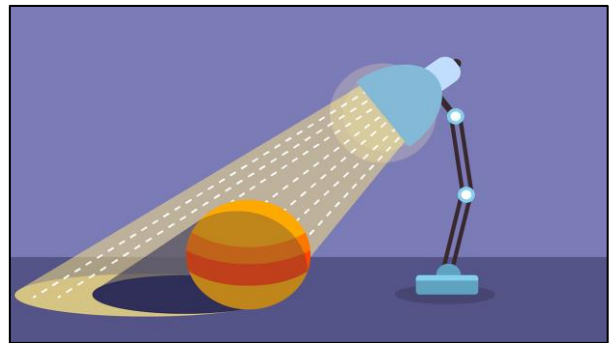
### Vocabulary:

Absence  
 Closer  
 Dangerous  
 Directly  
 Experiment  
 Further away  
 Light source  
 Material  
 Opaque  
 Protect  
 Reflect  
 Surface  
 Translucent  
 Transparent

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

By moving the position of the **light source**, we change the size of the **shadow**.

- The closer to the **light source** the opaque object is, the bigger the shadow will be. This is because the object blocks more of the light.
- The further from the **light source** the opaque object is, the smaller the shadow will be. This is because the object blocks less of the light.



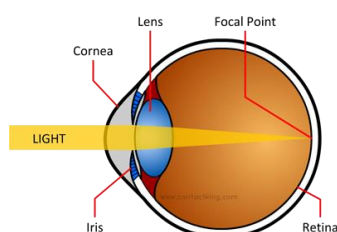
MORNING

NOON

LATE AFTERNOON

Have you ever seen your body's shadow late in the evening? What does it look like?

Our pupils control the amount of light entering our eyes. If too much light enters then it can damage the **retina**. To help protect your eyes, you can wear a hat with a wide brim and sunglasses with a UV rating.



The sun is a **light source**, but we should be very careful when looking at it. It can be very damaging for our eyes to look directly at the sun.

What other parts of our body do we need to protect from the sun?