## Rolvenden Primary School – Knowledge Organiser



## Vocabulary

refraction

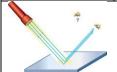
The change in direction of a wave passing from one medium to another. This is caused by speed changes.



Light being refracted through a glass of water.

reflection

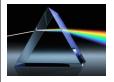
When a light ray hits a surface and bounces off.



Light reflecting off of a surface.

spectrum

A band of colours produced by the separation of the components of light. As seen in a rainbow.



A spectrum being formed by refraction of white light through a prism.

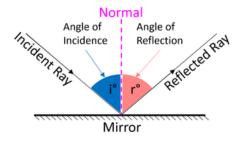
light

A natural agent that stimulates sight and makes things visible.

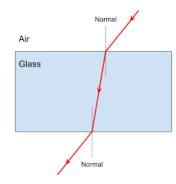


The sun is a **light** source. Its rays are very powerful.

## Reflection and Refraction



This diagram shows the key vocabulary for reflection. Light arrives from the source as the 'incident ray' and is reflected off of the surface as the 'reflected ray'. The angle of incidence and the angle of reflection are the same size.



This diagram shows how light is refracted through a different medium — in this example water. The different speeds at which light travels through the air and make the light change direction.

Light does not bend.

# Transparent, Translucent and Opaque

### **Transparent**

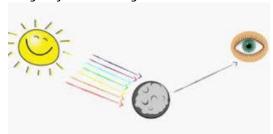
Describes objects that let light travel through them easily, meaning you can see through the object.

#### Translucent

Describes objects that let some light travel through them, meaning you can see objects, without detail or clarity, through them.

### <u>Opaque</u>

Describes objects that do not allow any light to pass through them, meaning you cannot see any objects through them.



This diagram shows how the eye sees. Light comes from the source (in this case, the sun). The ray of light is then reflected off of the object (in this case the moon) and the light travels to the eye.

Light

