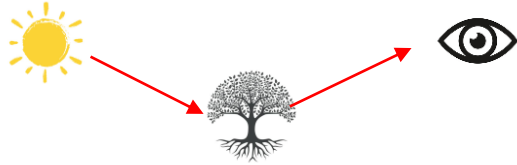


# Knowledge Organiser Year 5 and 6

## Unit: Light

### 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**.



### Bending Light

#### REFLECTION

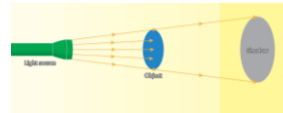


**Reflection**  
Light reflects off shiny, bright or light surfaces. That is why you can see your reflection when you look in a mirror.



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

### 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.



### Colours

#### Absorption and reflection of light

White light is made up of the colours of the rainbow. When light is refracted through a transparent object, a rainbow is formed.



A red object reflects red and absorbs others colors of white light










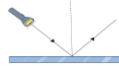


A white object reflects all colors of white light equally



An object is seen as black if it absorbs all colors of white light

Rocket Words

|                                                                                    |              |                                                                                                                |
|------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------|
|    | opaque       | A material that does not let light pass through.                                                               |
|    | transparent  | A material that lets all light pass through it.                                                                |
|    | translucent  | A material that lets some light pass through it                                                                |
|    | reflection   | A mirror image caused by rays of light reflecting off an image onto a reflective surface then into our pupils. |
|    | reflects     | Bounces off.                                                                                                   |
|    | light source | Any man made or natural means of producing light.                                                              |
|    | refraction   | Where light rays are reflected of an uneven surface at irregular angles, causing an illusion.                  |
|   | light ray    | Beams of light that travel from a light source in straight lines.                                              |
|  | pupil        | The black part of the eye that is a hole.                                                                      |
|  | angle        | An angle is formed when 2 straight lines meet at a common point.                                               |