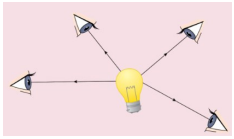
Light

Key Vocabulary
light ray: a way of showing light travelling from one place to another
reflection: an image of an object seen in a mirror or other reflective surface
dark/darkness: the absence of light able to see things.
light: is produced by a light source and makes things visible
light source: something, natural or artificial, that produces its own light
opaque: the property of blocking light by absorbing or reflecting all of the light that
reflect: to be diverted back from a surface
reflective: reflecting back a lot of the light that falls on it making it shiny in appearance
shadow: a darker region where some or all of the light has been blocked by an object
transparent: the property of allowing almost all light that falls on it to pass through,
translucent: the property of blocking or scattering some light so that not all of it
diagram: a drawing that represents what is happening rather than showing artistic

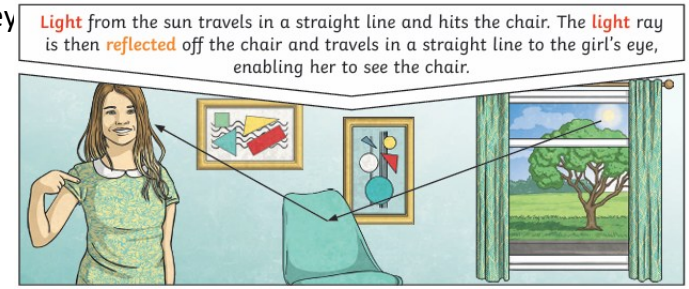
How does light travel?

Light travels away from a light source in straight lines.



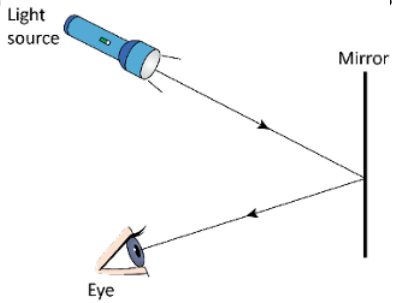
How do we see objects?

We need light to be able to see things. All objects, even those that do not appear shiny, reflect some of the light that falls on them. When this reflected light enters our ey



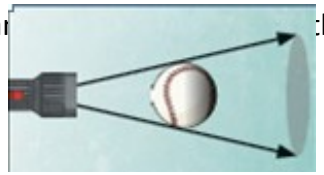
How is light reflected?

Light rays hitting a smooth, shiny surface such as a mirror are reflected at the same angle to the mirror as they travel towards it.



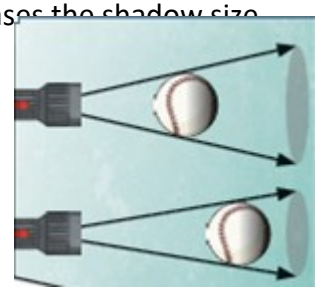
What can we change about a shadow?

No light can pass through an object made from an **opaque** material. When an opaque object is placed in front of a light source, it prevents the light from passing through. This *absence* of light creates a **shadow** on the surface behind it.. A shadow is always the sa hat casts it. .



What affects the size of a shadow?

Increasing the distance between light source and object decreas the shadow size



Increasing the distance between the object and the screen increases the shadow size. The shape of the shadow does not change.

Objects made from translucent materials cast pale shadows as they allow some of the light to pass through them. These shadows also have the shape