



Gospel Value

Joy

## KNOWLEDGE ORGANISER

### Year 3: Light, Reflections and Shadows

#### What I should know already

- Observed changes across the four seasons
- Observed and describe weather associated with the seasons and how day length varies

Because light travels in straight lines, when it hits an object, it is blocked. It can't bend around the object so it casts a shadow.

- 1.) We can see objects because light reflects off them and into our eyes.
- 2.) Light reflects off most objects, especially colours like white and yellow.
- 3.) If there is no light at all (pitch-black), then there is no light to reflect and we can't see anything at all.
- 4.) At night you can still see a bit in the dark because the moon is reflecting light.

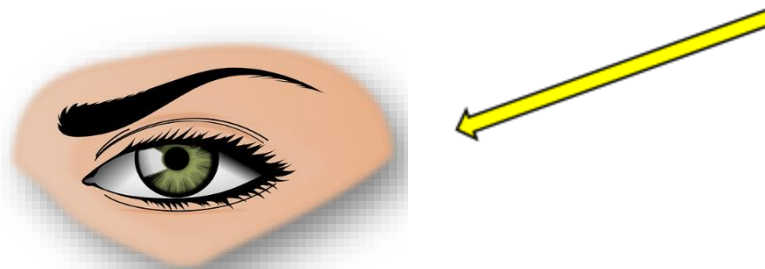
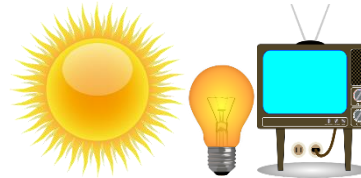
Light travels in straight lines. It travels from the light source either directly into our eyes, or reflecting off objects at 670 million mph.

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A mirror is not a light source. It reflects light so doesn't create it.



#### LIGHT SOURCES



#### Vocabulary:

Light Source – Something that emits lights e.g. torch, sun, light bulb

Dark – absence of light

Reflect – give back light

Ray – beam coming from a light source

Mirror – surface that reflects and image

Bounce – light reflects of certain materials

Visible – able to be seen.

Beam – radiate light.

Sun – star which provides heat and light to the earth

Glare – shine intensely and blindingly

Travel – light travels in straight lines

Straight – with no bends

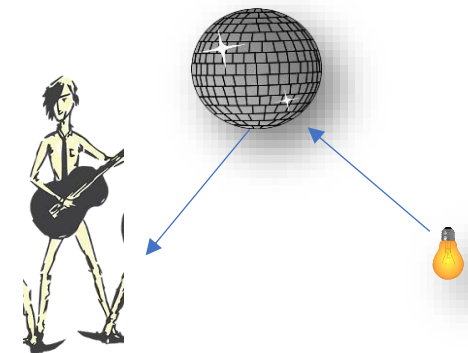
Opaque –light cannot travel through

Shadow – caused by an object blocking light

Block – obstacle

Transparent – light can travel through

Translucent – some light can travel through



When light hits a smooth object, it bounces off (reflects) making it appear shiny.