

# Year 3: Light

## LIGHT:

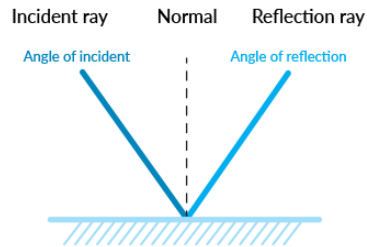
Light is a form of energy

Energy comes in different forms and can neither be created nor destroyed.

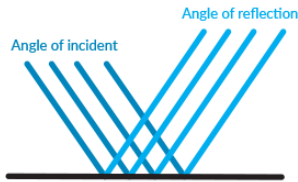
We need light to see things and darkness is the absence of light.

## REFLECTION:

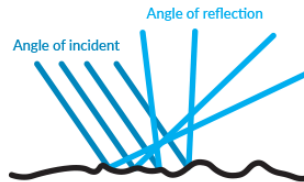
### Mirror reflection



### Specular reflection



### Diffusion reflection

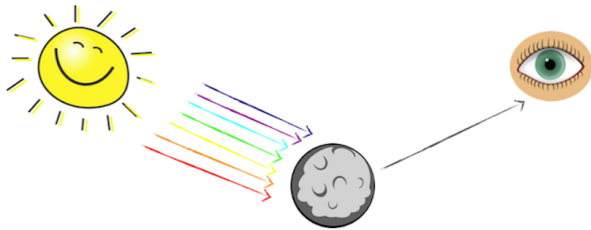


Light travels in straight lines.

Light is reflected when it travels from a light source and then 'bounces off' an object

Everything that we can see is either a light source or something that is reflecting light.

## SOURCES OF LIGHT:



Everything we see is either a light source or something that is reflecting light into our eyes.

Light can come from many sources.

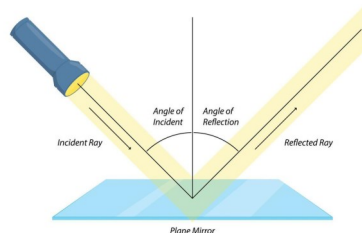
Some sources of light are natural e.g. the sun, stars, fire etc.

Some sources of light are man-made e.g. lightbulb or torch.

When light travels, it travels in straight lines from a light source to an object.

Light bounces off reflective objects, enabling us to see reflections.

Some materials aren't reflective because light is scattered by their surfaces.



## WHO:

Thomas Alva Edison

1847-1931



Thomas Alva Edison was an American inventor and businessman. He developed many devices in fields such as electric power generation, mass communication, sound recording, and motion pictures.

These inventions included the motion picture camera, the electric light bulb and the phonograph.

Through his life as an inventor and scientist, Edison won many awards for his work.

## SHADOWS:

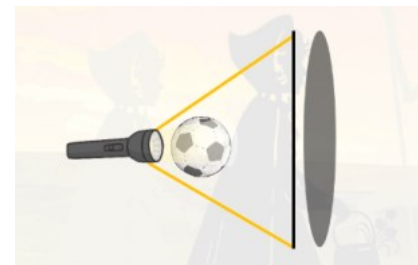
Shadows happen because light does not bend around objects.

Darkness created in a shadow is evidence of light travelling in straight lines.

Opaque objects block light creating shadows and light passes through transparent objects.

Opacity / transparency and reflectiveness are properties of materials.

Objects move towards a light source, the size of the shadow increases.



## KEY VOCABULARY



**DARKNESS:** the absence of light



**LIGHT:** a brightness that lets you see things



**LIGHT SOURCE:** anything that makes light, whether natural or artificial



**OPAQUE:** an object or liquid that can be seen and touched



**REFLECTED:** sent back from the surface and not pass through



**SHADOW:** a dark shape on a surface that is made when something stands between light and source.



**TRANSPARENT:** an object or liquid that you can clearly see through