

How can we control light?

Energy - Light
Year 3



Key scientist - Ole Roemer

He was the first scientist to measure the speed of light in 1676. He discovered that light travels at a set speed.



Key vocabulary

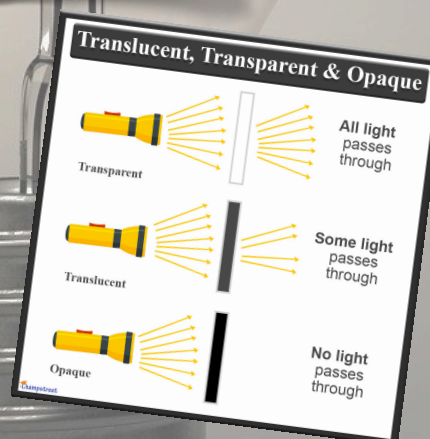
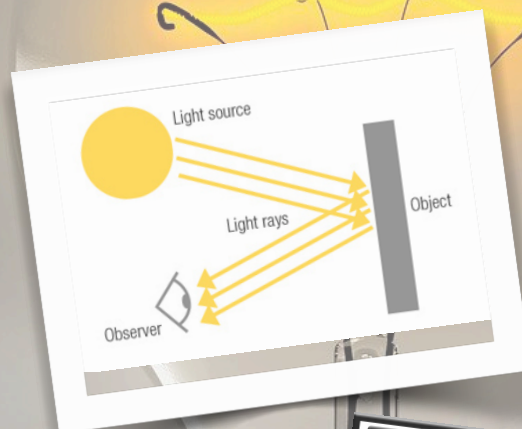
light	The natural element which allows us to see and makes things visible
light source	Something that produces light, e.g. the sun, fire, stars, man-made light such as a lamp.
artificial light source	Light that is not naturally occurring - it cannot exist without humans.
natural light source	Light that occurs naturally without the input of humans.
shadow	An area of darkness caused by an opaque object blocking light rays.
reflect	When light rays bounce off an object.
transparent	A material which allows light to pass through it, objects can be seen through it. E.g. glass.
translucent	A material which allows some light to pass through but not detailed shapes. E.g. a frosted window
opaque	A material which does not allow any light to pass through it. You cannot see through it.

Key learning

- Recognise that they need light in order to see things and that dark is the absence of light
- Notice that light is reflected from surfaces
- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- Recognise that shadows are formed when the light from a light source is blocked by an opaque object
- Find patterns in the way that the size of shadows change

Working scientifically concepts

- Interpreting and communicating results
- Recording data
- Observing and measuring



Energy - Light - Our Learning Journey

Year 3

- Notice light and dark including shadows

Year 5

- Identify and explain unbalanced forces
- Describe the orbits of the Earth and moon



Ethics -

Is artificial light bad for the planet?

