



Runnymede St. Edwards Primary Catholic School - Knowledge Organiser

Subject: Science

Light

Year: 3

Term: Spring 2

	Key Knowledge and Vocabulary
light	A type of energy. We can see objects because our eyes can sense light
dark	The absence of light
light source	An object that produces its own light (e.g. sun, fire)
reflect	To throw back or bounce light from a surface
illuminate	To light something and make it brighter
UV light	Ultraviolet light are invisible rays that are part of the energy that comes from the sun
opaque	An object which does not allow light to pass through it (e.g. wood)
translucent	An object which allows some light to pass through it. It may be possible to see some unclear images through the object (e.g. tissue paper)
transparent	An object which allows light to pass through it so that objects behind it can be easily seen (e.g. glass)
shadow	A dark area or shape caused by a blockage of light

Shadows

You can change the size and shape of shadows by placing the light source further away or closer to the object.

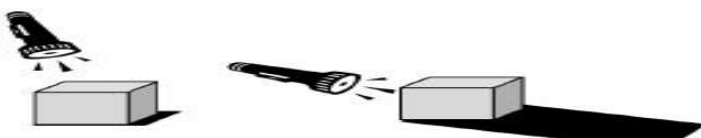


LARGE SHADOW
when the toy is
close to the light

SMALLER SHADOW
when the toy is
further from
the light

TINY SHADOW
when the toy is a
long way from the
light

As the **light source** moves **higher** in relation to the **object**, the **shadow** gets **shorter**. As the **light source** moves **lower**, the **shadow** gets **longer**.



Reflection

Light travelling and reflecting off a smooth surface.



Light travelling and reflecting off a rough surface.



Facts about light

Light travels in a straight line

Light travels faster than sound.

A light year is a unit of measurement for distance. It is the distance light can travel in a year.

A light year is a unit of measurement for distance.

Darkness is caused by the absence of light.

The moon does not emit its own light – it reflects the sun.

Ultraviolet (UV) light is a type of radiation which you can't see but can be dangerous. UV rays can come from the sun.

Translucent, Transparent & Opaque

