LIGHT – Knowledge Organiser Year 6 Spring 2

Vocabulary

light	A type of energy. It stimulates our eye to send signals to the brain so that we can see.
light source	The origin of light (where light comes from). Can be natural or artificial.
ray	The straight path with which light travels.
reflect	When light bounces off an object without being absorbed. [Noun = reflection].
refract	When light changes direction as it passes through one material into another. [Noun = refraction].
emit	To produce and give off/out a type of energy (e.g. light or sound).
transparent	Allows all light to pass through.
translucent	Allows some light to pass through. Objects on the other side of a translucent object can't be seen clearly.
opaque	Not able to allow any light to pass through.
periscope	A piece of equipment using two mirrors set at 45°. It enables us to view objects which would be out of sight.
spectrum	A range of colours produced by separating out white light (as seen in a rainbow). Red, Orange, Yellow, Green, Blue, Indigo, Violet

Properties of Light

1. Light appears to travel in straight lines

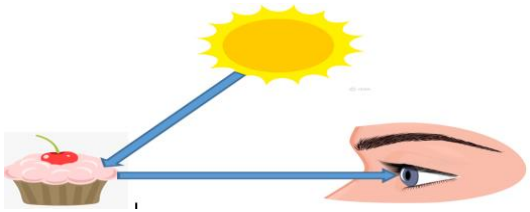
2. Light travels very fast!

300,000,000 metres per second!

3. When blocked, it creates a 

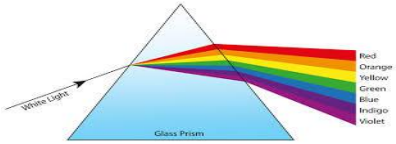
How We See

We can see objects because they give out light or reflect light into our eyes.



Refraction & Spectrum of Light

White light can be refracted through a prism to split it into its different colours (spectrum):



The spectrum of white light is RED, ORANGE, YELLOW, GREEN, BLUE, INDIGO and VIOLET.

Shadows

Shadows have the same shape as the objects that cast them

Shadows change length and direction during the day:

Shadows change in size depending on the distance between the object and light source: