

Key Knowledge Organiser: Year 6- Autumn 2

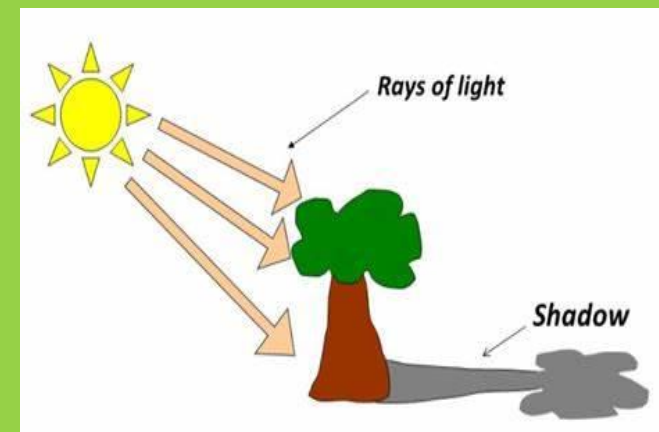
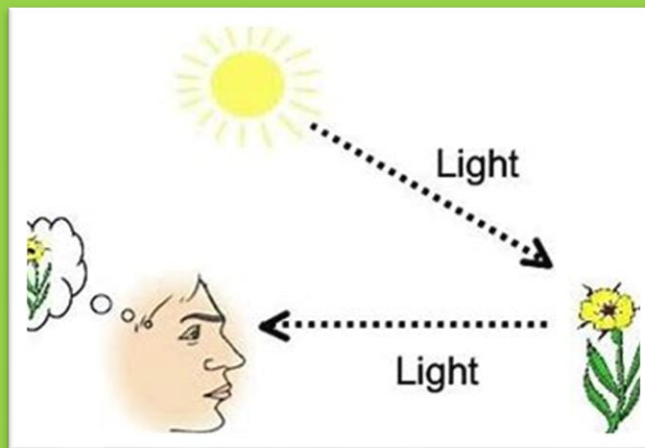
Science: Light

In this unit the children will investigate how light travels in straight lines and how shadows are formed and can be changed. They will investigate how light can be reflected and refracted (bent). They will learn how objects can be seen.

Vocabulary

iris	The coloured part of the lens
lens	The part of the eye that focuses the light
Light ray	The path the light takes
pupil	The black hole in the centre of the coloured part (iris) that lets light enter the eye
rainbow	Occurs when the sunlight hits rain, splitting the light into colours
symmetry	When one shape becomes exactly like another if you flip, slide or turn it. The simplest type of symmetry is "reflection" (or "mirror") symmetry
reflection	Light bouncing off the surface of an object – all materials reflect light
refraction	When light changes direction as it passes through one material to another (e.g. water, plastic)
shadow	Created when light is blocked by an opaque object
opaque	A material through which no light can pass
translucent	A material through which some light can pass (frosted glass/tracing paper)

Light:



Knowledge:

- To know that light travels in straight lines.
- To know that light travels from a light source to our eyes and we see objects because they give out or reflect light.
- To know that refraction is when light bends.
- To know that light can be refracted when it travels through different materials.
- To know that shadows are formed when light is blocked and that the shape of the shadow matches the object.
- To know that the size of the shadow is larger when the object is closer to the light source.

Scientific skills learned prior to this unit:

- Plan different types of scientific enquiries to answer questions.
- Record findings using simple scientific language, drawings and labelled diagrams.
- Use results to draw simple conclusions, make predictions, suggest improvements and raise further questions.

Scientific skills learned this unit:

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables.

transparent	A material through which all light can pass	- To know that rainbows are formed because of refraction through water droplets.	<ul style="list-style-type: none">• Record findings using simple scientific language, drawings and labelled diagrams, classification keys, bar and line graphs• Use test results from fair tests to make predictions to set up further comparative and fair tests.
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