

SCIENCE: LIGHT

WHAT IS LIGHT AND WHAT DOES IT DO?

Key Vocabulary

Reflect, light sources, travel, shadows, dark/darkness, light, light source, opaque, reflect, reflective, shadow, transparent, translucent, predict/prediction, block, reflection explain/explanation, evidence measure/measurement,

Working Scientifically:

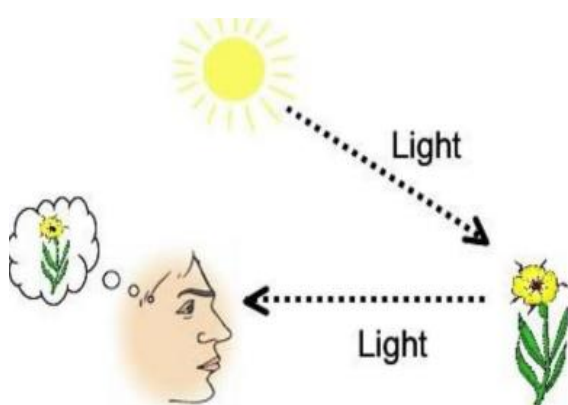
Identifying scientific evidence that has been used to support or refute ideas or arguments.

Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

Recording data and results of increasing complexity using scientific diagrams and labels, [classification keys, tables, scatter graphs, bar] and line graphs.

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

How do we see things?



Must - know knowledge

Light appears to travel in straight lines. We can see a light source because some of the light from the source enters our eyes.

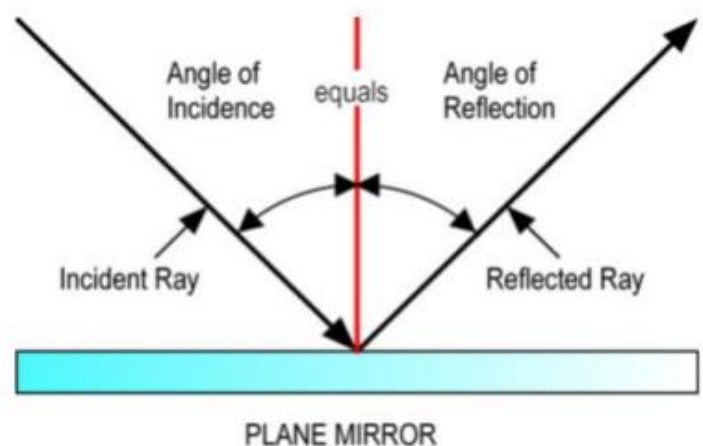
What can we change about a shadow? Light travelling in straight lines can be used to explain why a shadow is the same shape as the object that casts it and how the shape of shadows can be changed.

The idea that light travels in straight lines can be used to explain what is observed when testing predictions about shadows.

The shape of a shadow and the pattern to how shadows change size when the relative positions of the light, object and screen are changed can be explained by light travelling in straight lines.

Light is reflected from shiny surfaces in a predictable way because it travels in straight lines.

Law of Reflection



Experiments:

How distance of a light source affect the size and shape of shadows?