



Year 6 Light Knowledge Organiser



Star Vocabulary

Light	A form of energy that travels in a wave from a source.
Reflection	When light bounces off an object.
Shadow	shadow An area of darkness where light has been blocked.
Translucent	Objects that let some light through.
Transparent	Objects that let light travel through easily.
Opaque	Objects that don't let light pass through.
Refraction	When light bends from one medium to another.

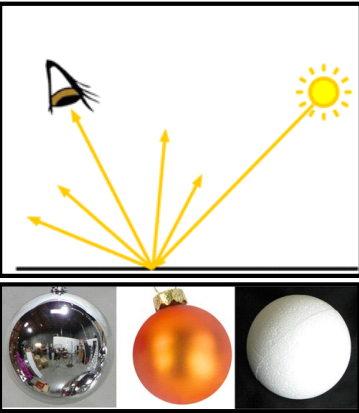
Recognise the purpose of light and how we need it to see things.

Discuss the similarities and differences between light waves and waves in matter.


We need light to be able to see things. Light waves travel out from sources of light in straight lines. These lines are often called rays or beams of light.

Because light travels in straight lines, shadows take the shape of the objects that cast them. Light is blocked by the outline of the object and does not pass behind it.



Some objects reflect light more than others. This depends if the surface of the object is mirrored, glossy or matt.



Progression

Recognise that they need light in order to see things and that dark is the absence of light.

Recognise that shadows are formed when the light from a light source is blocked by an opaque object. Find patterns in how shadows change.

Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.

Notice that light is reflected from surfaces. Understand that light is harmful to our eyes.

Recognise that light appears to travel in straight lines. Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.

Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.