Year 6 Science Autumn 1

Light

Links to prior learning:

Year 3 learning: To recognise that they need light in order to see things and that dark is the absence of light,

To notice that light is reflected from surfaces, To recognise that light from the sun can be dangerous and that there are ways to protect their eyes,

To recognise that shadows are formed when the light from a light source is blocked by an opaque object,

To find patterns in the way that the size of shadows changes

By the end of this unit I will be able to:

- 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
- Explain that we see things because light travels from light sources to our eyes or from light
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the

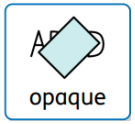
Key Vocabulary



Transparent: allowing light to pass through so that objects behind can be seen



Translucent: allowing light, but not detailed shapes, to pass through; semi-transparent



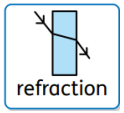
Opaque: not able to be seen through



Light source: anything that makes light, whether natural and artificial.



Reflection: the throwing back by a body or surface of light, heat, or sound without absorbing it.

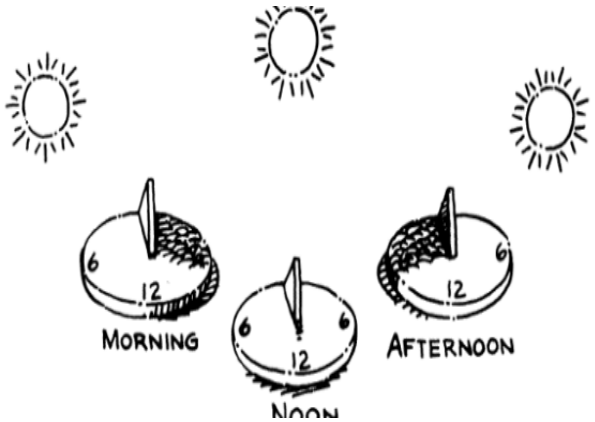


Refraction: change in direction of light waves as a result of its travelling at different speeds

Shadows



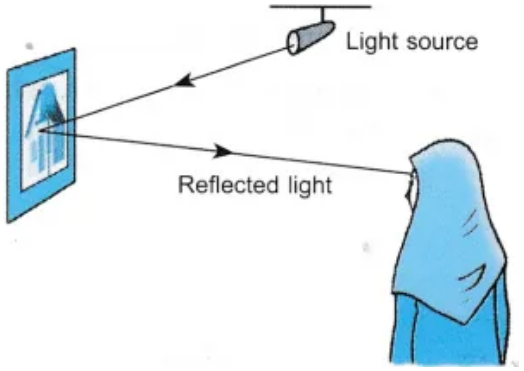
A shadow is the area where light from a light source is blocked by an opaque object. A shadow has the same shape as the objects which casts them.



Reflection



A light source reflects from the source to the object into our eyes in a straight line. Without a light source, objects cannot be seen.



Parts of the human eye

Pupil: the opening within the iris through which light passes before reaching the lens and being focused onto the retina

Retina: the nerve layer that lines the back of the eye, senses light, and creates impulses that travel through the optic nerve to the brain

Iris: The coloured tissue at the front of the eye that contains the pupil in the centre

Cornea: The transparent part of the eye that covers the iris and the pupil and allows light to enter the inside of the eye

