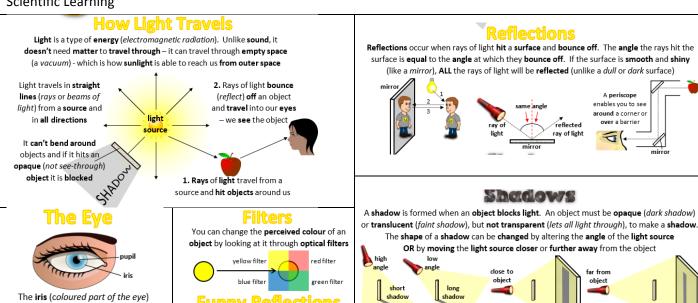
William Barnes Primary School	Subject: Science
Unit: Light	Year 6

What should I already Know?

- The moon is NOT a source of light because it reflects light from the sun (the same way a mirror can't be a source of light)
- Some surfaces/objects are more reflective than others
- Reflective surfaces can be very useful
- When the light from a light source is blocked by an opaque (not see-through) object a shadow is formed
- Some objects allow more light through than others
- You can change the shape of a shadow by moving the light source or the object further away from, or closer to, each other

Scientific Learning



Reflections on rippling water or curved metal (like a spoon) can look

distorted. That is because the light reflects off them at different angles

What should I Know by the end of the unit?

widens or narrows to change the size of the pupil (the black opening in the

centre). It does this to either let in more/less light depending on how

dark/bright it is. REMEMBER: Very bright light can damage your eyesite

- 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
- explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Vocabulary

refraction	This is when light bends as it passes from one medium to another. E.g. Light bends when it moves from air into water.		
visible spectrum	Light that is visible to the human eye. It is made up of a colour spectrum.		
prism	A prism is a solid 3D shape with flat sides. The two ends are an equal shape and size. A transparent prism separates out visible light into all the colours of the spectrum.		
light	A form of energy that travels in a wave from a source.		
light source	An object that makes its own light.		
reflection	Reflection is when light bounces off a surface, changing the direction of a ray of light.		

shadow	An area of darkness where light has been blocked.
transparent	Describes objects that let light travel through them easily, meaning you can see through the object.
translucent	Describes objects that things let some light through, but scatters the light so we can't see through them properly.
opaque	Describes objects that do not let any light pass through them.