Science-Light

Year 6

How we see things

- Light is a form of energy.
- We see things because light travels from a source • (e.g. the sun) and bounces off surfaces before entering our eyes.

Knowledge

Organiser

Light normally travels in straight lines, but when it passes through transparent materials, such as water, it bends. This is known as refraction



Light is made of many different colours, known as a spectrum. When light is split, we see the colours as a rainbow.



The Eye

- The eye is the organ in our body which allows us to • see.
- The eye is made up of a number of different parts.



- Light travels into the eye through the pupil and is detected at the back of the eye, on the retina.
- The retina then sends information to the brain through the optic nerve, allowing us to see.
- Sometimes, the muscles holding the lens are too tight or not tight enough, meaning that we cannot always see clearly. At these times, we may need to wear glasses or contact lenses.
- The iris (the coloured part of the eye) changes size to allow more or less light in. This helps us to see in darker situations.

Key Vocabulary	
opaque	a material you are not able to see through
prism	something that splits a beam of light.
rainbow	an arch of colours caused by the splitting of a beam of light.
reflection	when light hits the surface of an object and then that light travels to our eyes so we can see.
shadow	an area of darkness produced by an object coming between rays of light and a surface.
source	where something comes from.
translucent	a material allowing light, but not detailed shapes, to pass through
transparent	a material allowing light to pass through so that objects behind can be seen clearly.
What I can do at home	
We est nainhour when white	

- We get rainbows when white Investigate light travels through something and splits. Can you create a rainbow using things
- How much do we rely on sight? Explore With help so you are safe, try
 - closing your eyes and moving
 - around your house. How
 - tricky do you find it?

Communicate

Talk to an adult at home about the things below. You don't need to record this.

The main 5 senses are sight, smell, touch, taste and hearing. Which do you use the most? Which do you think is the most