St John's Primary School: Science knowledge organisers

Year group: Year 6 Science focus: Light



Key knowledge:

	Light sources	
What is light?	A way of seeing our surroundings	
	when it is dark.	
What is	The absence of light.	
darkness?	When the area surrounding you is	
	difficult to see.	
What is a light	A light source is something that	
source?	makes its own light.	
How do we	Light travels from the light source,	
see objects?	bounces off an object and travels	
	into our eyes so that we can see	
	the object.	
Shadows		
How is a	When light from a source is blocked	
shadow	by an opaque object, you get a	
formed?	shadow.	
How does the	If an object is moved closer to the	
size of the	light sources, the shadow gets	
shadow	bigger.	
change?	If an object is moved further away	
	from the light source, the shadow	
	gets smaller.	
Why are	Because light travels in straight	
shadows the	lines, shadows have the same	
shape they	shape as the objects that cast	
are?	them.	

Key concepts:

Recognising	Finding patterns	
Noticing		

Possible experiences:

Design and make a periscope. Investigate refraction

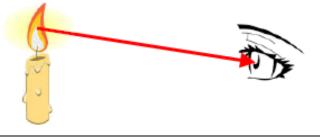
Key vocabulary:

Opaque	An object you are not able to see through
Refraction	When light travels from air into water, it slows down, causing it to change direction slightly. This change of direction is called refraction.
Spectrum of light	The different wavelengths of energy produced by a light source
Translucent	When an object allows light to pass through it but not an image (e.g. frosted glass)
Transparent	When an object allows light and an image to pass through it undisturbed (e.g. a glass window)

Diagrams:

We see things when light from a light source enters
our eyes
Light travels in a straight line directly from the light

Light travels in a straight line directly from the light source to the eye



Sometimes, the light travels from the light source, bounces off an object and travels into our eyes so that we can see the object

