



### Key knowledge:

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

