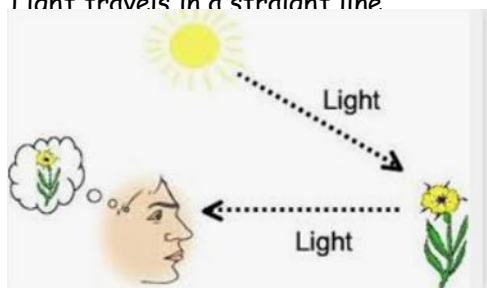


What do we know already:	Vocabulary:		
*I know that we see objects because our eyes can sense light. *I know that dark is the absence of light. *I know that some objects: the sun, light bulbs and candles are sources of light. *I know that some surfaces reflect light but others absorb light. *I know that shadows are formed on a surface when an opaque or translucent object is between a light source and the surface and blocks some of the light.	Tier 1	Tier 2	Tier 3
	Light Dark	Opaque Ray Reflect Reflection Refraction Shadow Source Transparent	Obscure - unclear Translucent - if a material is translucent, some light can pass through it.
What's next:			
*I will learn that light appears to travel in straight lines. *I will use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into our eye. *I will learn to explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. *I will use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.			

How does light travel?

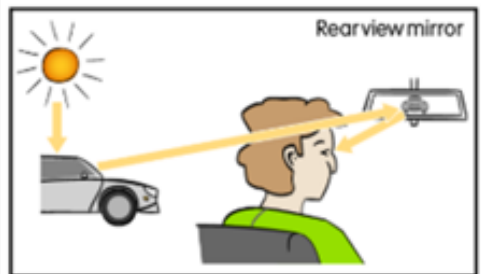
Light travels in a straight line.



We see through our eyes, which are organs that take in light and images and turn them into impulses that our brains can understand. We can see things because light either comes from an object - a light source - or is reflected by an object in straight lines.

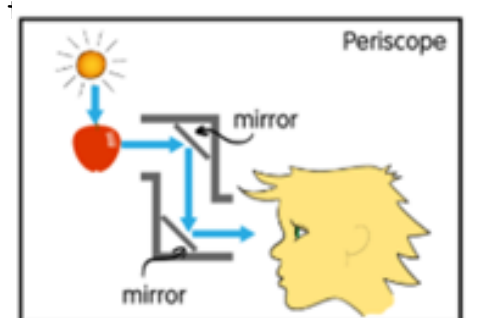
What is a reflection?

When a ray of light approaches a smooth polished surface and the light ray bounces back, it is called the reflection of light,



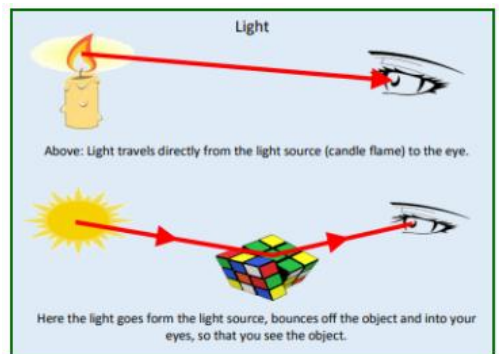
What is refraction?

Refraction is manifested by a bending or change in direction of the light. Refraction occurs as light passes from one medium to another only when there is a difference in the index of refraction between the



How does the way light travels help us to see?

Light travels directly from the light source (candle flame) to the eye.



Here the light goes from the light source, bounces off the object and into your eyes, so that you see the object.

Why do shadows have the same shape as the objects that cast them?

Because light travels in straight lines, a shadow has the same shape as the object blocking the light.

