Be Your BEST
Believe – Excellence – Safe – Team

Science: LIGHT

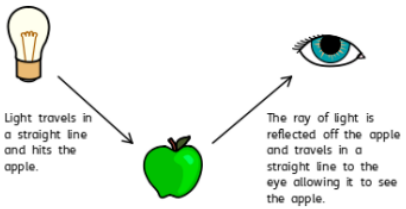
Years 6

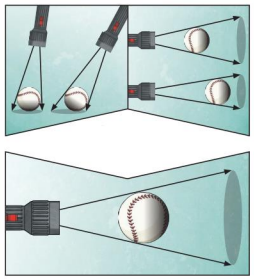
What do I already know?

- that we need light in order to see things and that dark is the absence of light
- light is reflected from surfaces
- light from the sun can be dangerous and that there are ways to protect our eyes
- explored and found patterns in the way that the size of shadows change.

What will be my new knowledge?

- that light appear 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 eyes
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.





Notable Scientists



Euclid
300BCE
Claimed that light travelled in straight lines and studied laws if reflection.



Alhazen
Golden Age of Islam
Identified that our eyes do not emit light rays but that they can be damaged by them.



Jennifer Dionne
1981 - date
Created optical material that can bend light backwards (like Harry Potter's cloak of invisibility).

Key Vocabulary

Word	Definition	Visual
light source	Where light comes from. Can be natural or man-made.	
emit	To produce and give off/out a type of energy, in this case, light.	
shadow	An area of darkness where light has been blocked.	
reflection	Reflection is when light bounces off a surface changing the direction of the ray of light.	
refraction	Refractions is when light bends as it passes from one medium to another.	
spectrum	A range of colours produced by separating out white light (as seen in a rainbow).	
opaque	Describes objects that do not let any light pass through them.	
translucent	Describes objects which let some light through them, but scatters so we can't see through them properly.	
transparent	Describes objects that let light travel through them easily, meaning you can see through the object.	
periscope	A piece of equipment using two mirrors set at 45. It enables us to view objects which would be out of sight.	
filter	A device that controls or changes the brightness or colour of light. A red filter only transmits red light. It absorbs blue light and green light.	
absorb	To take in.	

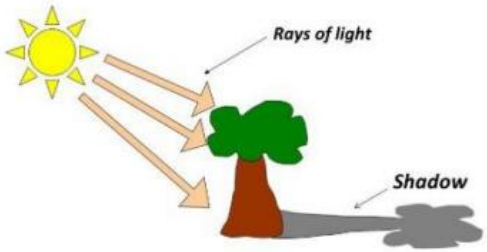


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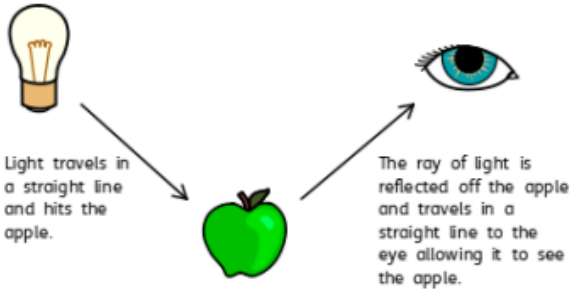
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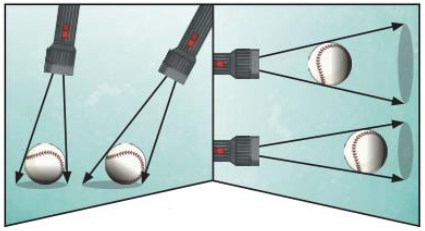
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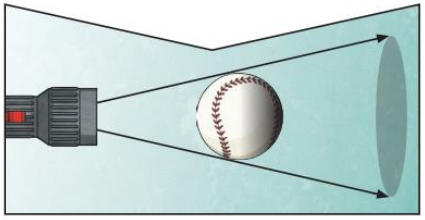
What do I already know?



What will be my new knowledge?







Notable Scientists



Euclid



Alhazen



Jennifer Dionne

Key Vocabulary

