

Year: 6 Spring 2 Topic: Science - Light

Key Facts	Map/Timeline/Diagram
<ul> <li>• We need light to be able to see things. Light waves travel out from sources of light in straight lines. These lines are often called rays or beams of light.</li> <li>• Light from the sun travels in a straight line and hits the object. The light ray is then reflected off the object and travels in a straight line to the eye, enabling us to see the object.</li> <li>• The law of reflection states that the angle of incidence is equal to the angle of reflection.</li> <li>• Shadows can also be elongated or shortened depending on the angle of the light source. A shadow is also larger when the object is closer to the light.</li> <li>• This is because light bends when it moves from air to water. When light bends in this way, it is called refraction.</li> <li>• .</li> </ul>	angle of reflection  reflected ray  normal line  incident ray  Light  Light
Key Learning:	Prior Learning:  Books for support/ Enrichment Opportunities:
<ul> <li>To know that objects are seen because they give out or reflect light into the eye</li> <li>To explore the blind spot and understand how it occurs.</li> <li>Recognise that light appears to travel in straight lines</li> <li>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</li> <li>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</li> <li>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</li> </ul>	<ul> <li>Light travels in straight lines</li> <li>The sun is a source of light</li> <li>Light is faster than sound.</li> <li>Without light, we wouldn't be able to see anything as we need light to be reflected onto our lens.</li> </ul>

Subject Specific Vocabulary			
Key word	Definition		
Light	A form of energy that travels in a wave from a source.		
Light source	An object that makes its own light.		
Reflection	Reflection is when light bounces off a surface, changing the direction of a ray of light.		
Incident ray	A ray of light that hits a surface		
Reflected ray	A ray of light that has bounced back after hitting a surface.		
The Law of Reflection	The law states that the angle of the incident ray is equal to the angle of the reflected ray		
Natural Light	light that is generated naturally, the common source of which is the Sun		
Artificial Light	Artificial Light is any light source that is not naturally occurring		
Refraction	This is when light bends as it passes from one medium to another. E.g. Light bends when it moves from air into water.		
Shadow	An area of darkness where light has been blocked.		