





















# Year 3: Science - Physics - Light



Glossary		Key Information	Curricular Goals
<b>Absorb</b>	Take in or soak up	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><b>What is light?</b></p> <p>Light is a type of energy that lets us see things</p>  <p>If there is no light then it is dark and we cannot see anything</p>  </div> <div style="width: 48%;"> <p><b>Shadows</b></p>  <p>An opaque object blocks the light from getting through. A dark shape or outline is formed. This is a shadow</p>  </div> </div> <div style="margin-top: 10px;"> <p><b>Reflections</b></p> <p>Shiny surfaces reflect light</p>   <p>Matt surfaces don't reflect light very well</p>   </div> <div style="margin-top: 10px;"> <p><b>Sunlight</b></p>  <p>The light from the sun can be dangerous. It can damage our eyes. We must never look directly at the sun. We can protect our eyes by wearing sunglasses or sunhats in bright sunlight.</p> </div>	<p><b>What is light?</b> Light is a form of energy that enables us to see the world around us. Light comes from different sources. Our main source of natural light is the Sun. Even at night, the moon reflects the Sun's light creating moonlight. Light can also come from a fire, stars, light bulbs, and even blue light from our smartphones</p>
<b>Artificial Light</b>	Light made from a man made object e.g. torch, street light		
<b>Concave</b>	A concave lens is one where the centre of the lens is thinner than the edges.		
<b>Convex</b>	Convex lenses, also called positive lenses, are lenses that curve outward from the edges to the centre.		
<b>Dark</b>	The absence of light - little or no light		
<b>Light</b>	A type of energy. We can see objects because our eyes can sense light		
<b>Light Source</b>	The main light source for Earth is the Sun. Some other luminous objects give out light, for example, torches, candles and lamps.		
<b>Opaque</b>	Opaque objects do not allow light to pass through them, in most cases creating a shadow.		
<b>Reflect</b>	To throw back or bounce light from a surface		
<b>Shadow</b>	a dark shape or outline of something that is made when light is blocked		
<b>Transparent</b>	clear, see-through, lets light pass through		
<b>Translucent</b>	Almost see through, lets some light through		
 <p><b>Justus Von Liebig</b></p> <p>The silvered-glass mirrors found throughout the world today first got their start in Germany almost 200 years ago. In 1835, <b>German chemist Justus von Liebig</b> developed a process for applying a thin layer of metallic silver to one side of a pane of clear glass</p>		<p><b>What is darkness?</b> Darkness is the absence of light. A shadow is an area of darkness produced by an object coming between beams of light and a surface</p> <p><b>Does everything have a shadow?</b> Not every object is able to do that. Some materials will let the light pass through whereas others will only block some of it. Objects able to block all the light are called opaque and will form a shadow. You also need a large surface such as a wall or screen on which you can make the shadow visible.</p> <p><b>What is a reflection?</b> Light beams are projected from the light source (the sun). These light beams travel in a straight line until they meet an object. The light beams are then reflected off the surface it meets, until the light beam enters the eye (see picture). The light activates cells inside our eyes which are processed by our brain into an image. This all happens incredibly fast! All of the objects we can see are only visible when light has reflected from the objects</p>	

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