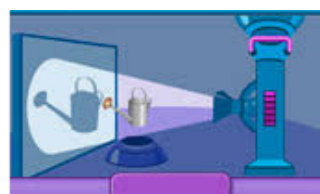
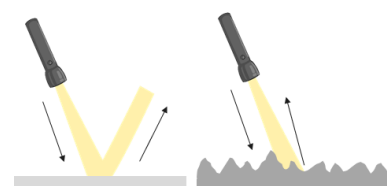
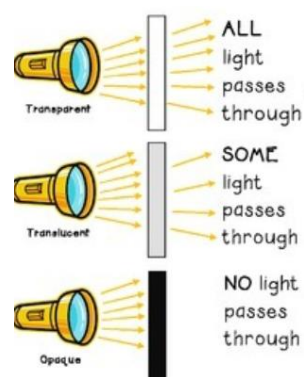




| Key ideas and information   |
|---|
| Light is needed in order to see things and darkness is the absence of light.<br>Light sources can be natural or man-made.   |
| The Sun is our most important source of light. It also provides warmth and allows plant growth.<br>The Sun's ultraviolet rays can be dangerous. We can prevent Sun damage to the skin and eyes e.g. through sun cream, sunglasses, long sleeves, hats etc.                    |
| Depending how much light can pass through them, objects can be opaque, transparent or translucent.  |
| Light reflects from a mirror and travels in straight lines. Reflective surfaces are smooth, flat and shiny. When light rays hit a rough surface, they scatter in all different directions, so it doesn't reflect well.  |
| Shadows are formed when the light from a light source is blocked by an opaque object.<br>A shadow takes the shape of the object which is blocking the light.<br>When a light source is brought closer to an object, more light will be blocked so the shadow will get bigger. |



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|---|---|
| <p><u>Light</u> - Light is a source of illumination, whether a natural one (like the sun) or an artificial one (like your lamp).</p> <p><u>Darkness</u> – The absence of light.</p> | <p><u>Opaque</u> - Light cannot pass through an opaque object/you cannot see through it.</p> <p><u>Translucent</u> - Some light can pass through a translucent object/you can see through it, but not completely.</p> <p><u>Transparent</u> – A transparent object does not block or absorb any light/you can see right through it.</p> |
| <p><u>Shadow</u> - A shadow is a dark shape that is formed when an object blocks a source of light.</p>   | <p><u>Mirror</u> – A smooth, flat, shiny surface that forms images by reflecting light.</p>   |
| <p><u>Light source</u> - Any natural or man-made object which creates or gives out light.</p>   | <p><u>Energy</u> – A source of power for a human or other living creature.</p>  |
| <p><u>Reflection</u> - Your reflection is the image you see in the mirror when light bounces back to your eyes.</p>   | <p><u>Absorb</u> – If a surface absorbs light, it takes it in rather than reflecting it back.</p>   |
| <p><u>Reflective</u> – A reflective surface is a surface that reflects light. Reflective clothes help you to be more visible in the dark when a light source is present.</p>        | <p><u>Ultra-violet light</u> - Invisible rays that are part of the energy that comes from the Sun and can damage the skin and eyes.</p>   |

Working scientifically and scientific enquiry skills

What is the difference between day and night? Research using secondary sources to find patterns.

Do all surfaces reflect light? Use a comparative test to classify different materials.

The nearer the object is to the light source the bigger the shadow. Use a comparative test to exemplify this statement.