

Light Knowledge Organiser

| Subject Specific Vocabulary | |
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| Light source | An object that produces its own light (e.g. sun, fire). |
| Reflection | When a light hits a surface and 'bounces' off. |
| Refraction | When light passes through a different object and its direction changes. |
| Opaque | Opaque An object which does not allow light to pass through it (e.g. wood). |
| Translucent | An object which allows some light to pass through it. It may be possible to see some unclear images through the object (e.g. tissue paper). |
| Transparent | An object which allows some light to pass through it. It may be possible to see some unclear images through the object (e.g. tissue paper). |
| Spectrum | A range of colours caused when white light is refracted. A rainbow shows a spectrum of colours. |
| Prism | A solid 3D shape where two end faces are similar and parallel. |
| Shadow | A dark area or shape caused by the blockage of light. |

| Sticky knowledge |
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| <p>We need light to be able to see things.</p> <p>Light travels in a straight line</p> <p>Light travels faster than sound.</p> <p>A light year is a unit of measurement for distance. It is the distance light can travel in a year.</p> <p>The size and shape of a shadow changes based on the distance and angle compared to the light source.</p> <p>Darkness is caused by the absence of light.</p> <p>The moon does not emit its own light – it reflects the sun.</p> <p>Ultraviolet (UV) light is a type of radiation which you can't see but can be dangerous. UV rays can come from the sun.</p> <p>The law of reflection states that, no matter which direction light hits a smooth surface from, the light reflects back off at an equal angle</p> <p>Light travels as a wave. But unlike sound waves or water waves, it does not need any matter or material to carry its energy along. This means that light can travel through a vacuum—a completely airless space.</p> |