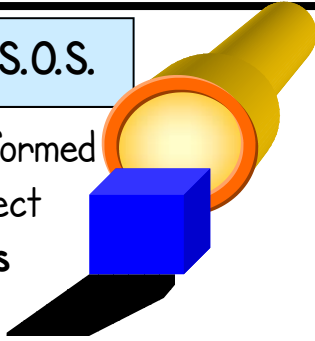


# How We See Things Fact Sheet

## Remember S.O.S.

A **shadow** is formed behind an object when it **blocks** the light.



source

object

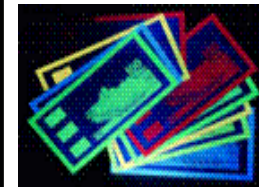
shadow



The filament in a **light bulb** becomes **hot** as the electrical current passes through it, and then it **glows** to create **light**.



These sunglasses are **translucent** - some **light** passes through them.



These notes **fluoresce** when a **UV light** is shone on them.



**Reflections** are all around us. We see buildings and other items are reflected in lakes, rivers and other natural reflective surfaces. A **kaleidoscope** uses two **mirrors** to produce a pattern of **images**. Two **mirrors** angled at  $45^\circ$  enable us to see around corners using a **periscope**.

Many things contain **lenses** e.g. **magnifying glasses**, **microscopes**, **spectacles**, **cameras** and **eyes**!



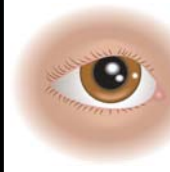
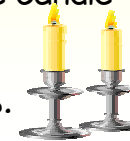
This bowl is **opaque** - **no light** passes through it and you can't see through it.



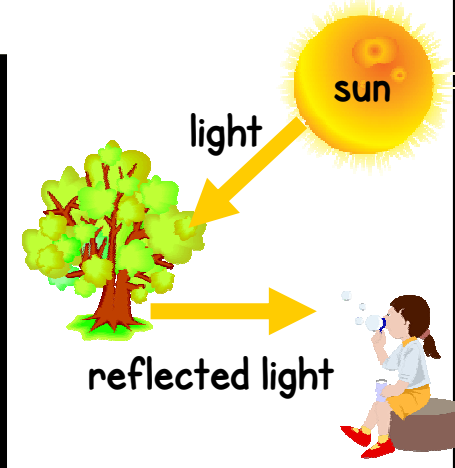
This glass is **transparent** - **all light** passes through it. You can see through it.



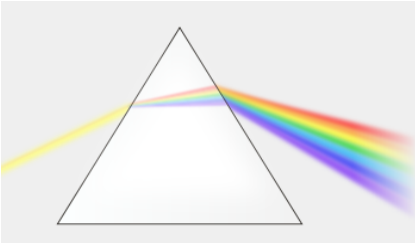
A lit candle is a **light source**. The candle vapour burns to produce light. The candle flame is **luminous**.



We see objects around us because **light** from a **light source** is **reflected** from them into our **eyes**.



# How We See Things Glossary

<b>block</b> - to interrupt the light causing a shadow	<b>mirror</b> - a polished surface which reflects light
<b>fluorescent</b> - property of a material that is able to store light energy and then to glow	<b>opaque</b> - not see-through - lets no light through at all
	<b>periscope</b> - a device that uses a series of mirrors to enable the viewer to look around corners.
<b>image</b> - the picture formed in a mirror or made by a lens	<b>reflection</b> - the process where light bounces off a material
<b>lens</b> - a transparent object, that allows light to pass through it, but will bend the light on its way through	<b>shadow</b> - the area of darkness formed when an object blocks light
<b>light</b> - a kind of energy that we can see - the glow produced by something hot	<b>translucent</b> - not see-through. Lets some light pass through
<b>light rays</b> - the beams of light that come from a light source - they travel in straight lines	<b>transparent</b> - see-through. Lets all light pass through
<b>light source</b> - the place where light begins	 <p>A ray of light can be split, into a <b>rainbow</b> of colours, when it passes through a glass <b>prism</b></p>
<b>luminous</b> - property of something that is a light source e.g. a lighted candle	
<b>microscope</b> - a device used to focus light through a lens in order to magnify the image	