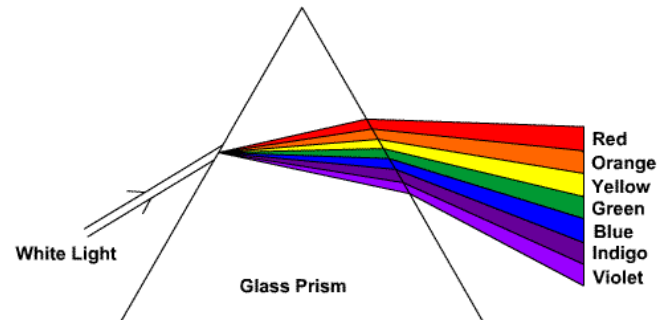


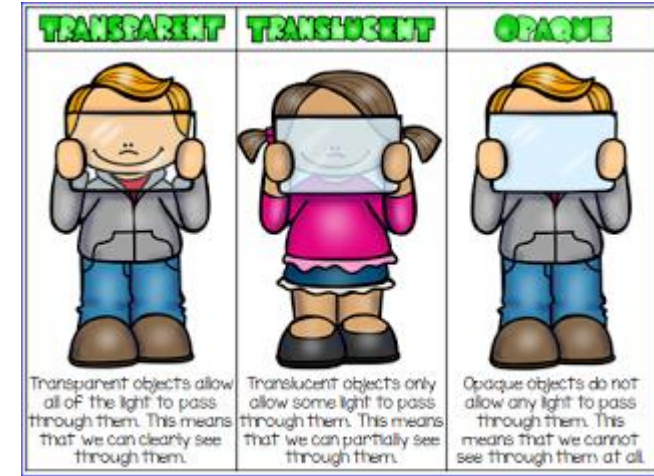
# Knowledge Organiser Year 3 Science: Light and shadow

## Concept: Energy

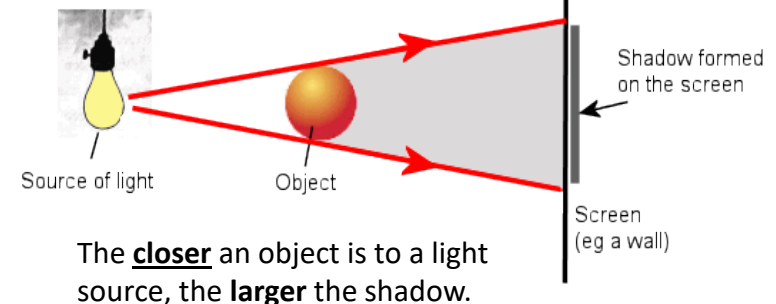
Key Vocabulary	
<b>Light source</b>	An object that produces its own light (e.g. sun, fire).
<b>Reflection</b>	When a light hits a surface and 'bounces' off.
<b>Refraction</b>	When light passes through a different object and its direction changes.
<b>Opaque</b>	An object which does not allow light to pass through it (e.g. wood).
<b>Translucent</b>	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).
<b>Transparent</b>	An object which allows light to pass through it so that objects behind it can be easily seen (e.g. glass).
<b>Spectrum</b>	A range of colours caused when white light is refracted. A rainbow shows a spectrum of colours.
<b>Rainbow</b>	An arch of colour caused by the refraction of light on water droplets in the air, usually rain (Red, Orange, Yellow, Green, Blue, Indigo, Violet).
<b>Prism</b>	A solid 3D shape where two end faces are similar and parallel.
<b>Shadow</b>	A dark area or shape caused by the blockage of light.



When white light passes through a glass prism, it is refracted. The light changes direction and is then dispersed (spread out) as it exits the prism. Depending on the shape of the prism and the angle of the light, we can often see the spectrum of colours.



Light sources



# Knowledge Organiser Year 3 Art: Drawing with Matisse

## Concept: Interpretation

Key Vocabulary	
<b>Colour</b>	Colour is used to describe the way an object reflects light. E.g. A red object reflects red light.
<b>Collage</b>	A piece of art made by sticking layers of materials onto a backing.
<b>Composition</b>	Composition in art refers to the arrangement of elements within a piece of art.
<b>Interpretation</b>	When you interpret a piece of art, you decide upon or explain the meaning of it.
<b>Mood</b>	The mood of a piece of art is the atmosphere it creates or how it makes you feel.
<b>Observation</b>	Observational art is when you create a piece of art based on what you can see.
<b>Shade</b>	A shade of a colour is created when black is added to darken the colour.
<b>Tint</b>	A tint of a colour is created when white is added to lighten the colour.
<b>Tone</b>	A tone of a colour is created when grey is added.



**The Sciff (La Yole)**  
Pierre-Auguste Renoir (1875)



**Sorrrows of the King**  
Henri Matisse (1952)



Tint



Shade



Tone

For his collages, Matisse would create coloured paper by painting on white sheets. Once dry, he would cut objects out freehand. He would then arrange the elements to create his final composition.



Edvard Munch created 4 versions of his painting The Scream. Notice how the colours change slightly. This affects the mood created in the picture.

