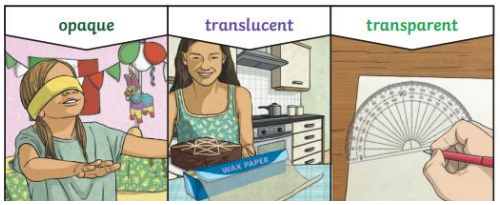
RED SQUIRREL CLASS - LIGHT

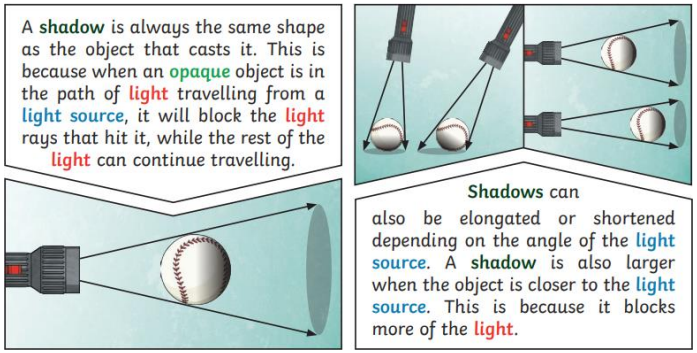
Key Vocabulary	
Light	A form of energy that travels in a wave from a source.
Light source	An object that makes its own light.
Reflection	Reflection is when light bounces off a surface, changing the direction of a ray of light.
The Law of Reflection	The law states that the angle of the incident ray is equal to the angle of the reflected ray.
incident ray	A ray of light that hits a surface.
reflected ray	A ray of light that has bounced back after hitting a surface.
refraction	This is when light bends as it passes from one medium to another. E.g. Light bends when it moves from air into water.
visible spectrum	Light that is visible to the human eye. It is made up of a colour spectrum.
prism	A prism is a solid 3D shape with flat sides. The two ends are an equal shape and size. A transparent prism separates out visible light into all the colours of the spectrum.
transparent	Describes objects that let light travel through them easily, meaning you can see through the object.
translucent	Describes objects that things let some light through, but scatters the light so we can't see through them properly.
opaque	Describes objects that do not let any light pass through them.



Key Knowledge – Light waves

We need light to be able to see things. Light waves travel out from sources of light in straight lines. These lines are often called rays or beams of light. Light travels as a wave. But unlike waves of water or sound waves, it does not need a medium to travel through. This means light can travel through a vacuum - a completely airless space.

Important people and places: Sir Isaac Newton,



Visible light

Isaac Newton shone a light through a transparent prism, separating out light into the colours of the rainbow (red, orange, yellow green, blue, indigo and violet) - the colours of the spectrum. All the colours together merge and make visible light.

Key Knowledge: The Law of Reflection

The law of reflection states that the angle of incidence is equal to the angle of reflection. Whenever light is reflected from a surface, it obeys this law.

The angle of reflection is the angle between the normal line and the reflected ray light.

The angle of incidence is the angle between the normal line and the incident ray of light.