## Year 6: Let it shine Knowledge Mat

Subject Specific Vocabulary	
light wave	One of the characteristics of light is that it behaves like a wave. Light can be defined by its wavelength and frequency. The frequency is how fast the waves vibrate up and down.
spectrum	The visible colours of light when it is dispersed
concave	Is a lens that curves inwards and reflects light differently as a result.
convex	Is a lens that curves outwards and reflects light differently as a result.
dispersal	When white light is split into its colours by a prism.
lens	A lens is a curved piece of glass or plastic designed to refract light in a specific way.
retina	The retina is at the back of your eye and it has light- sensitive cells called rods and cones.
cornea	The cornea is thin, clear and covers your eye. It's important because it helps you see by focusing light as it enters the eye.
iris	By opening and closing the pupil, the iris can control the amount of light that enters the eye.
pupil	The pupil can be compared with the shutter of a camera. It is surrounded by the iris which is the coloured part of the eye.
refraction	Change in the direction of light when it passes through a different substance.
reflection	When light bounces off the surface of an object.



## Key 'sticky' Knowledge about Light

□ Light travels in straight lines.

- Objects are seen because they give out or reflect light into they eye
- Shadows are caused by objects blocking the path of light; therefore, they are the same shape as the objects that cast them.
- White light is made up of a spectrum of colours. A rainbow shows this spectrum.
- Light reflects from all objects. The way that different objects disperse light leads to us seeing different colours.
- Some substances, like glass and water, can change the path of light, so that it appears to 'bend' or change direction.