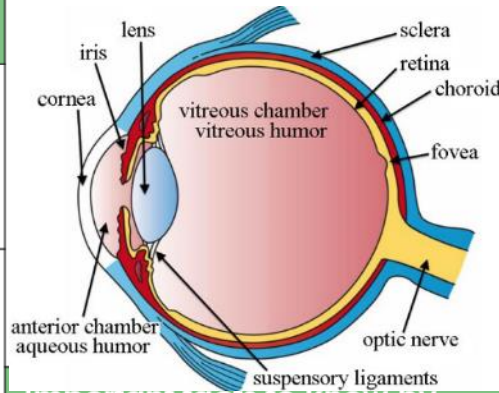


# Year 6: Light Knowledge Mat

Subject Specific Vocabulary	
<b>light wave</b>	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 wave vibrates up and down.
<b>light source</b>	Light, or illumination, is a form of energy that travels in waves, like sound. You can find different sources of light, such as a candle or the Sun.
<b>concave</b>	It is a lens that curves inwards and reflects light differently as a result.
<b>convex</b>	It is a lens that curves outwards and reflects light differently as a result.
<b>filters</b>	A filter is a transparent material that absorbs some colours and allows others to pass through.
<b>lens</b>	A lens is a curved piece of glass or plastic designed to refract light in a specific way.
<b>retina</b>	The retina is at the back of your eye and it has light-sensitive cells called rods and cones.
<b>cornea</b>	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.
<b>iris</b>	By opening and closing the pupil, the iris can control the amount of light that enters the eye.
<b>pupil</b>	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.



## Important facts to know by the end of the light topic:

- **Know that light travels in straight lines.**
- **Understand that because light travels in straight lines then objects are seen because they give out or reflect light into the eye.**
- **Know that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.**
- **Know that light travels in straight lines and therefore shadows have the same shape as the objects that cast them.**

## Sticky Knowledge about Light

- Light will travel in a completely straight line until it hits an object that will bend it. The light that is in a straight line are called 'light waves'.
- Space does not have any light. We can see things in space due to light bouncing off of the objects in space.
- Light doesn't travel as fast when it has to pass through mediums that are different, such as air, water or glass.
- Light that we see from the sun actually left the sun ten minutes before we see it.
- Light can be controlled and produced in so many ways. A camera can control the amount of light that comes into the camera lens. We also use light in televisions, medical systems, copy machines, telescopes and satellites.
- Light is used by plants to convert the light into energy as their 'food'. The process is called 'photosynthesis' and converts carbon dioxide through the energy of the light.