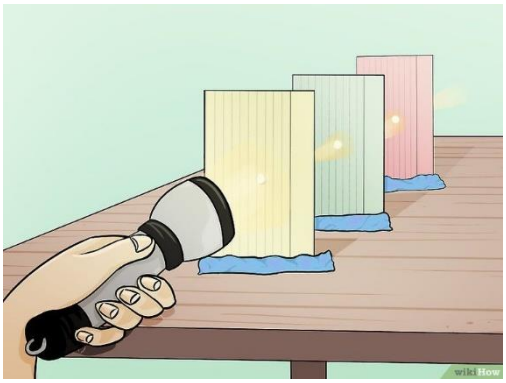
Science

Year 6 Spring 1 - Light

What is this topic about? In this topic, we will learn about light, how we see, shadows, reflection and refraction. We will learn how light travels and how this enables us to see objects.



I will show my scientific skills by…

- Observing where to place rear-view mirrors on cars.
- **Create, invent and design** a periscope and using the idea that light appears to travel in straight lines to **explain** how it works.
- **Investigate and test** different ways to demonstrate that light travels in straight lines.
- Investigating the relationship **[looking for patterns]** between light sources, objects and shadows by using shadow puppets.
- Extend their experience [**explore and observe**] of light by looking at a range of phenomena including rainbows, colours on soap bubbles, objects looking optical illusions in water and coloured filters.

At the end of the Topic I will know…

- Light appears to travel in straight lines, and we see objects when light from them goes into our eyes.
- The light may come directly from light sources, but for other objects some light must be reflected from the object into our eyes for the object to be seen.
- Objects that block light will cause shadows and because light travels in straight lines, the shape of the shadow will be the same as the outline shape of the object.

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.
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.
Shadow	An area of darkness where light has been blocked.