

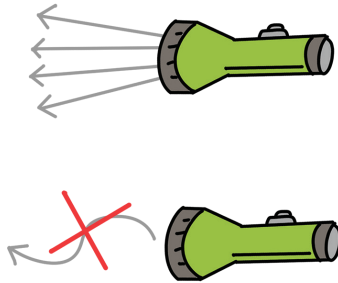


War of the Worlds.

How did light help fight the war?

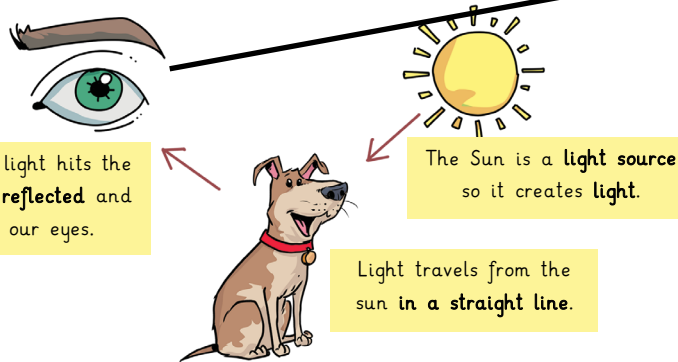
1. How does light travel?

- Light travels very fast in **straight lines** called **light rays**.
- Even though light travels in straight lines, it travels in **different directions**.
- Light rays from a torch travel in different directions but **always in straight lines**.



2. How can I see?

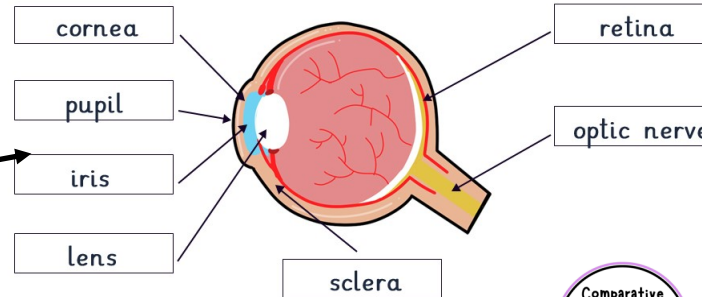
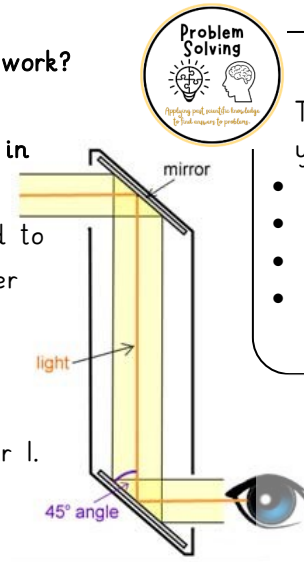
- When light hits an object, it is **reflected** (bounces off) and enters our eyes. This is how we see the object.
- We need **light sources** to be able to see; otherwise, there is no light to reflect off surfaces and into our eyes. This is why we cannot see in the dark.



3. How do periscopes work?

Because **light travels in straight lines**, a **periscope** can be used to see things while under cover.

They were used in trenches in World War I.



4. Why do shadows have the same shape?

- A **shadow** is made when an **object blocks light**. A shadow is a **dark area or shape** caused by a solid object blocking the rays of light from a light source.
- This is why a shadow is the same shape as the object.



Applying Past Knowledge

This learning links with the lessons you had in year 3 about:

- Light being reflected from surfaces.
- Light being needed to see
- Light from the sun can be dangerous.
- Shadows are formed when a light source is blocked.

Key Vocabulary

- **Light source** - Anything that makes light either natural or artificial.
- **Reflect** - Light is thrown back without being absorbed.
- **Reflective**- An object that is capable of reflecting light.
- **Shadow** - A dark area or shape produced when light cannot pass through an object.
- **Transparent**- An object that allows light to pass through it.
- **Translucent** - An object that allows light to pass through but where you cannot see detailed shapes.
- **Opaque** - An object that doesn't allow light to pass through it.

