

Nova's Guide to the Marvellous World of Light

Step into the glow and discover how we see the world around us!

- **What is a light source?** A light source is an object that creates its own light, such as the Sun, a flashlight, or a flickering candle.
- **Why do shadows form?** A shadow is created when an opaque object blocks the path of light, preventing it from reaching a surface.
- **What happens during reflection?** Reflection occurs when light hits a shiny or smooth surface and bounces back, like a reflection in a mirror or a calm pond.
- **How do materials differ?** Transparent materials let light pass through clearly, translucent materials let some light through, and opaque materials block light completely.
- **Why is light essential for vision?** Our eyes need light to enter them to form an image; without a light source reflecting off an object, the world remains dark to our sight.

Did you know? Did you know that light travels in perfectly straight lines? When light hits an object, it bounces off and enters our eyes, allowing us to see! This is why we cannot see in a room with absolutely no light sources—there is simply nothing to reflect into our eyes.

Key vocabulary: Light source · Reflection · Transparent · Opaque · Translucent · Shadow · Pupil