

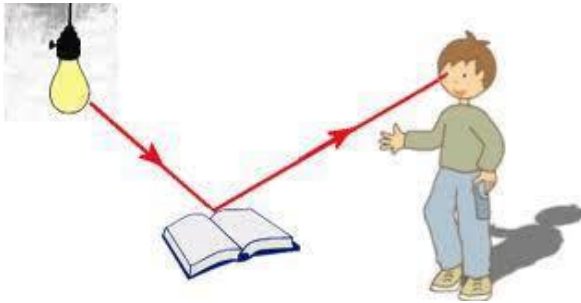
Year 6 Science: Light

Assessment Question

- How does light from light sources, or reflected light, travel?
- How do we see objects?
- How are shadows formed and how does their shape and size change?

Vocabulary	Definition
light	A type of energy, in the form of a wavelength that can be detected by the human eye.
light source	create lights that is man-made or natural.
reflecting light	Light changing direction by bouncing off an object at the same angle that it hits a surface.
shadow	Dark shape made when light is blocked by an opaque object.

- We need light to be able to see things.
- Light waves travel from sources of light in **straight lines**.
- These lines are called rays or beams of light.



- Light from a source travels in a **straight line** and hits the book.
- The light ray is then **reflected** off the chair and travels in a **straight line** to the girl's eye, enabling her to see the book.

A shadow is always the **same shape** as the object that casts it. This is because, when an **opaque** object is in the path of light travelling from a light source, it will **block the light rays** that hit it, while the rest of the light can continue travelling.



Shadows can also be **elongated or shortened** depending on the **angle** of the light source. A shadow is also **larger** when the object is **closer** to the light source. This is because it blocks more of the light.

Scientific Thinking and Procedural knowledge

- Observe to gather more information and open scientific thinking.
- **To ask your own questions about scientific phenomena**
- To question and speculate, based on prior knowledge.
- **Select and plan the most appropriate ways to answer questions, recognising and controlling variables where necessary.**
- **Draw conclusions, explain and evaluate your methods and findings**
- **Describe and evaluate your own and others' scientific ideas**
- **Record data and results using scientific diagrams and labels, tables and line graphs.**
- Report and present findings from enquiries including conclusions, causal relationships and explanations and degree of trust in results.
- **Raise further questions that could be investigated, based on their data and observations.**
- Use conclusions to make predictions and set up further comparative and fair tests.