

Light and the eye - Science

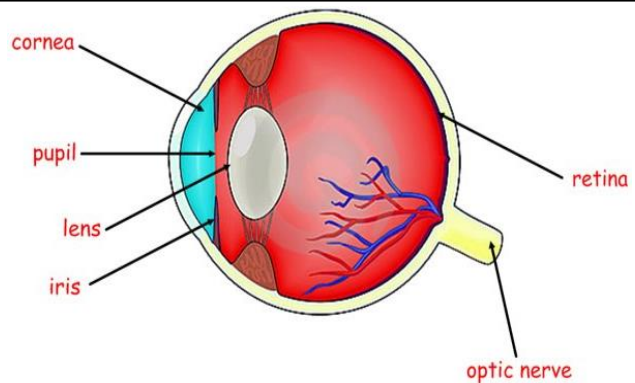
Year 6
Autumn 1

Overview

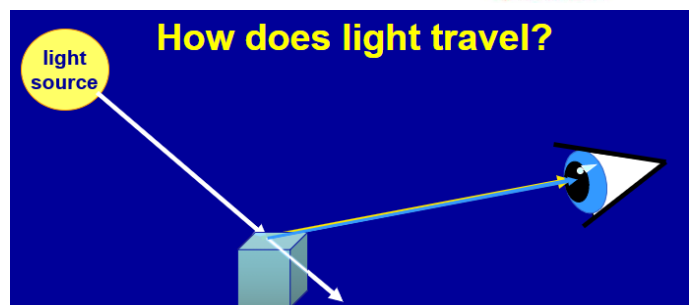
In this topic, we study the human eye and its key features. We learn how we see things, how the eye transports pictures to the brain and how the eye protects itself. We then go on to study light, doing experiments on shadows, learning about reflections and how light travels.

Key knowledge - Science

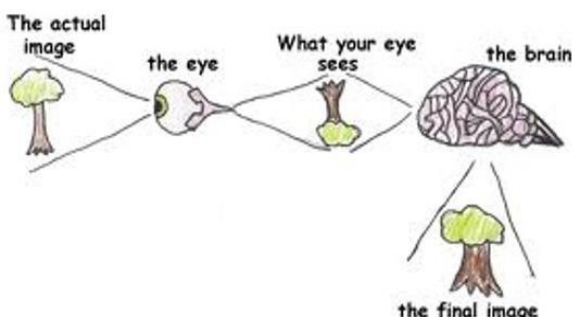
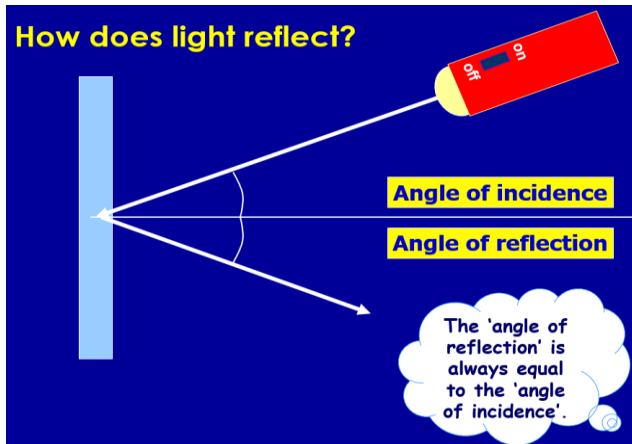
- Understand and be able to label key parts of the eye and explain their function.
- Understand how we see and the journey light goes on through our pupil, to the retina, down the optic nerve and to the brain which processes the image.
- Understand and be able to explain how the eye protects itself.
- Understand that light travels in straight lines and the relationship between shadows and the blocking of light, conducting shadow experiments.
- Understand the terms opaque, transparent and translucent and list materials for each category.
- Understand the process of reflection and refraction.



How does light travel?



How does light reflect?



Key Vocabulary

Word	Definition
Retina	Part of the back of the eye where a picture is printed of what you see.
Pupil	The gap in your eye letting light through.
Iris	These contract to control the size of the iris, like a curtain limiting the amount of light into your eye.
Cornea	The clear, protective surface of the front of your eye.
Optic nerve	A nerve sending images to the brain.
Lens	Focuses light and makes a clear image.
Reflection	When light is bounced off a surface in another direction.
Refraction	Bending of light as it travels through one transparent material to another.
Transparent	Material that lets light pass through it.
Translucent	Material that lets some light through.
Opaque	A material that blocks light travelling through.