

Nova's Light and Reflection Flashcards

Learning objective: To identify, describe and explain the properties of light, including reflection, shadows, and how we see.

Read the front of each card. Test your knowledge by recalling the definition or answer hidden behind the vertical line. Discuss the 'Greater Depth' questions with a partner to deepen your understanding.

What is a light source?	Define 'opaque'.
An object that emits its own light, such as the Sun, a lamp, or a candle.	A material that does not allow any light to pass through it, resulting in a dark shadow.
What happens during reflection?	What is the difference between transparent and translucent?
Light hits a surface and bounces off it, allowing us to see objects that do not produce their own light.	Transparent objects allow light to pass through clearly, translucent objects allow some light to pass through but scatter it.
How is a shadow formed?	Why does a shadow change size throughout the day?
A shadow is formed when an opaque object blocks light from a source, preventing it from reaching a surface behind the object.	Because the position of the light source (the Sun) changes, altering the angle at which light hits the object.
What does light travel in?	Why is it dangerous to look directly at the Sun?
Light travels in straight lines called rays.	The Sun's light is extremely intense and can cause permanent damage to the retina at the back of the eye.
Explain why we can see objects in a dark room if we turn on a torch.	What is a mirror?
The torch acts as a light source; light travels from the torch, hits the object, reflects off it, and enters our eyes.	A smooth, shiny surface that reflects light clearly, allowing us to see a reflection of ourselves or other objects.