

Nova’s Night-Sky Light Lab: Year 4 Science Word Mat

Learning objective: To define key scientific vocabulary related to light, reflection, and shadows, and apply critical thinking to the properties of light.

Key Vocabulary

Use this vocabulary mat to help you master the physics of light. The terms are categorised into 'Sources of Light', 'How Light Travels', and 'Shadows and Reflections'. Read each definition carefully.

Light Source An object that produces its own light.	Reflect When light bounces off a surface in a new direction.	Opaque A material that does not allow any light to pass through it.
Transparent A material that allows light to pass through it completely.	Translucent A material that allows some light to pass through it.	Shadow An area of darkness created when an object blocks light.
Ray A narrow beam or line of light travelling in a straight line.	Pupil The dark circular opening in the centre of the eye.	Mirror A smooth, shiny surface designed to reflect light.
Absorb To take in light energy so it does not pass through.	Surface The outer or top layer of an object that light can hit.	Obstacle A solid object that gets in the way of light.
Luminous Describing an object that emits its own light.	Non-luminous Describing an object that does not emit its own light.	Spectrum The range of colours that make up white light.
Explain why we can see the moon at night.	Compare and contrast the properties of different materials.	Justify your answer. If you were lost in a dark room, how would you find your way out?
What might happen if there was no light?	Nova wants to re-examine the properties of light.	Design an experiment to test a hypothesis about light.