Nova’s Night-Time Light Investigation

Learning objective: To understand how light travels in straight lines and how we see objects.

Use your scientific knowledge to complete the diagram. Follow the drawing prompt below to illustrate how light behaves when Nova looks at a star.

Draw: Create a clear, labelled scientific diagram. On the left, draw a glowing star and a dark night sky. On the right, draw a profile view of Nova the owl’s head. Use a ruler to draw a straight line (a light ray) connecting the star to Nova’s eye. Add labels from the word bank using neat lines. Ensure your style is clean and informative, like a diagram in a science textbook.

Label words: Light source · Straight line · Reflection · Pupil · Retina · Light ray

Steps:

1. Draw a star in the top corner. Draw a straight line representing a light ray travelling from the star to Nova’s eye.
2. Label the 'Light source' on your drawing.
3. Explain why we cannot see objects in a room if all the lights are turned off.
4. Draw a small torch shining onto a book. Use an arrow to show how the light bounces off the book and into an eye.

5. Label the 'Reflection' on your drawing of the torch and book.