

Nova's Light and Shadow Lab

Learning objective: To identify that light from light sources is needed to see things and that shadows are formed when light is blocked by an opaque object.

Read the labels in the word bank and add them to your drawing. Use your scientific knowledge to show how light travels.

Draw: Draw a scene featuring Nova the owl standing on a branch in a dark room. On a table in front of Nova, draw a bright hand-held torch shining a beam of light towards a small rubber duck. Behind the duck, draw a dark, solid shadow shape on the wall. Use straight lines to show the path of the light traveling from the torch to the duck.



Label words: Light source · Opaque object · Shadow · Light ray · Darkness

Steps:

1. Draw a straight arrow to show how light travels from the torch to the toy. Why does the light not go through the toy?
2. What happens to the size of the shadow if you move the torch closer to the toy?
3. Name one natural light source you could see in the night sky with Nova.
4. Explain why we cannot see in a room with no light sources at all.
5. Is a mirror a light source? Explain your answer.