

Nova's Brilliant Light Quiz

Learning objective: To identify light sources, understand how we see objects, explore reflection, and recognise how shadows are formed.

Read each question carefully and circle the best answer. Nova the owl is watching, so do your best work!

Answer Key: 1. A (Sun), 2. True, 3. False (Light travels in straight lines), 4. B (Reflection), 5. Opaque, 6. True, 7. B (The Moon reflects the Sun's light), 8. Transparent, 9. A (When light is blocked), 10. False (We need light to see).

Word bank: Light source · Reflection · Shadow · Opaque · Transparent · Ray · Darkness

1. Which of these is a natural light source? A) The Sun* B) A mirror C) The Moon D) A wooden chair (1 mark)

2. True or False: Light travels in straight lines. (1 mark)

3. True or False: You can see objects in total darkness without any light source. (1 mark)

4. When light bounces off a shiny surface like a mirror, this is called: A) Absorption B) Reflection* C) Refraction D) Shadowing (1 mark)

5. What word describes an object that light cannot pass through at all? (1 mark)

6. True or False: A shadow is formed when an object blocks light. (1 mark)

7. Why can we see the Moon at night? A) It makes its own light B) It reflects the Sun's light* C) It is a giant lightbulb D) It is a star (1 mark)

8. What do we call a material that lets all light pass through it, like clear glass? (1 mark)

9. When is a shadow longest? A) When the light source is low* B) When the light source is directly above C) Never D) Only at night (1 mark)

10. 10. True or False: Shiny, light-coloured surfaces are better at reflecting light than dark, dull surfaces. (1 mark)

Draw: Draw a diagram showing a torch shining a light beam onto a mirror, and show how the light 'bounces' off to hit a wall.



Extension challenge: Nova wants to know: Why do you think it is dangerous to look directly at the Sun? Write two sentences explaining why we should always protect our eyes.