

Y6 How We See

KS2 Y6 Science · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Explain how you see a book on a table in a room lit by a lamp.

Step 1 · Start at the source

Light travels in straight lines from the lamp

Step 2 · It reaches the book

Some of the light reflects off the book

Step 3 · It reaches you

Reflected light travels in a straight line into your eye

Step 4 · Your brain

Makes sense of the light, so you see the book

Answer: Lamp → book (reflects) → eye. We see the book because it reflects light into our eyes.

Check: Draw it with two rays, both with arrows pointing towards the eye.

2. Now try one with the steps

How do you see a light bulb?

Step 1 · Is the bulb a light source?

Step 2 · So...

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. Why can we see objects that are not light sources?

2. Why can we see a light source, like a candle?

3. Does light travel from our eyes to objects, or from objects to our eyes?

4. Why can't we see anything in a completely dark room?

5. What kind of surface reflects light best to form a clear image?

6. Which part of the eye lets light in?

7. How many mirrors does a simple periscope use?

8. Put in order: eye, Sun, flower.

9. What happens to your pupils in bright light?

10. Why do cyclists wear reflective strips at night?

11. Explain how you see the Moon at night.

12. Why does a calm lake show a clear reflection but a choppy one doesn't?

13. In a ray diagram of how we see, how many arrows should point into the eye?

14. Give one everyday use of mirrors to change the direction of light.

4. Before you hand it in

Drawing rays coming out of the eye.

Arrows always point towards the eye.

Leaving out the light source in a 'how we see' diagram.

Draw source → object → eye.

Thinking only mirrors reflect light.

Mirrors reflect evenly to make an image; other surfaces scatter light.

Thinking light bends round the inside of a periscope.

Mirrors change the light's direction; it stays straight between them.