

Date: _____

Chapter 7, lesson B: Reflection of Light (7.B.1)

1. Object X is not a source of light. How can we see object X?

Circle the correct answer.

It absorbs light. It gives off light. **It reflects light.**

2. Three students wrote notes about the properties of light.

Aziz

Light travels in the same direction after it is reflected.

Jenny

We can see objects because they are light sources.

Sarah

We need light to see.

a. Circle the name of the student who is correct.

Aziz Jenny

Sarah

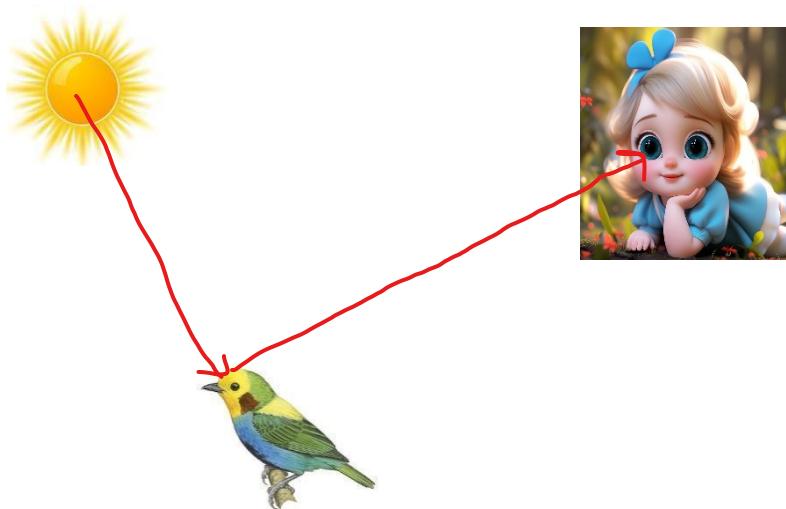
b. Correct the other statements.

We can see objects either because they are light sources, or they reflect light off their surfaces.

Light travels in straight lines but in a new direction after it is reflected.

3. Draw rays of light on the diagram to show how the girl can see the bird.

(source of light)



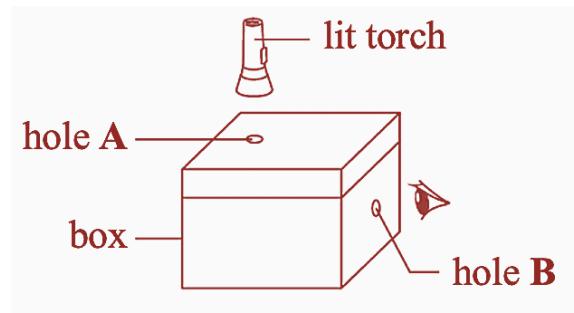
4. Peter is in a dark room. There are no lights in the room.

Can Peter see the walls in the room? Explain.

Peter cannot see the walls in the dark room. The walls are not sources of light. He can see the walls only when they reflect light into his eyes.

5. Yasmin prepares a set-up as shown below.

She sees light inside the box through hole B.



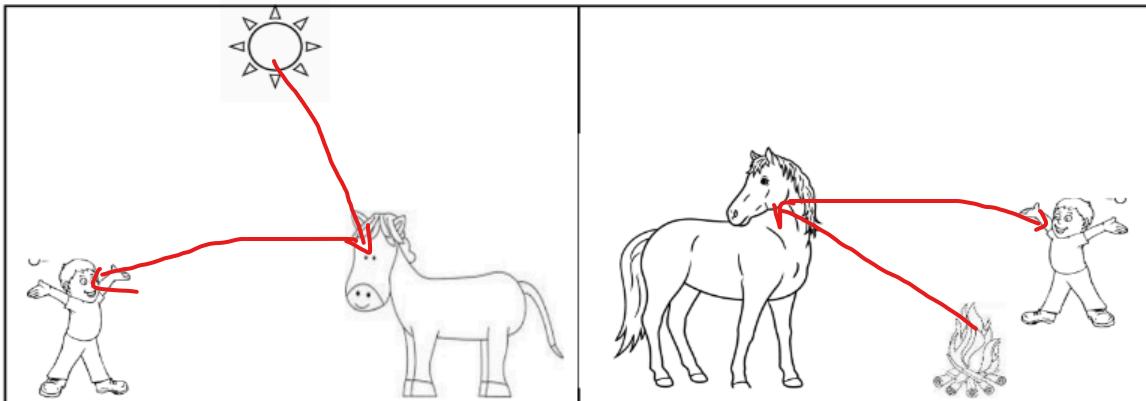
Yasmin covers hole A.

Can she see light inside the box through hole B now?

Explain.

No. There is no light in the box when Yasmin covers hole A. So, no light reaches her eyes to allow her to see.

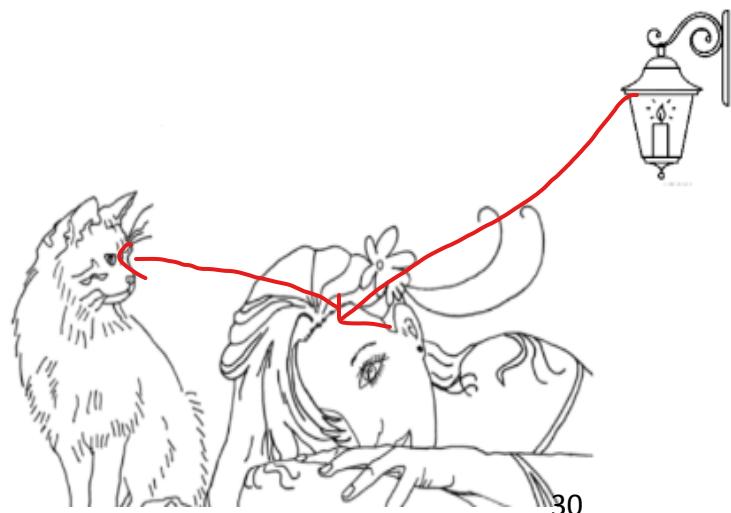
6. Draw a ray diagram to show how Peter can see the horse.
Show the direction of the arrows clearly.



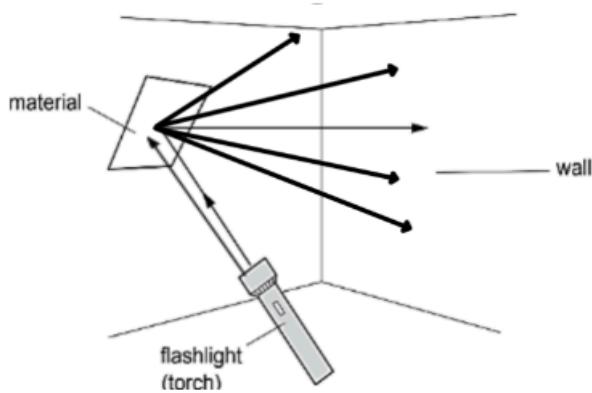
7. Draw a ray diagram to show how a light source is seen.



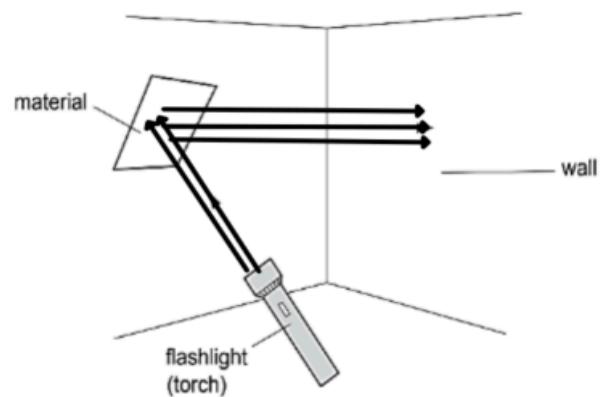
8. Draw a ray diagram to show how the cat sees the girl.



9. According to the pictures below, fill in the table.



Picture A



Picture B

	Picture A	Picture B
type of surface (rough or smooth)	rough	smooth
material / object (mirror or wood)	wood	mirror
light rays are reflected off the surface in (all directions or the same direction)	all directions	same direction

10. Fill in the blanks.

reflects : bounces off

ray diagram : a drawing that shows how light travels

reflection : the bouncing of light from a surface

reliable : gives the same result when the experiment is repeated.