Where Light Goes

Read for clues about what makes objects visible.

P.4.6B.2 "Obtain and communicate information to explain how the visibility of an object is related to light."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline three places where the passage tells what light does. Circle one place where something blocks light.

A Look Inside the Closet

1. At the back of a closet, a blue toy boat sits on a shelf. With the door closed and the lamp off, the boat is hard to see. Your eyes need light from the boat to see it. The boat does not make its own light. When you open the closet door, light from the hallway can enter. Some of that light hits the boat and bounces toward your eyes.

2. Turn on the closet lamp and look at a white card and a black sock beside the boat. Both objects reflect some light into your eyes, so you can see them. The card reflects more of the lamp's light and looks brighter. The sock absorbs more light and looks darker. If you turn off the lamp and shut the door, neither object is easy to see.

3. A clear jar on the shelf lets light pass through its sides, so you can see a coin inside when light reaches it. A closed cardboard box blocks light and hides a coin inside. In both cases, seeing the coin depends on light reaching it and then traveling to your eyes. A lighted room alone does not make an object visible if a solid box blocks your view.

2 ANSWER WITH EVIDENCE

Use the passage

1. Why is the boat hard to see when the closet door is closed and the lamp is off?

2. How does opening the closet door help you see the boat?

3. Why does the white card look brighter than the black sock under the lamp?

4. Why can you see a coin in the clear jar but not a coin in the closed cardboard box?

3 YOUR TURN

Your own words

Choose an object not named in the passage that is hard to see in a dim place. In three sentences, explain how you would use a light source to see it, how light would get to your eyes, and what might block the light.

ANSWER KEY

Where Light Goes

GRADE 4 · P.4.6B.2

PART 1 · READ AND MARK

Underline three places where the passage tells what light does. Circle one place where something blocks light. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Why is the boat hard to see when the closet door is closed and the lamp is off?	**Little light reaches the boat, so little light from it reaches your eyes.**
2	How does opening the closet door help you see the boat?	**Hallway light enters, hits the boat, and bounces toward your eyes.**
3	Why does the white card look brighter than the black sock under the lamp?	**The card reflects more of the lamp's light into your eyes. The sock absorbs more light.**
4	Why can you see a coin in the clear jar but not a coin in the closed cardboard box?	**Light can pass through the jar, reach the coin, and travel back to your eyes. The cardboard box blocks light and hides the coin.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

A set of keys is hard to see under my bed. I would shine a flashlight under the bed so light could hit the keys and bounce into my eyes. A thick blanket hanging over the bed could block the flashlight beam, so I would move it aside.

Accept explanations that trace light from a source to an object and then to the eyes. For Part 3, the object must be new, and the response must name something that could block the light.