

Name: _____ Date: _____

Bouncing and Bending: A 3rd Grade Quest into Light Optics

Foundational practice identifying how sunlight interacts with everyday objects like spoons, puddles, and glass to help young scientists predict light behavior.

1. When you look into a shiny metal spoon and see your face, what is the light doing?

- A. Absorbing into the metal
- B. Bouncing off the surface
- C. Disappearing
- D. Turning into heat

2. Light travels in a straight line until it hits an object.

- A. True
- B. False

3. A pool of water can act like a _____ because it reflects an image of the trees above it.

- A. Shadow
- B. Window
- C. Mirror
- D. Flashlight

4. Why does a pencil look 'broken' when you put it in a glass of water?

- A. The water is too heavy
- B. The light bends as it enters the water
- C. The pencil is actually breaking
- D. The glass is dirty

5. Dark-colored clothes reflect more light than white-colored clothes.

- A. True
- B. False

6. Objects that let 'all' light pass through them so you can see clearly are _____.

- A. Opaque
- B. Transparent
- C. Blurry
- D. Solid

7. What optical tool do people use to see tiny details on a butterfly wing?

- A. Sunglasses
- B. A magnifying glass
- C. A cardboard box

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D. A brick

8. A prism works by bending light to show all the colors of the rainbow.

- A. True
- B. False

9. If you want to block light to make a shadow on the wall, you should use an _____ object.

- A. Opaque
- B. Invisible
- C. Clear
- D. Watery

10. Which of these is the best example of refraction in nature?

- A. A shadow under a tree
- B. The sun feeling hot
- C. A rainbow in the sky after rain
- D. A black rock