

Name: \_\_\_\_\_

**1. Why is air described as transparent?**

- A. All light is able to pass through air.
- B. Some light is able to pass through air.
- C. Most light is able to pass through air.
- D. No light is able to pass through air.

**2. Study the photograph of a glass filled with water.**



According to the photograph, which statement is true about the water and the glass?

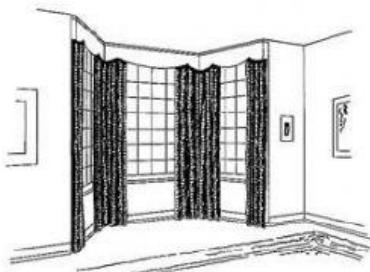
- A. The glass is translucent, and the water is transparent.
- B. The glass is transparent, and the water is translucent.
- C. The glass and the water are both translucent.
- D. The glass and the water are both transparent.

**3. Clarissa noticed that her flashlight could shine through wax paper, notebook paper, and cotton fabric. However, the light did not shine brightly or make a spotlight on the wall as it did when she shined the flashlight through glass.**

Which statement best explains why the light lacked brightness when shined through a material other than glass?

- A. The wax paper, notebook paper, and cotton are transparent, while the glass is translucent.
- B. The wax paper, notebook paper, and cotton are opaque, while the glass is translucent.
- C. The wax paper, notebook paper, and cotton are translucent, while the glass is opaque.
- D. The wax paper, notebook paper, and cotton are translucent, while the glass is transparent.

**4. Study the illustration of a room.**



Which scientific observation about the room is a qualitative observation?

- A. Each window is 48 inches wide.
- B. The curtains are made from an opaque material.
- C. There are three windows in the room.
- D. The area of the room is 150 square feet.

**5. Why is light unable to pass through a brick wall?**

- A. Light is unable to pass through brick material because it is opaque.
- B. Light is unable to pass through brick material because it is translucent.
- C. Light is unable to pass through transparent material.
- D. Light is unable to pass through all solid material.

**6. Which of these BEST explains why the mailbox casts a shadow?**



- A. The Sun is very bright.
- B. Light waves change direction.
- C. The Sun is too far from the object.
- D. Light cannot pass through opaque objects.

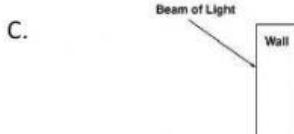
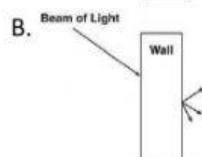
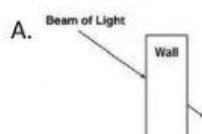


**7. The image to the right shows the shadow of a boy. What causes the shadow?**

- A. clouds moving above the boy
- B. darkness reflecting off the boy
- C. light being blocked by the boy
- D. light pushing the shadow below the boy



8. Which of these **MOST** likely happens when light hits a wooden wall?



9. Which list correctly classifies these objects by the way that light passes through them?

- A. frosted glass window—translucent; thin fabric curtain—transparent; plywood board—opaque
- B. frosted glass window—transparent; thin fabric curtain—translucent; plywood board—opaque
- C. frosted glass window—transparent; thin fabric curtain—transparent; plywood board—translucent
- D. frosted glass window—translucent; thin fabric curtain—translucent; plywood board—opaque

10. Which word describes fog, dark sunglasses, and a ruby?

- A. Transparent
- B. Opaque
- C. Gauzy
- D. Translucent

11. Which of the following is not a transparent material?

- A. white plastic milk bottle
- B. clear glass juice bottle
- C. plastic food wrap
- D. air in the refrigerator

12. Roger is holding three materials in front of his face as shown.



From left to right, what types of materials are these?

- A. opaque, translucent, transparent
- B. transparent, translucent, opaque
- C. translucent, opaque, transparent
- D. opaque, transparent, translucent