

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?

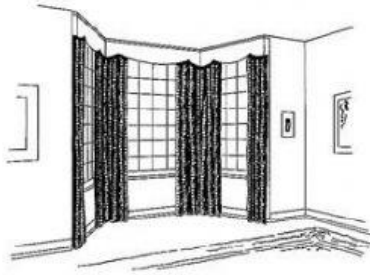
- A. The glass is translucent, and the water is transparent.
- B. The glass is transparent, and the water is translucent.
- C. The glass and the water are both translucent.
- D. The glass and the water are both transparent.

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.

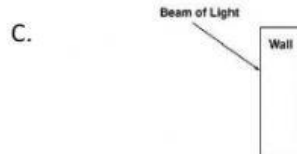
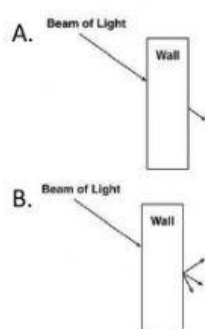


7. The image to the right shows the shadow of a boy. What causes the shadow?

- 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