



# KEY

## Light Energy Pre – Post Poll

Choose the most correct answer.

- C 1. You would like a window in your bathroom that would let in light but allows you to have your privacy. Which type of material would you use?
- A. Opaque
  - B. Transparent
  - C. Translucent
  - D. Conductive
- B 2. If all the colors are mixed together, what color do they make?
- A. Black
  - B. White
  - C. Gray
  - D. Brown
- A 3. Which of the following travels the fastest?
- A. White light
  - B. A loud sound
  - C. An explosion
  - D. Sound in a solid
- C 4. A beam of light enters hits a mirror at a  $30^\circ$  angle. At what angle does it leave the mirror?
- A.  $45^\circ$
  - B.  $60^\circ$
  - C.  $30^\circ$
  - D.  $90^\circ$
- D 5. When light from the sun hits a tree, it cannot pass through it. What happens?
- A. The light is refracted.
  - B. The light is reflected.
  - C. The tree creates a shadow.
  - D. Both B and C.

C 6. A lens that can make objects bigger is called a....

- A. Concave lens.
- B. Prism.
- C. Convex lens.
- D. Image.

G 7. When light bounces off a substance, what happens?

- A. Light is refracted.
- B. Light is absorbed.
- C. Light is reflected.
- D. The object disappears.

B 8. What do light waves do as they pass from one transparent material to another?

- A. Bend.
- B. Disappear.
- C. Reflect.
- D. Bounce off.

Short answer. (2 point question.)

9. Explain how a drop of water can act as a magnifying lens.

As light enters a drop of water the light rays bend because the curve of the drop acts like a convex lens and the rays are refracted. The light slows down and forms a new path. The light spreads out and the image looks bigger.