

Chapter 23

Use with Section 3

REINFORCEMENT

● Refraction and Lenses

1.–5. Read each pair of statements. One or both of them are correct. Circle the ones that are correct. Cross out any incorrect ones.

Light travels at the same speed in all mediums.

Light travels at different speeds in different mediums.

Refraction is the change of speed of a light wave as it moves from one medium to another.

Refraction is the bending of a light wave as it moves from one medium to another.

The larger the change in the speed of a light wave, the greater its refraction.

The larger the change in the speed of a light wave, the lesser its refraction.

A lens is a transparent object with at least one curved side that causes light to refract.

A lens is a transparent object with two curved sides that cause light to refract.

A convex lens is also called a converging lens.

A concave lens is also called a diverging lens.

Identify each statement as describing a convex lens, a concave lens, or both.

- _____ 6. A lens that is thicker in the center than at the edges
- _____ 7. A lens that is thicker at the edges than in the center
- _____ 8. Causes light rays passing through it to meet at a focal point
- _____ 9. Has an optical axis
- _____ 10. An object more than two focal lengths from the lens will have an inverted image
- _____ 11. Causes light rays passing through it to diverge
- _____ 12. Causes light rays passing through it to refract
- _____ 13. Used to correct nearsightedness
- _____ 14. Used to correct farsightedness
- _____ 15. Creates a focal point