Name _____ Class _____ Date _____

How are waves refracted?

Lesson Review

Write *true* if the statement is true. If the statement is false, change the underlined term to make the statement true. Write your answers in the spaces provided.

_____ **1.** The bending of a wave is called <u>reflection</u>.

_____ **2.** A light wave <u>speeds up</u> as it moves from a more dense to a less dense medium.

_____ **3.** When a wave moves at an angle from a less dense medium to a more dense medium, it is bent <u>away from</u> the normal.

_____ **4.** In order for a wave to be bent <u>toward</u> the normal, it must move at an angle from a more dense medium to a less dense medium.

_____ **5.** Refraction is caused by a change in wave <u>speed</u>.

_____ **6.** The laws of refraction describe how waves are <u>bent</u> when they move from one medium to another.

_____ **7.** When a wave travels from air into water, it will bend <u>away from</u> the normal.

Skill Challenge

Skills: *interpreting tables, relating information*

Use the table to answer the following questions.

DENSITIES OF SEVERAL MATERIALS	
Material	**Density (g/cm^3)**
Helium	0.00018
Air	0.0013
Water	1.00
Seawater	1.02
Bone	1.8
Gasoline	0.07
Hydrogen	0.00009

1. If a light wave moved from air into helium, what would happen to its speed?

_____

_____

_____

2. If a light wave moved from gasoline into hydrogen, in which direction would it bend?

_____

_____

3. If a light wave moved from water into seawater, in what direction would it bend? _____

Would the wave speed up or slow down? _____

_____

4. Why would a light wave speed up if it moved from air into hydrogen? _____

_____