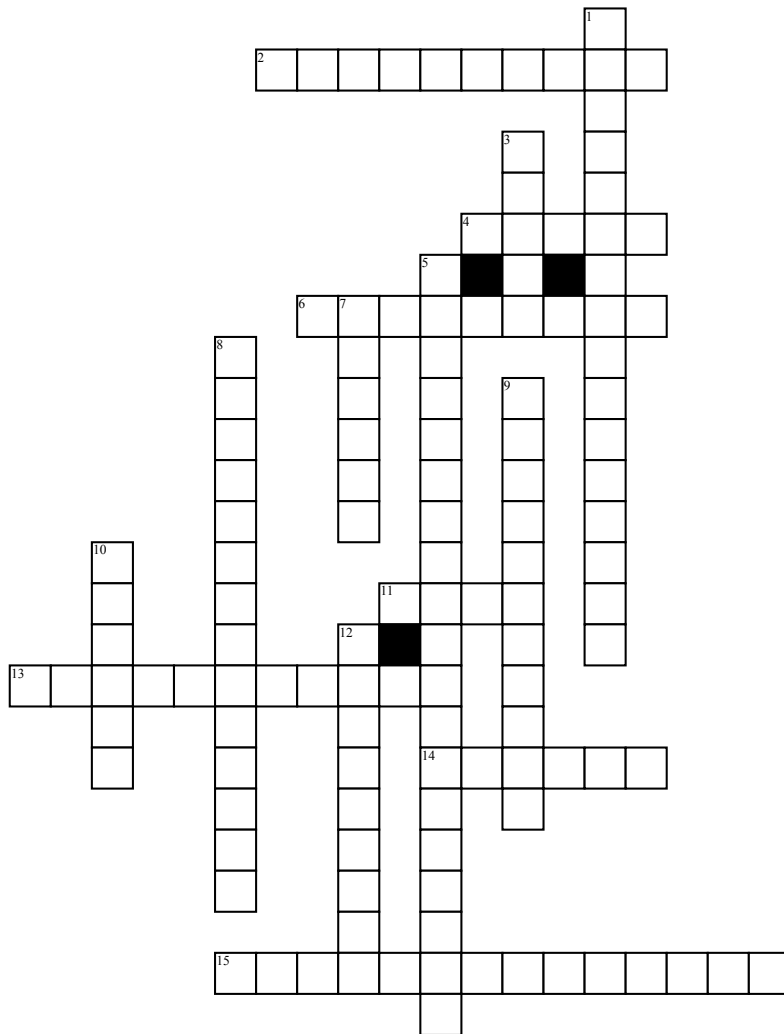


Name: _____

Wave Vocab



Across

2. Reflection is the change in direction of a wavefront at an interface between two different media so that the wavefront returns into the medium from which it originated. Common examples include the reflection of light, sound and water waves. ... Reflection is observed with surface waves in bodies of water.
4. The hertz (symbol: Hz) is the derived unit of frequency in the International System of Units (SI) and is defined as cycles per one second. It is named after Heinrich Rudolf Hertz, the first person to provide conclusive proof of the existence of electromagnetic waves.
6. Amplitude, in physics, the maximum displacement or distance moved by a point on a vibrating body or wave measured from its equilibrium position. It is equal to one-half the length of the vibration path.
11. In physics, mathematics, and related fields, a wave is a disturbance (change from equilibrium) of one or more fields such that the field values oscillate repeatedly about a stable equilibrium (resting) value.

13. Rarefaction is the reduction of an item's density, the opposite of compression. Like compression, which can travel in waves (sound waves, for instance), rarefaction waves also exist in nature. A common rarefaction wave is the area of low relative pressure following a shock wave (see picture).

14. Waves have moving crests (or peaks) and troughs. A crest is the highest point the medium rises to and a trough is the lowest point the medium sinks to. ... Figure 8.2: Crests and troughs in a transverse wave. Crests and troughs. A crest is a point on the wave where the displacement of the medium is at a maximum.

15. a wave vibrating at right angles to the direction of its propagation.

Down

1. Longitudinal waves are waves in which the displacement of the medium is in the same direction as, or the opposite direction to, the direction of propagation of the wave.
3. A crest is the point on a wave with the maximum value of upward displacement within a cycle. A crest is a point on a surface wave where the displacement of the medium is at a maximum. A trough is the opposite of a crest, so the minimum or lowest point in a cycle.

5. Definition: Electromagnetic waves or EM waves are waves that are created as a result of vibrations between an electric field and a magnetic field. In other words, EM waves are composed of oscillating magnetic and electric fields. ... They are also perpendicular to the direction of the EM wave.

7. A substance that makes possible the transfer of energy from one location to another, especially through waves. For example, matter of sufficient density can be a medium for sound waves, which transfer mechanical energy. See more at wave.

8. Mechanical Wave

9. Compression. A compression is a region in a longitudinal wave where the particles are closest together. Rarefaction. A rarefaction is a region in a longitudinal wave where the particles are furthest apart.

10. In physics, energy is the quantitative property that must be transferred to an object in order to perform work on, or to heat, the object.

12. Vibration, periodic back-and-forth motion of the particles of an elastic body or medium, commonly resulting when almost any physical system is displaced from its equilibrium condition and allowed to respond to the forces that tend to restore equilibrium.

Word Bank

- | | | | |
|-------------------|-------------|-----------|----------------------|
| Longitudinal Wave | Reflection | Trough | Electromagnetic Wave |
| Wave | Medium | Hertz | Amplitude |
| Mechanical Wave | Energy | Vibration | Compression |
| Transverse Wave | Rarefaction | Crest | |