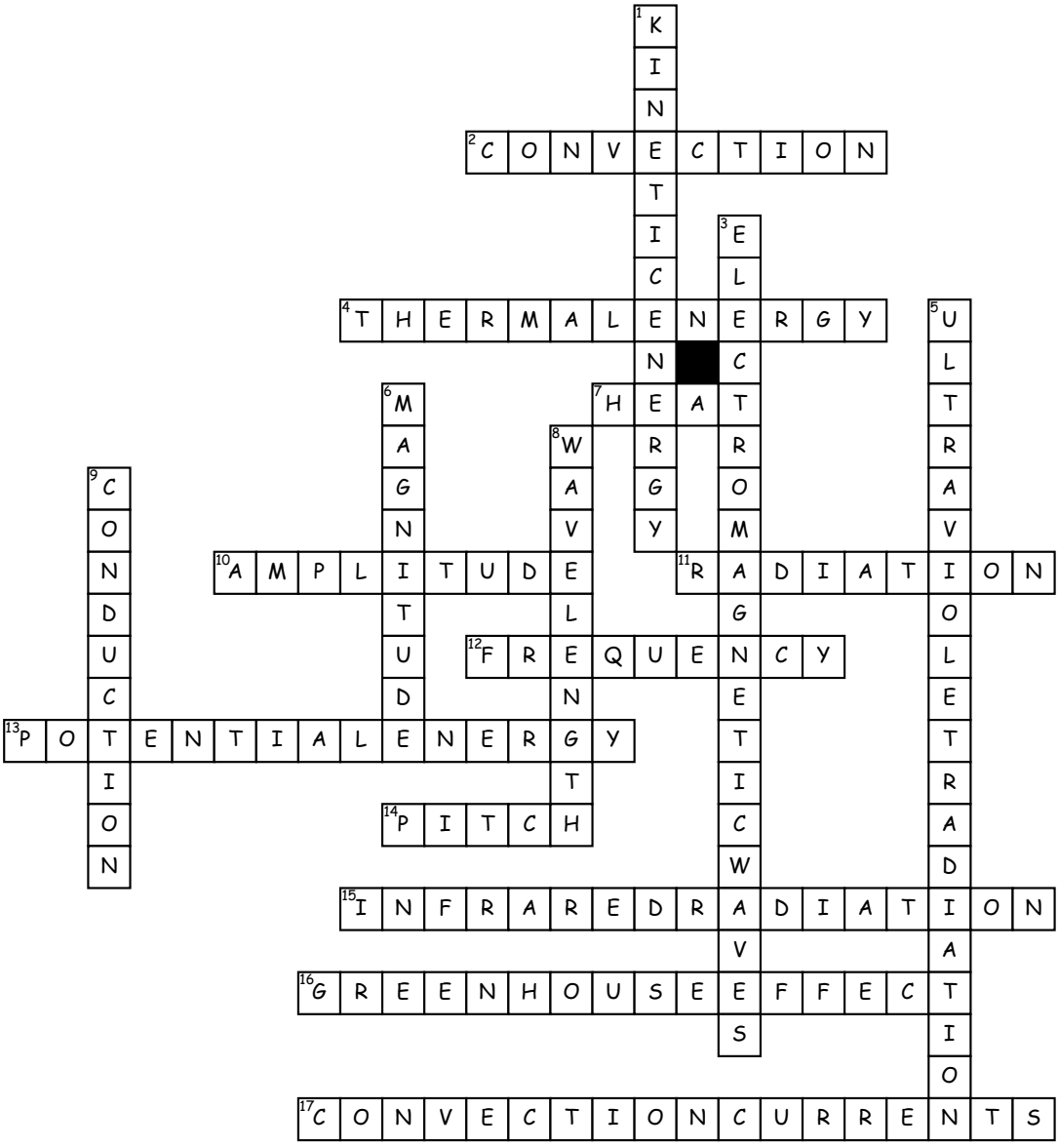
Name: _____ Date: _____

# Energy in the Earth's Atmosphere, Waves, and Heat Transfer



**Across**

**2.** The transfer of thermal energy by the movement of fluid.

**4.** The total energy of motion in the particles of a substance.

**7.** The transfer of thermal energy from one object to another because of a difference in temperature.

**10.** The distance from the rest position to the crest position which is half the vertical distance from a trough to a crest.

**11.** The direct transfer of energy by electromagnetic waves.

**12.** The number of waves passing a point in a certain time. Usually measured in a wave per second and in the unit of hertz (Hz).

**13.** Stored Energy

**14.** The quality of a sound governed by the rate of vibrations producing it; the degree of highness or lowness of a tone.

**15.** Electromagnetic waves with wavelengths that are longer than visible light but shorter than microwaves.

**16.** The process by which heat is trapped in the atmosphere by gases that form a "blanket" around Earth.

**17.** The circulation of a fluid as it alternatively heats up and cools down.

**Down**

**1.** Energy of Motion.

**3.** Waves that transfer electric and magnetic energy through the vacuum of space and that include radio waves, infrared, visible light, ultraviolet, X-rays, and gamma rays.

**5.** Electromagnetic waves with wavelengths that are shorter then visible light but longer than x-rays.

**6.** The size of a surface wave.

**8.** The distance between successive crests of a wave, especially points in a sound wave or electromagnetic wave.

**9.** The direct transfer of thermal energy from one substance to another that it is touching.