

Name \_\_\_\_\_

**Waves & Electromagnetic Spectrum Worksheet**

**Directions:** Use the word bank to answer the following questions. **Each word will be used only once.**

Crest	Frequency	Mechanical	Infrared
Trough	Transverse	Radio	Gamma
Wavelength	Longitudinal	Ultraviolet	X-Rays
Visible Light	Amplitude	Electromagnetic	

1. \_\_\_\_\_ waves are used to penetrate solids and are used in doctor's offices and as airports.
2. \_\_\_\_\_ is the distance between one point of a wave to the same point in the next wave.
3. \_\_\_\_\_ is the number of waves per unit of time.
4. \_\_\_\_\_ waves occur when the motion of the medium is parallel to the direction of the wave.
5. \_\_\_\_\_ waves have a color spectrum known as ROYGBIV.
6. \_\_\_\_\_ waves disturb matter.
7. The \_\_\_\_\_ is the top of a wave.
8. The \_\_\_\_\_ is the bottom of a wave.
9. \_\_\_\_\_ is the maximum distance that matter is displaced from the resting position.
10. \_\_\_\_\_ waves are produced by stars and galaxies.
11. \_\_\_\_\_ waves occur when the motion of the medium is at right angles (perpendicular) to the direction of the wave.
12. \_\_\_\_\_ waves are often used in heat lamps.
13. \_\_\_\_\_ waves are utilized by insects to locate nectar.
14. \_\_\_\_\_ waves are transverse waves that disturb electromagnetic fields.
15. \_\_\_\_\_ waves have the shortest wavelength and the highest frequency.