

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 |          |

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