Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade \_\_\_\_\_

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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.