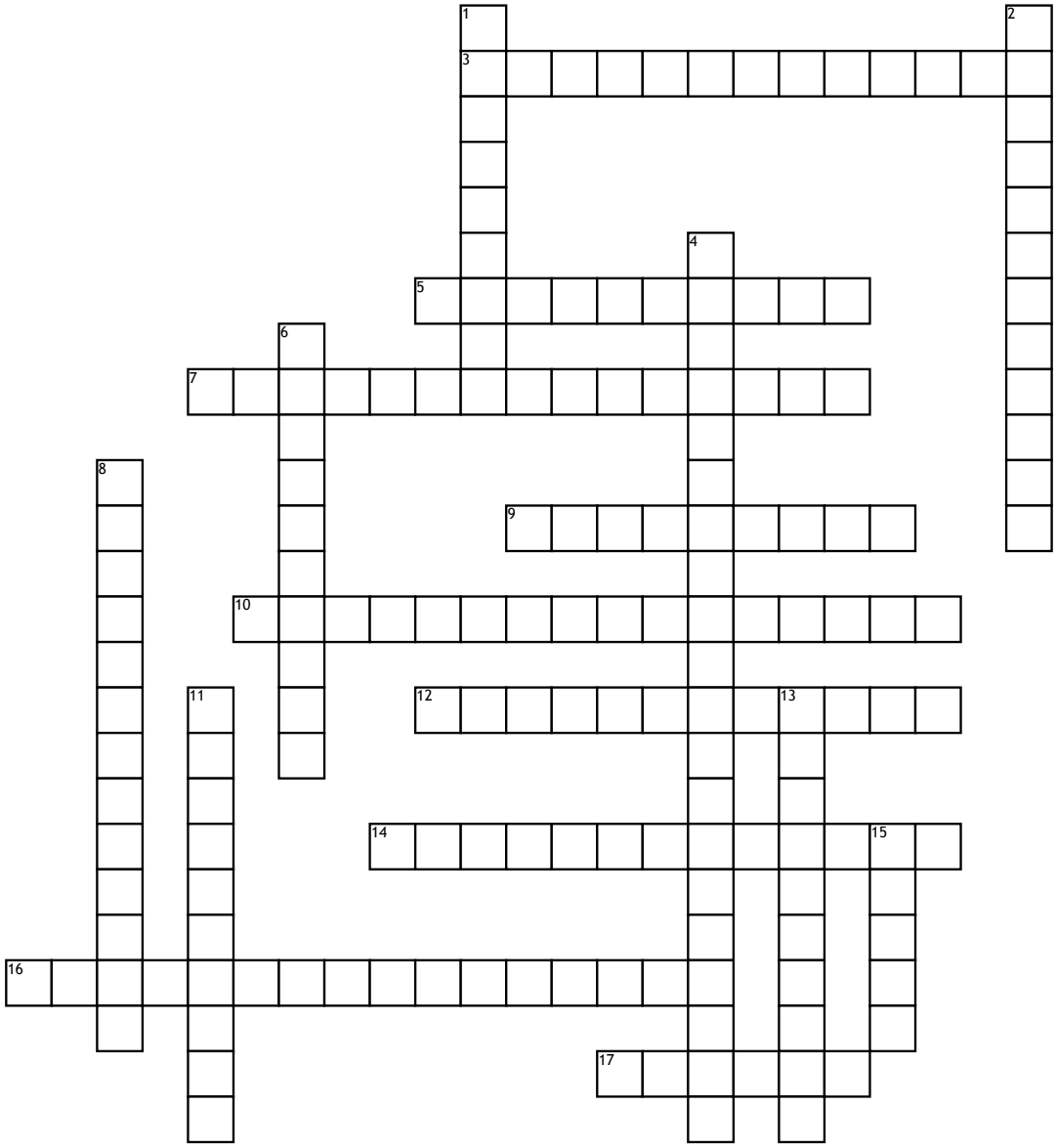
Name: _____ Date: _____

Electromagnetic and Particulate Radiation



Across

3. A particle consisting of two protons bound to two neutrons with a net positive charge

5. the lowest energy non ionizing electromagnetic radiation

7. a mathmatical value used to calculate photon energies based on frequency and equal to 4.135x10 -15 eV sec

9. the number of waves passing a given point each second

10. the intensity of a source of radiation is inversely proportional to the square of the distance

12. a low energy non ionizing electromagnetic radiaiton just above infrared light

14. a low energy, non ionizing eletromagnetic radiation just above microwaves

16. a low enery, nonionizing electromagnetic radiation just above visible light

17. a discrete bundle of electromagnetic energy

Down

1. a very high-energy electromagnetic radiation originating from a radioactive nucleus with the ability to ionize matter

2. an electron that is emitted from an unstable nucleus with the ability to ionize matter

4. high energy particles with the ability to ionize matter

6. the distance between the peak of one wave to the peak of the next wave

8. the process by which an atom with excess energy in its nucleus emits particles and energy to regain stability

11. a low energy, nonionizing electromagnetic radiation just above radio waves

13. the removal of an electron from an atom

15. a unit of measure for frequency equal to one cycle per second