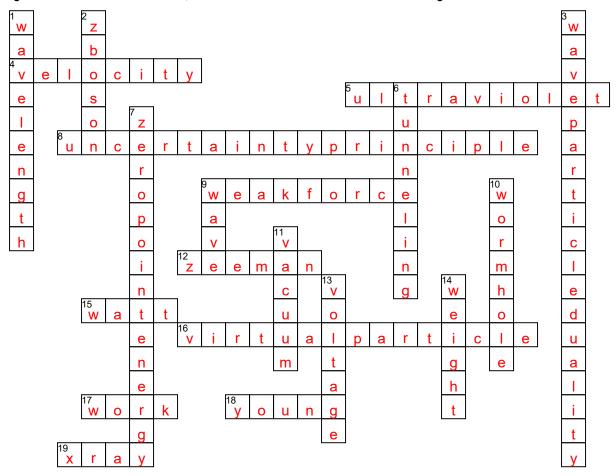
## Physics Terms Crossword Puzzle 6-4

1 Using the Across and Down clues, write the correct answer in the numbered grid below.



## **ACROSS**

- 4. The speed of something in a given direction.
- 5. Electromagnetic radiation with a wavelength shorter than that of visible light.
- 8. The principle that it is impossible to know both the position and momentum of a particle with absolute precision.
- 9. One of the four fundamental forces of nature, responsible for radioactive decay.
- 12. Effect observed in the splitting of spectral lines in the presence of a magnetic field.
- 15. The unit of power in the International System of Units.
- 16. A particle that exists for a limited time during interactions between real particles.
- 17. The product of force and displacement.
- 18. Scientist known for his double-slit experiment.
- 19. A form of electromagnetic radiation.

## **DOWN**

- The distance between successive crests of a wave.
- 2. A particle that mediates the weak nuclear force.
- 3. The concept that every particle or quantum entity exhibits both wave and particle properties.
- 6. A quantum mechanical phenomenon where particles move through a barrier.
- 7. The lowest possible energy that a quantum mechanical system may have.
- 9. A disturbance that travels through a medium.
- 10. A hypothetical tunnel connecting two separate points in space-time.
- 11. A space devoid of matter.
- 13. The electric potential difference between two points.
- 14. The force exerted on a body by gravity.

wave-particle duality Young zero-point energy

velocity tunneling work

uncertainty principle watt weak force

virtual particle wormhole z boson

wavelength x-ray voltage

wave ultraviolet weight

vacuum Zeeman