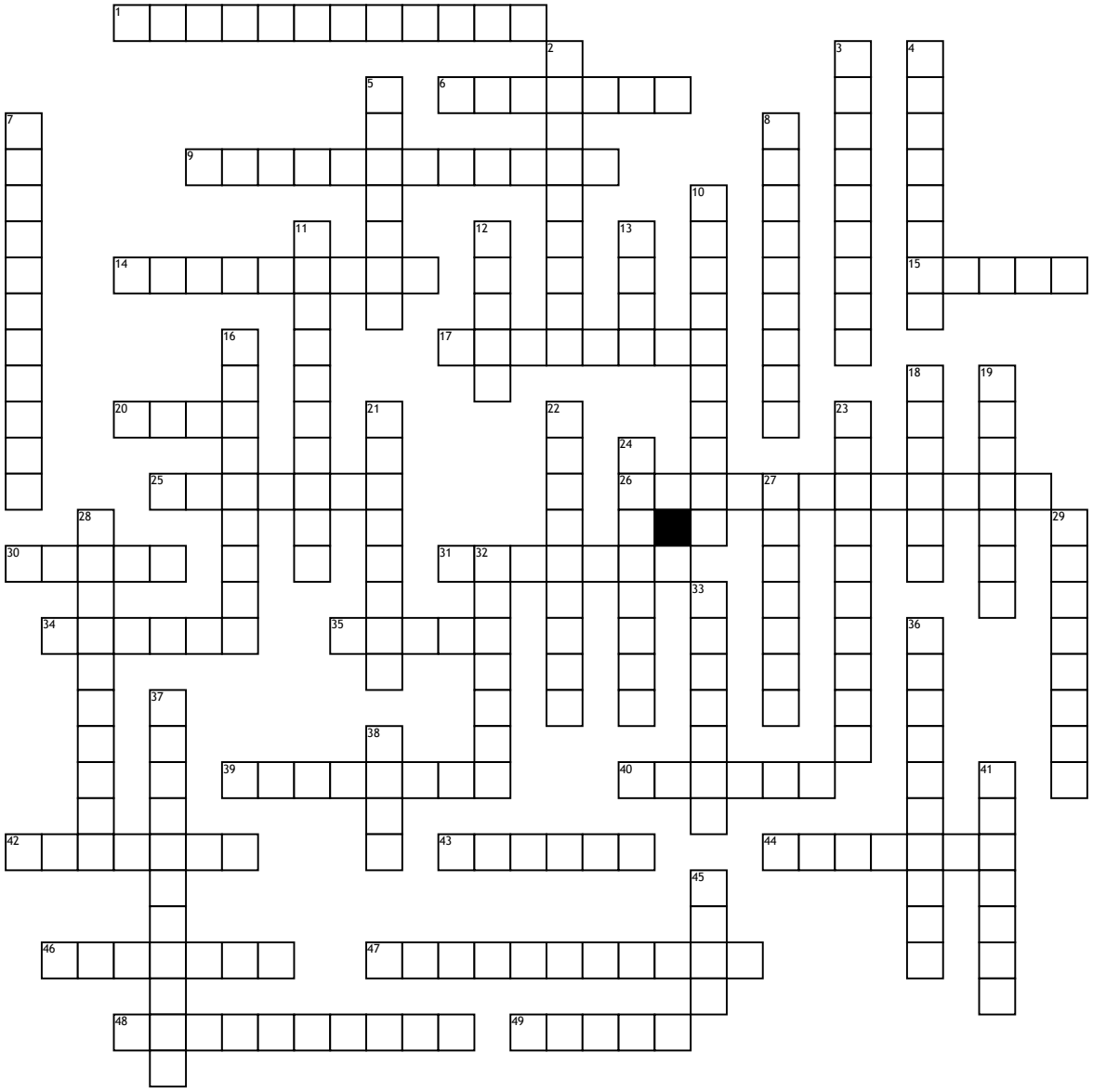
Name: _____

Physics



Across

1. The rate of change of velocity with respect to time.

6. The central, positively charged, dense portion of an atom.

9. The study of motion of air, particularly its interaction with a solid object, such as an airplane wing.

14. The number of oscillations completed in 1 second by an oscillating body.

15. Magnetic _____. The region around a magnet where its magnetic force is experienced by other magnetic objects.

17. The motion of a body under the effect of gravity alone. (2 word term)

20. Absolute _____. The temperature of -273.16 or 0 K at which molecular motion vanishes.

25. Nuclear _____. The splitting of heavy nucleus into more stable , lighter nuclei with an accompanying release of energy.

26. A long, thin thread of fused silica, used to transmit light, based on total internal reflection. (2 word term)

30. The distance traveled by a body per unit of time.

31. Unit of Sound.

34. Matter that has the ability to flow.

35. Monochromatic _____. Consisting of single wavelength.

39. A high energy photon. (2 word term)

40. Vibration. The back and forth _____ that repeats itself.

42. The mass of a substance per unit volume.

43. Nuclear _____. The combination of two lighter nuclei to form a heavier nucleus with an accompanying release of energy.

44. The property of a body to resist a change in its state of rest or uniform motion.

46. A quanta of energy in light wave; the particle associated with light.

47. _____ Force. An outward pseudo force acting on a body in circular motion.

48. The transfer of heat from a region of higher temperature to a region of lower temperature by increased kinetic energy moving from molecule to molecule.

49. A device that produces coherent light by stimulated emission of radiation.

Down

2. The remaining core of a supernova that is so dense that even light cannot escape.

3. The distance traveled by light through empty space in one year; equal to 9.46 x 1012 km. (2 word term)

4. The time during which half the number of atoms in the element disintegrate. (2 word term)

5. Scientific study of matter and its motion and behaviour through space and time, including concepts of energy and force

7. The extent to which something is likely to happen or be the case.

8. Sound waves that pile up into a shock wave when a source is traveling at or faster than the speed of light. (2 word term)

10. The distance between the two nearest points on a wave which are in the same phase.

11. The bending of light from its straight line path when it travels from one medium to another.

12. One of the hypothetical basic particles, having charges whose magnitudes are 1/3 of the charge of an electron.

13. _____ particle. An electron emitted from a nucleus in radioactive decay.

16. Branch of Physics dealing with the production, transmission and effects produced by sound.

18. Newton's First law of _____. An object at rest will tend to stay at rest; an object of motion in motion will tend to stay in motion with the same speed or direction, unless impacted by an unbalanced force.

19. Energy an object has due to its motion.

21. Person you would most like to meet.

22. Disturbance of a wave or by any quantity that varies periodically.

23. E=mc2. Einstein's formula of _____.

24. The product of mass and velocity of a body, it is a measure of the quantity of motion in a body.

27. Electric _____. The rate of flow of electric charge.

28. The bouncing back of a wave from a boundary.

29. Einstein's definition of _____. 'Doing the same thing over and over again and expecting a different result."

32. The idea that everything in the universe eventually moves from order to disorder, and _____ is the measurement of that change.

33. The weakest of the four fundamental forces of physics; The gravitational attraction at the surface of a planet or other celestial body.

36. Material composed of the antiparticle to the corresponding particles of ordinary matter.

37. Force of attraction between all masses in the universe, especially attraction of earth's mass for bodies near its surface.

38. _____ number. The sum of the number of protons and neutrons in a nucleus.

41. _____ mechanics. Model of the atom based on the wave nature of subatomic particles, the mechanics of electron waves: also called wave mechanics.

45. Thermal Capacity: The quantity of _____ required to raise the temperature of the whole body by 1.