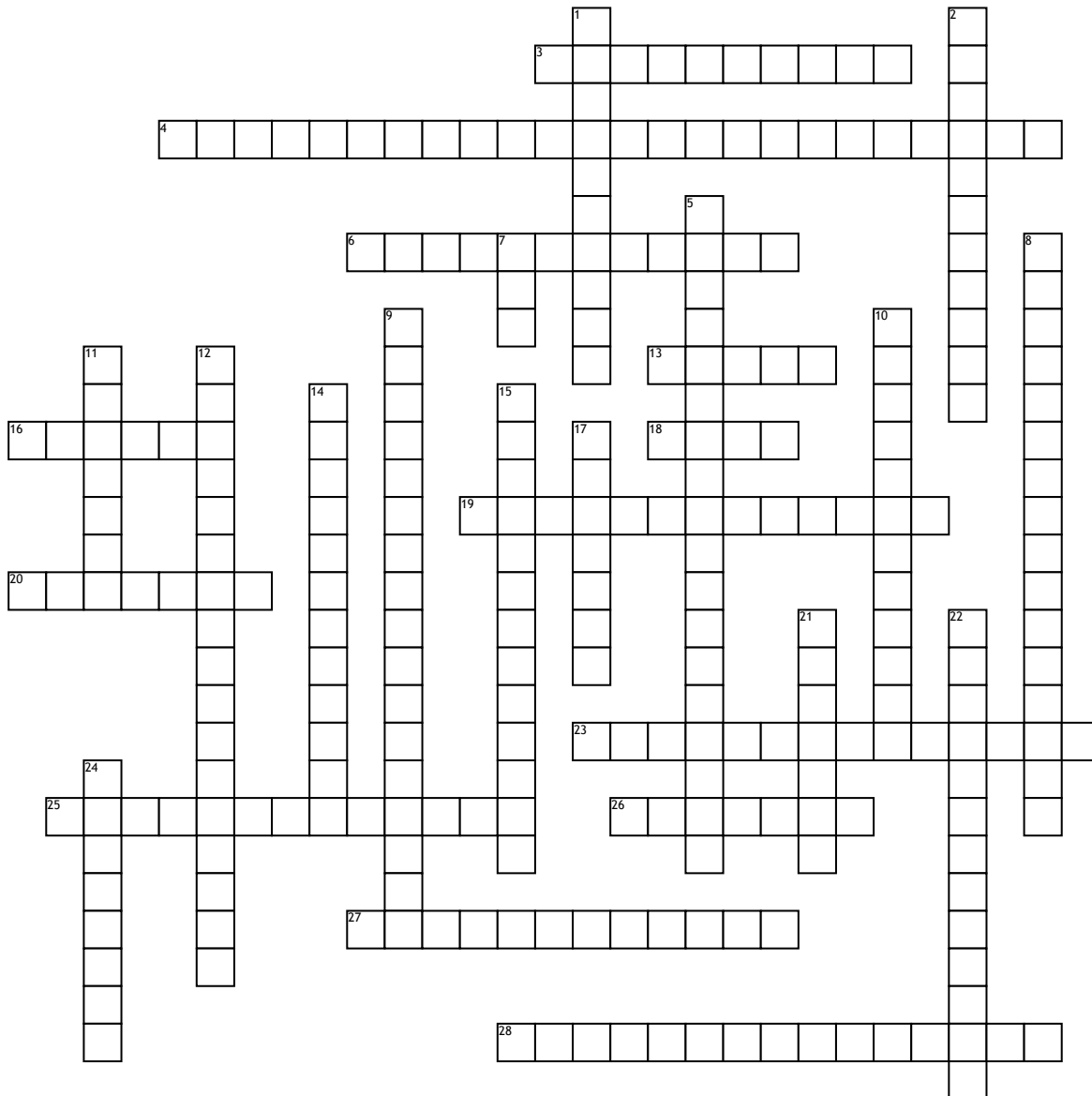


Science



Across

3. The total number of protons and neutrons in the nucleus of an atom. It is also known as the nucleon number.
4. A form of energy transfer, including radio waves, microwaves, infrared, visible light, ultraviolet, X-rays and gamma rays.
6. The number of protons in the nucleus of an atom. It is also known as the proton number.
13. A word used to describe the way electrons move around the nucleus of an atom.
16. A particle found in the nucleus of an atom, having a positive charge and the same mass as a neutron.
18. The smallest neutral part of an element that can take part in chemical reactions
19. Area around a nucleus that can be occupied by electrons.
20. A simple substance made up of only one type of atom
23. Another term for kinetic theory.

25. A particle made of two protons and two neutrons, emitted as ionising radiation from some radioactive isotopes.

26. A particle found in the nucleus of an atom having zero charge and mass of 1 (relative to a proton).

27. The mass of something compared to the mass of something else which is often given the mass of 1.

28. The part of the electromagnetic spectrum that can be detected by our eyes.

Down

1. The distance between a point on one wave and the same point on the next wave.

2. An atom that has lost electrons and so has an overall positive charge.

5. A spectrum of light (or other electromagnetic radiation) that includes black lines. These are caused by some wavelengths being absorbed by the materials that the light (or radiation) passes through.

7. An atom or group of atoms with an electrical charge due to the gain or loss of electrons.

8. A set of wavelengths of light or other electromagnetic radiation showing which wavelengths have been given out (emitted) by a substance.

9. A particle that is smaller than an atom, such as a proton, neutron or electron.

10. Electromagnetic waves that can be detected by the human eye.

11. Atoms of an element with the same number of protons (atomic number) but different mass numbers due to different numbers of neutrons.

12. Radiation that can cause charged particles (ions) to be formed. It can cause tissue damage and DNA mutations.

14. The number of protons in an atomic nucleus. Another term for atomic number

15. Another term for mass number.

17. The central part of an atom or ion.

21. A particle found in the nucleus (neutron or proton)

22. The model that explains the properties of different states of matter in terms of the movement of particles.

24. A tiny particle with a negative charge and very little mass.