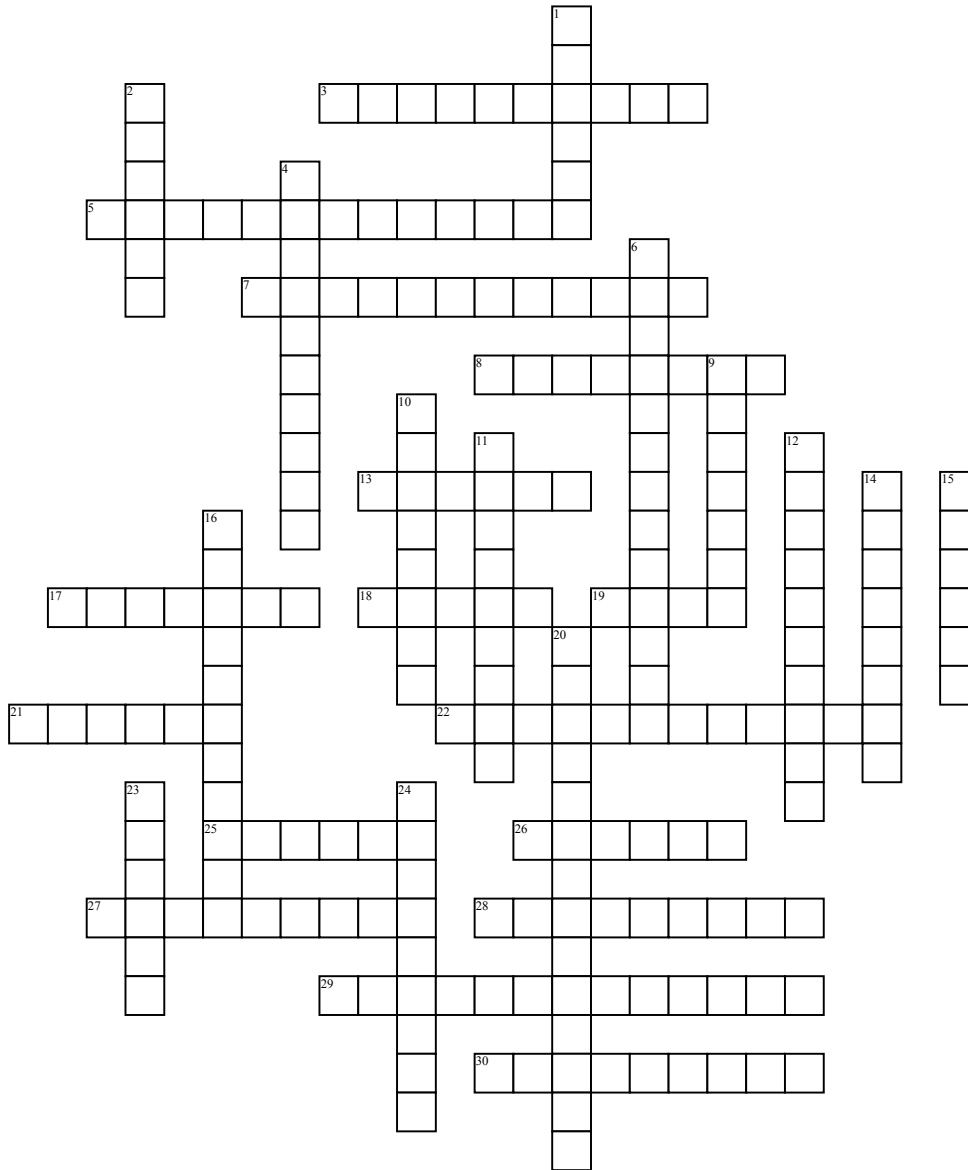


Freshman Science



Across

3. The cycle of processes by which water circulates between the Earth's oceans, atmosphere and land.
5. Organelle found in large numbers in most cells, in which the biochemical processes of respiration and energy production occur.
7. The number of protons in the nucleus of an atom
8. A very large star of high luminosity and low surface temperature.
13. The chemical element of atomic number 2, an inert gas which is the lightest member of the noble gas series.
17. A subatomic particle of about the same mass of a proton but without an electric charge.
18. This shell on the outside of the Earth.
19. The quality of matter which a body contains.
21. A stable subatomic particle occurring in all atomic nuclei, with a positive electric charge.
22. Semipermeable membranes surrounding the cytoplasm of a cell.
25. The chemical element of atomic number 6, a non-metal in which has two main forms. Has an atomic symbol of 'C'.

26. Layer of Earth between the crust and core.

27. Fluid like layer that lies above the solid inner core.

28. A star that suddenly increased greatly in brightness because of a catastrophic explosion that ejects most of its mass.

29. A nuclear reaction in which atomic nuclei of low atomic number fused to form a heavier nucleus with the release of energy

30. Material within a living cell excluding the nucleus.

Down

1. A colorless, odorless reactive gas, the chemical element of atomic number 8, and the life supporting component of air.
2. The chemical element of atomic number 11, a soft silver white reactive metal of the alkali metal group.
4. A small very dense star that is typically the size of a planet, it is formed when a low mass star has exhausted all of its central nuclear fuel and lost its outer layer as a planetary nebula.
6. A table of the chemical elements, arranged in order of atomic number.

9. A dense organelle present in most eukaryotic cell, typically a single rounded structure bounded by a double membrane that contains the genetic material.

10. A stable subatomic particle with a charge of negative electricity.

11. A minute particle consisting of RNA and associated proteins found in large numbers in the cytoplasm of living cells.

12. The mass of an atom of a chemical element, expressed in atomic mass units.

14. A colorless, odorless highly flammable gas, the chemical element of atomic number 1.

15. The property of matter and radiation which is manifest as a capacity to perform work.

16. A series of processes by which carbon compounds are interconverted in the environment.

20. A complex of vessels and folded membranes within the cytoplasm of most eukaryotic cells.

23. A cloud of gas and dust in outer space, visible in the night sky either as a indistinct bright patch or as a dark silhouette against other luminous matter.

24. Inner most geologic layer of the Earth.