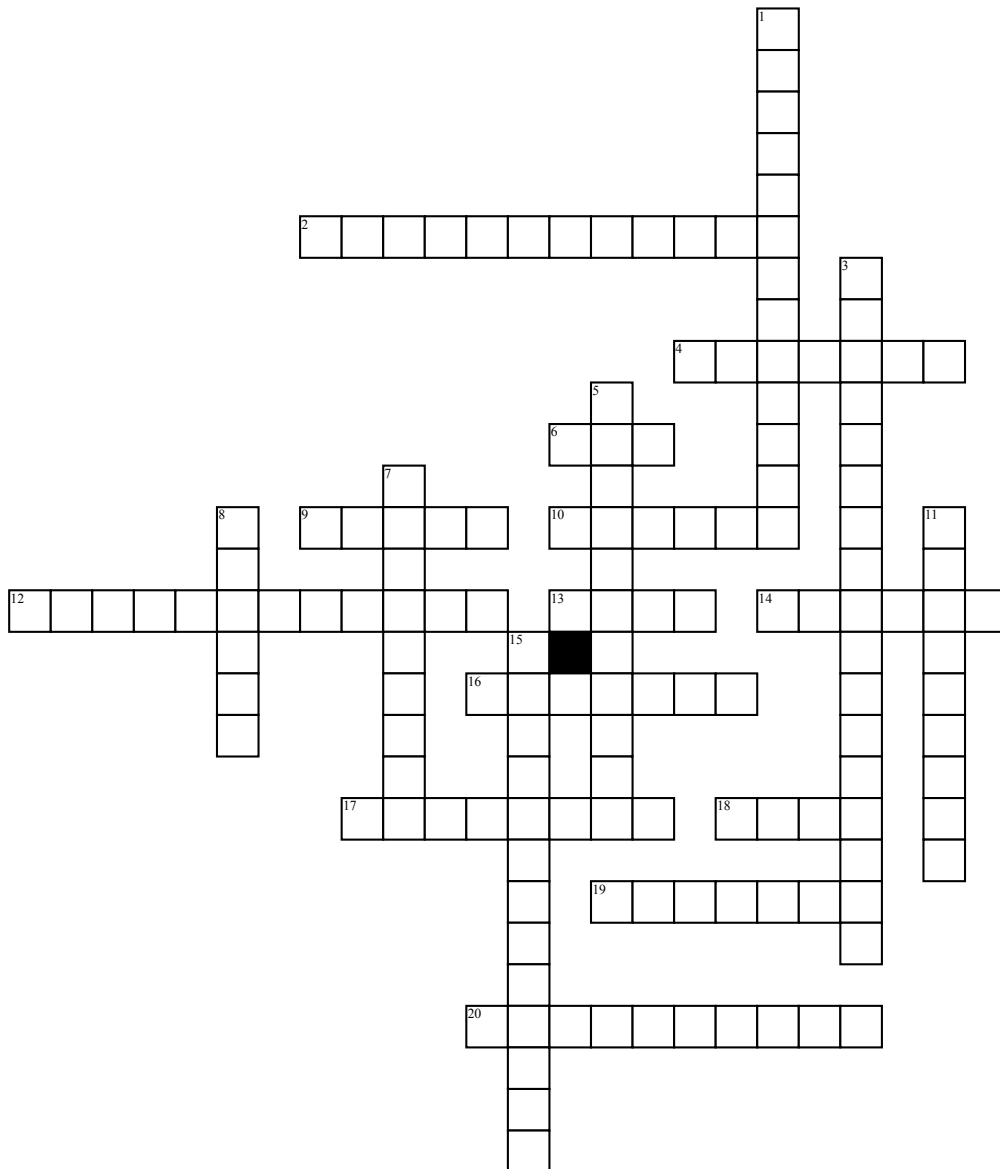


Atoms and Structures



Across

2. the number of positive charges or protons in the nucleus of an atom of a given element
4. the region in the center of an atom where most of an atom's mass and positive charge is concentrated
6. a substance possessing perfect molecular mobility and the property of indefinite expansion
9. having three dimensions (length, breadth, and thickness)
10. fluid that conforms to the shape of its container
12. a process that occurs when an unstable atomic nucleus changes in to another stable nucleus

13. the amount of matter in an object

14. the substance or substances of which any physical object consists or is composed

16. a neutral particle in the nucleus of an atom

17. any of two or more forms of a chemical element

18. the smallest piece of an element that still represents that element

19. found in atomic nuclei in numbers equal to the atomic number of the element

20. the integer nearest in value to the atomic weight of an atom and equal to the number of nucleons in the nucleus of the atom

Down

1. the group of electrons revolving around the nucleus of an atom

3. the average mass of the element's isotopes

5. any element that spontaneously emits radiation

7. a stable elementary particle present in all atoms

8. the elementary particles that make up the protons and neutrons that in turn make up the atomic nucleus

11. the science that deals with the composition and properties of substances and various elementary forms of matter

15. a table illustrating the periodic system