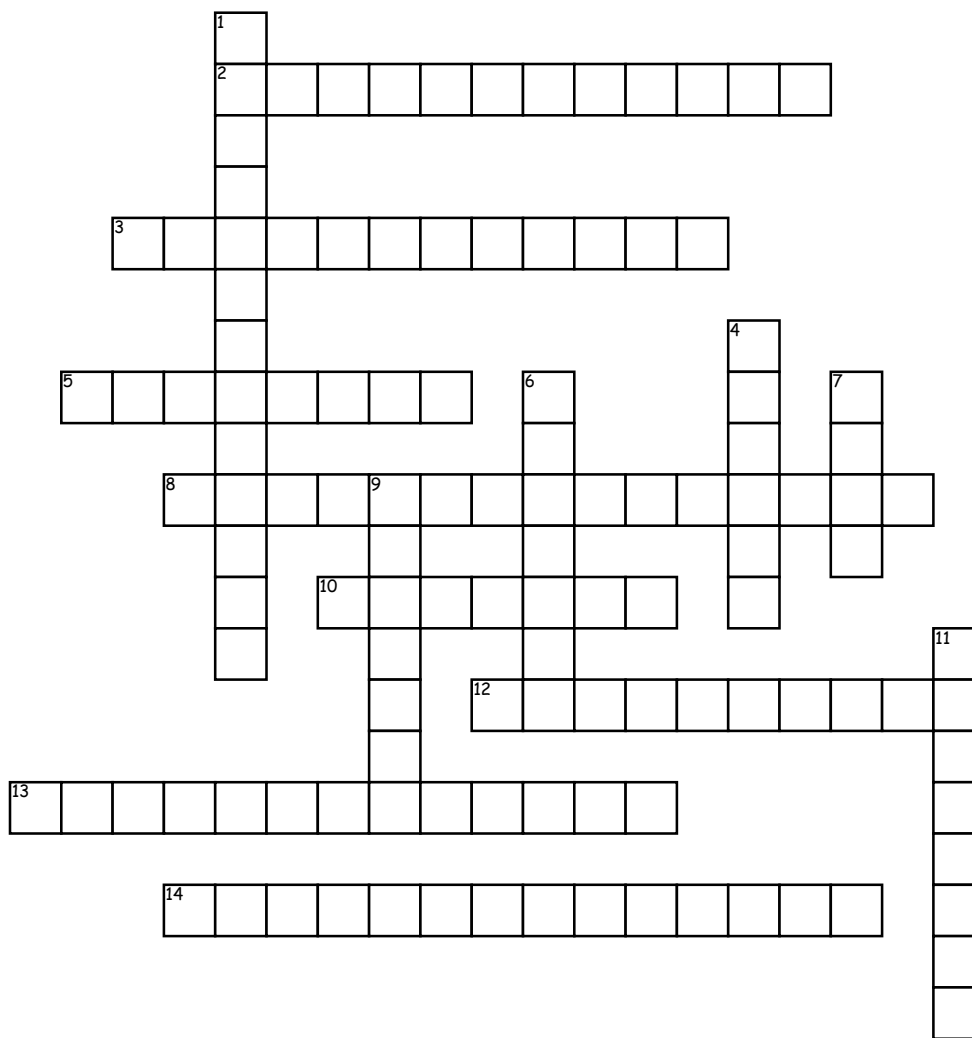


Atomic Structure



Across

2. specific shells or orbitals outside the nucleus that are defined by how much energy they can hold (also where electrons can be found)

3. the number of protons in the nucleus of an atom, which determines the chemical properties of an element and its place in the periodic table.

5. a stable subatomic particle with a charge of negative electricity

8. an electron in an outer shell of an atom that can be lost to or shared with another atom to form a molecule

10. the positively charged center of an atom that contains most of its mass

12. the mass of an atom of a chemical element expressed in atomic mass units. It is approximately equivalent to the number of protons and neutrons in the atom (the mass number) or to the average number allowing for the relative abundances of different isotopes.

13. A wave like space around the nucleus where electrons can be found.

14. usually refers to the one- or two-letter abbreviation for a chemical element

Down

1. The way we organize chemical elements using their atomic number. It is organized into rows and columns.

4. a stable subatomic particle occurring in all atomic nuclei, with a positive electric charge

6. A species of atoms having the same number of protons and neutrons in their atomic nuclei ex.) carbon, oxygen, sodium

7. the smallest unit of an element that has the chemical properties of that element

9. a subatomic particle of about the same mass as a proton but without an electric charge, present in all atomic nuclei

11. Different forms of the same element that contain the same number of protons but a different number of neutrons.

Word Bank

valence electron

nucleus

atom

atomic mass

electron

Element

neutron

Energy levels

chemical symbol

atomic number

proton

electron cloud

periodic table

isotopes