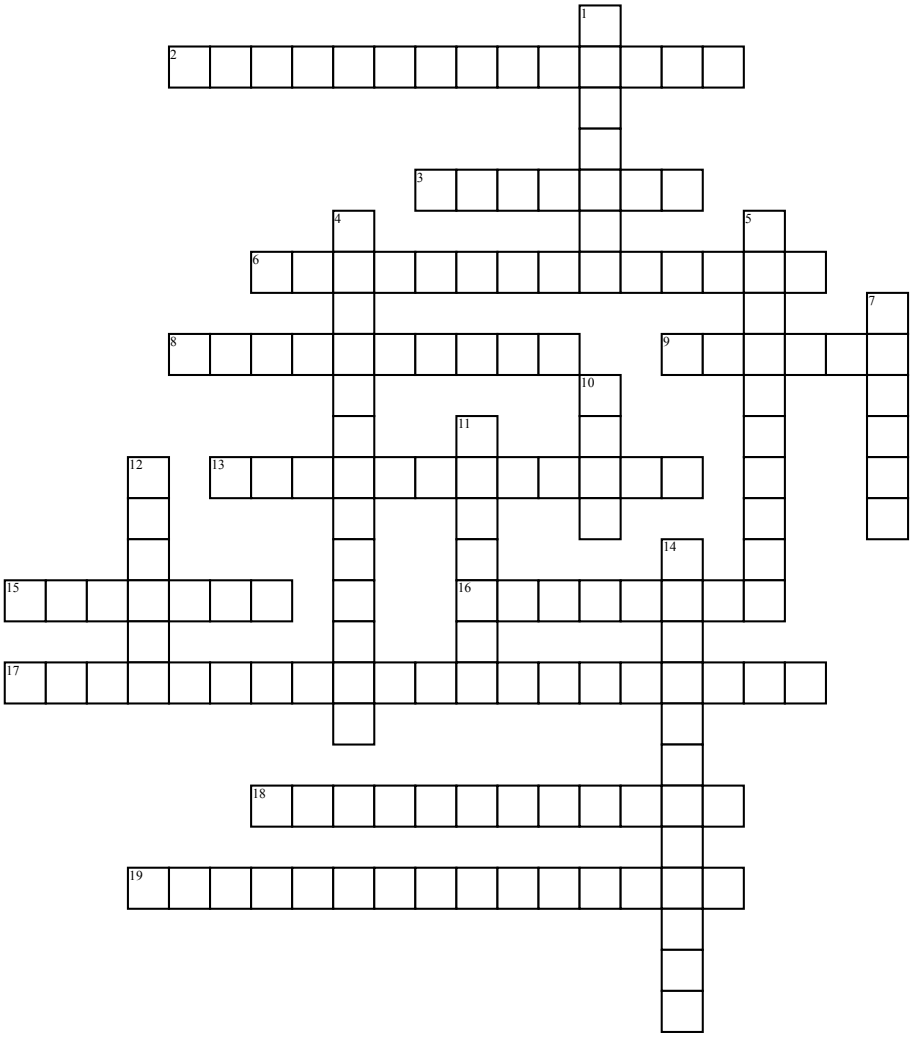
Name: _____

Elements and Atoms



Across

2. extremely small masses are expressed in terms of _____

3. substance that cannot be broken down by regular chemical means

6. usually the first or second letter(s) of the English or Latin name for an element

8. adding the number of protons and neutrons gives you this number

9. the backbone of organic molecules

13. an unstable isotope that tends to decay and emit radiation

15. particle in the atom with no charge

16. three dimensional space regions through which electrons move

17. electrons with similar energies are said to be at the same _____

18. fixed number of protons in the atomic nucleus tells us this

19. radioactive decay can be detected by this method

Down

1. composed of clusters of protons and neutrons

4. the chart of elements arranged by atomic number

5. diagrams of an electron and its configuration in an atom (Hint: this diagram displays them arranged in circles)

7. electrons need this to move between orbitals

10. smallest unit of life

11. atom of an element with the same number of protons and electrons but varies by neutron

12. a positively charged subatomic particle

14. the outermost concentric ring in an a Bohr's model

Word Bank

Atomic mass unit	Element	Principal energy level	Bohr models
Chemical symbol	Atomic mass	Radioisotope	Energy
Isotope	Valence shell	Orbitals	Autoradiography
Atom	Periodic table	Proton	Neutron
Atomic number	Nucleus	Carbon	