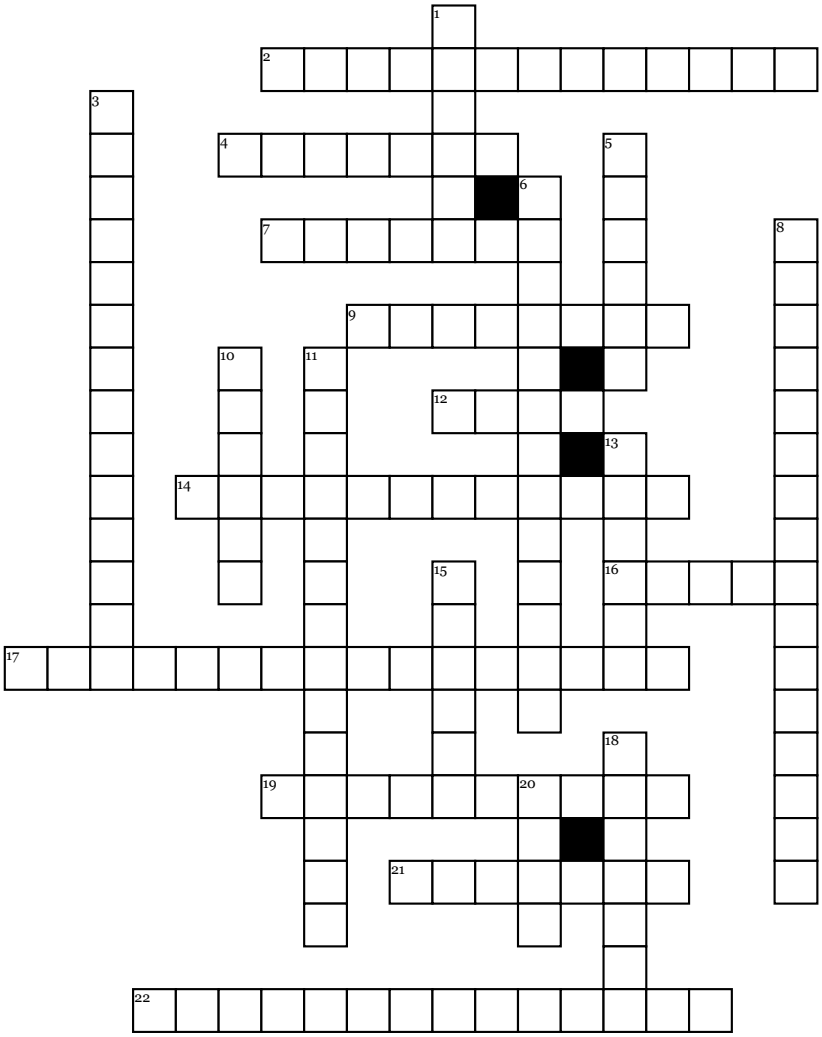
Name: _____ Date: _____ Period: _____

Building Blocks



Across

2. A table of the elements that organizes them according to a regular, repeating pattern.

4. The tiny, dense, positively charged center of an atom. Contains most of the atom's mass and protons and neutrons are located there.

7. Pure substance that can't be separated into simpler substances by physical or chemical changes.

9. Negatively charged particles found in the electron clouds of atoms. Electrons have a charge of -1.

12. The smallest particle into which an element can be divided and still be the same substance.

14. The number of protons in the nucleus of an atom is equal to the atomic number. Elements on the periodic table are arranged in order of atomic number.

16. Each column of elements (top to bottom) on the periodic table. Elements in the same group have similar physical and chemical properties.

17. A property of matter that describes a substance based on its ability to change into a new substance with different properties.

19. The sum of the protons and neutrons in an atom. (Protons + Neutrons = Mass Number)

21. The amount of matter (mass) per unit of volume. Equals mass divided by volume

22. The Si or metric unit used to express the masses of particles in atoms. Each proton and neutron has a mass of 1 amu.

Down

1. The amount of 3D space an object occupies

3. Affects one or more physical properties of a substance. Physical changes can often be reversed.

5. Horizontal rows of elements (left to right) on the periodic table. The properties of elements in a row follow a repeating pattern

6. Physical forms a substance can exist in. The four main states of matter are: solid, liquid, gas and plasma. (physical property of matter)

8. A property of matter that can be observed or measured without changing the substance.

10. Any object or thing that has measurable volume and mass.

11. One or more substances change into entirely new substances with different properties. Chemical changes can often not be reversed.

13. The measure of the gravitational force on an object's mass (usually by the Earth or another very massive object). Weight = mass x gravity

15. Positively charged particles found in the nucleus of an atom. Protons have a charge of +1.

18. Particles found in the nucleus of an atom that have no charge but have mass.

20. The amount of matter in an object

Word Bank

weight	Chemical Change	Proton	Nucleus	Physical Property
State of Matter	volume	Atom	Electron	Atomic Mass Unit
Periodic Table	Group	Chemical Property	Density	Matter
Atomic Number	Mass	Period	Neutron	Mass Number
Element	Physical Change			