True or False. For any statements you believe are false, change the words in the statement that would make it true.

- 1. An element is a pure substance that contains only one type of atom. TRUE
- 2. Pure gold is made up of 3 kinds of atoms. FALSE
- 3. If a scientist breaks up a sample of a substance she would find many of the same type of atoms. TRUE
- 4. Elements are made when atoms are combined. FLASE, (that's a molecule)
- 5. An atom is the smallest particle of matter that retains the properties of the element. TRUE
- 6. A block of carbon is broken down into small pieces. Each piece of the carbon is a different kind of atom. FALSE, they are all carbon atoms.
- 7. The smallest unit of matter is an atom. TRUE
- 8. When an atom is bonded to another different atom it is called an element.

FALSE (that is a compound, which we haven't learned about yet).

- 9. Anything that has mass and volume is made out of atoms. TRUE
- 10. Most of the mass of an atom is found in the electron layers. FALSE
- 11. The nucleus of an atom contains protons and neutrons. TRUE

- 12. Electrons are found in layers outside the nucleus. TRUE
- 13. The atomic number of a substance tells how many protons an element has. TRUE
- 14. The number of protons an element has can vary. FALSE
- 15. The atomic mass of an element can often be found below its chemical symbol on the periodic table. TRUE, look for the number with decimals.
- 16. In the periodic table, the atomic number is found above the chemical symbol.TRUE
- 17. All chemical symbols have one letter. FALSE, they can have one or two letters and are sometimes called the "Element Symbol."
- 18. The chemical symbol for neon is Ne. TRUE
- 19. Protons have a positive charge, while electrons have a negative charge. TRUE
- 20. When drawing an atom, we draw the same number of electrons as protons. TRUE