**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_**

**Quarter 1 Assessment**

8th Grade Science

**Multiple Choice**

1. A series of steps followed to solve problems is

A) investigations B) experimental guidelines C) standard procedures D) the scientific method

2. In an experiment, the one variable that is changed is called the

A) experimental variable B) dependent variable C) controlled variable D) independent variable

3. Particles are closest together in a

1. Solid B. Liquid C. Gas D. Plasma

4. The measure of how hard gravity pulls on an object is its

1. Density B. Mass C. Weight D. Volume

5. Anything that has mass and takes up space is

1. Plasma B. Matter C. Solid D. Density

6. The elements in group 7 of the periodic table are called

1. Noble Gases B. Transition Metals C. Alkali Earth Metals D. Halogens

7. The elements in group 1 of the periodic table are called

1. Rare Earth Elements B. Alkali Metals C. Noble Gases D. Halogens

8. The electrons on the outermost energy level of an atom are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ electrons.

1. Anion electrons B. Cation electrons C. Outsider electrons D. Valence electrons

**Fill in the blank**

Word bank: Predict, Analyze, Infer, Science, Observe, Classify, Freezing, Melting, Condensation, Vaporization, Sublimation, Deposition

9. To **\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_ is to use one or more senses, to get information about your surroundings.

10. To \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is to group things together based on how they are alike, or similar.

11. To \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is to state what you think might happen in the future.

12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the change from a liquid to a gas.

13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the change from a liquid to a solid.

14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is the change from a solid to a liquid.

**True or False?**

15. Getting a haircut is an example of a chemical change. \_\_\_\_\_\_\_

16. Burning toast is an example of a chemical change. \_\_\_\_\_\_\_\_

17. Ionic Bonds form when atoms share electrons. \_\_\_\_\_\_\_\_\_

18. In a gas, the particles do not move freely, they can only vibrate in place.\_\_\_\_\_\_\_

19. A cation is an ion with a negative charge. \_\_\_\_\_\_\_\_\_

20. The first shell of an atom can only hold two electrons. \_\_\_\_\_\_\_\_

21. Neutrons have a negative charge. \_\_\_\_\_\_\_\_\_

22. When atoms bond they share or exchange neutrons. \_\_\_\_\_\_\_\_\_\_

23. Create a **Bohr Model** for Carbon. Label the particles.

24. Create a **Lewis Dot Structure** of Oxygen.

**Short Answer**

25. What is Dmitri Mendeleev known for? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

26. How do you find the number of neutrons in an atom? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

27. What is an ion? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

28. What is the difference between the Bohr Model and the Lewis Dot Structure? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

29. What is the difference between an ionic bond and a covalent bond? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Written Response**

Write an essay describing the element you chose to research for your project. Describe why that element is important. Write what you have learned about that element and why it is important in our everyday lives.

Make sure your writing has a title and is written in complete sentences.