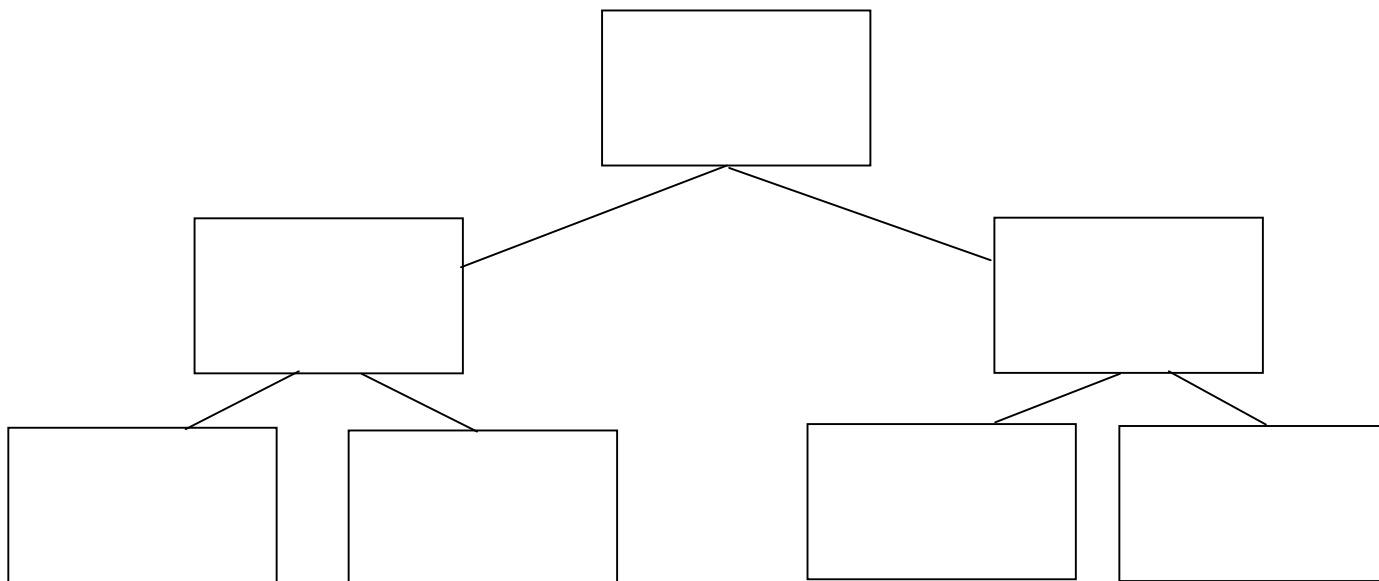


Name: _____ Period: _____ Date: _____

Study Guide and Practice Quiz
Classifying Matter and Scientific Method

Directions: Fill in the concept map for the different types of matter. Draw pictures to help you.



Directions: Match the word to its definition.

- | | |
|--------------------------------|---|
| 1. _____ Matter | a. made from more than one type of atom |
| 2. _____ Compound | b. made from one type of atom |
| 3. _____ Heterogeneous Mixture | c. a physical combination of two or more substances |
| 4. _____ Element | d. contains two or more phases |
| 5. _____ Mixture | e. has mass and takes up space |

Directions: classify the types of matter below as...

Element	Compound	Homogeneous Mixture	Heterogeneous Mixture
---------	----------	---------------------	-----------------------

- | | |
|------------------------|----------------------|
| 6. Diamond _____ | 7. Ammonia _____ |
| 8. Air _____ | 8. Baking Soda _____ |
| 9. Multi-Vitamin _____ | 10. Silver _____ |

Directions: Select the correct answer. Make sure to read all questions completely and carefully.

11. Which of the following is a **chemical change**?

- a. cutting a piece of wood
- b. boiling water
- c. a car rusting
- d. salt dissolving in water

12. What is the name of the element that has the chemical symbol **N**?

- a. Neon
- b. Niobium
- c. Sodium
- d. Nitrogen

13. Which of the following is a **physical property**?

- a. color
- b. rusting
- c. burning
- d. fermenting

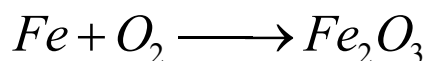
14. Which of the following is a **physical change**?

- a. ripping a piece of paper
- b. a car rusting
- c. water reacting with acid
- d. wood decaying

15. When using the scientific method, a possible reason or explanation for what you observed (an educated guess) is called...

- a. Experiment
- b. Hypothesis
- c. Observation
- d. Theory

Directions: Below is a chemical equation. Label where the **reactants** and **products** are located.



16. _____ 17. _____

Directions: Answer the questions below in complete sentences to receive full credit. (6 points)

19. What is the difference between a physical and chemical change? _____

20. List the four steps of the scientific method in the correct order. (6 points)

_____ → _____ → _____ → _____