

Name \_\_\_\_\_

Date \_\_\_\_\_

Use with Chapter 2, Section 2

# ELEMENTS, COMPOUNDS, MIXTURES

A. Write the name of the element for each symbol below:

1. Cl \_\_\_\_\_

3. S \_\_\_\_\_

2. Na \_\_\_\_\_

4. Fe \_\_\_\_\_

Write the symbol for each element named below:

5. aluminum \_\_\_\_\_

7. hydrogen \_\_\_\_\_

6. calcium \_\_\_\_\_

8. gold \_\_\_\_\_

B. For each description or example below, write one of the following words:

element	compound	mixture
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9. can be separated into parts by physical changes

\_\_\_\_\_

10. two or more elements chemically combined

\_\_\_\_\_

11. has a definite amount of each ingredient

\_\_\_\_\_

12. cannot be broken down into simpler substances

\_\_\_\_\_

13. water or sugar

\_\_\_\_\_

14. iron and sulfur added together

\_\_\_\_\_

15. iron

\_\_\_\_\_

C. Figure 1 shows sketches of some molecules. Write the letter of a sketch that matches each formula:

16. Ne \_\_\_\_\_

19. NH<sub>3</sub> \_\_\_\_\_

17. O<sub>2</sub> \_\_\_\_\_

20. C<sub>2</sub>H<sub>4</sub> \_\_\_\_\_

18. H<sub>2</sub>O \_\_\_\_\_



A



B



C



D



E

Figure 1.

Name \_\_\_\_\_ Section \_\_\_\_\_

Part I. Classify each of the following substances as; an element, a compound, a solution, or a heterogeneous mixture. *Non-Metal, Metallid, Metal*

1. Sand	2. Salt	3. Pure Water	4. Soil
5. Soda	6. Pure Air	7. Carbon Dioxide	8. Gold
9. Bronze	10. Oxygen	11. Salad Dressing	12. Salt Water
13. Antimony	14. Sugar	15. Lemonade	16. Chex mix
17. Steel	18. Lettuce	19. CO <sub>2</sub>	20. Bromine

Part II. In the spaces provided, describe the distinguishing characteristics of the major categories of matter. Do not define the terms.

13. Element -          
14. Compound -          
15. Solution -          
16. Heterogeneous Mixture -          

Name KEY Date \_\_\_\_\_

# ELEMENTS, COMPOUNDS, MIXTURES

Use with Chapter 2, Section 2

A. Write the name of the element for each symbol below:

- 1. Cl Chlorine
- 2. Na Sodium
- 3. S Sulphur
- 4. Fe Iron

Write the symbol for each element named below:

- 5. aluminum Al
- 6. calcium Ca
- 7. hydrogen H
- 8. gold Au

B. For each description or example below, write one of the following words:

element                      compound                      mixture

- 9. can be separated into parts by physical changes Mixture
- 10. two or more elements chemically combined Compound
- 11. has a definite amount of each ingredient Compound
- 12. cannot be broken down into simpler substances Element
- 13. water or sugar Compound
- 14. iron and sulfur added together Mixture
- 15. iron Element

C. Figure 1 shows sketches of some molecules. Write the letter of a sketch that matches each formula:

- 16. Ne C
- 17. O<sub>2</sub> E
- 18. H<sub>2</sub>O B
- 19. NH<sub>3</sub> D
- 20. C<sub>2</sub>H<sub>4</sub> A

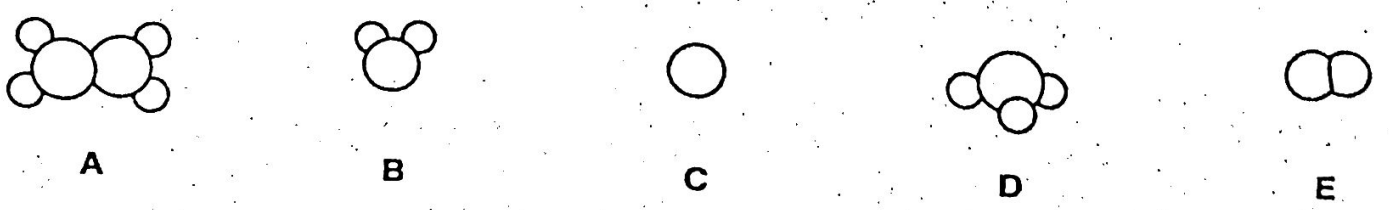


Figure 1.

Name \_\_\_\_\_ Section \_\_\_\_\_

Part I. Classify each of the following substances as: an element, a compound, a solution, or a heterogeneous mixture. Non-Metal, Metalloid, Metal

1. Sand HET. MIXTURE	2. Salt COMPOUND	3. Pure Water * PURE SUBST/ COMPOUND	4. Soil HET. MIXTURE
5. Soda SOLUTION	6. Pure Air MIXTURE	7. Carbon Dioxide COMP.	8. Gold ELEM. - METAL
9. Bronze SOLUTION	10. Oxygen ELEMENT	11. Salad Dressing HET. MIX.	12. Salt Water SOLUTION
13. Antimony ELEM - METALLOID	14. Sugar COMP.	15. Lemonade SOLUTION	16. Chex mix HET. MIX.
17. Steel SOLUTION	18. Lettuce MIXTURE	19. CO <sub>2</sub> COMPOUND	20. Bromine ELEM - NON-METAL

Part II. In the spaces provided, describe the distinguishing characteristics of the major categories of matter. Do not define the terms.

13. Element - SIMPLEST FORM OF <sup>"WHOLE"</sup> MATTER - <u>CAN'T</u> BE DIVIDED BY NORMAL CHEMICAL REACTIONS
14. Compound - CONSIST OF 2+ ELEMENT - <u>CAN</u> BE BROKEN DOWN BY CHEMICAL REACTIONS
15. Solution - TYPE OF MIXTURE - SMALLEST PARTICLES 1. SUBSTANCE DISSOLVED IN ANOTHER - <u>CAN'T</u> BE FILTERED, BUT <u>CAN</u> BE SEPARATED BY OTHER MEANS (BOILING).
16. Heterogeneous Mixture - LARGEST PARTICLES - <u>EASIEST</u> TO SEPARATE