Lesson 3- Molecules, Compounds, and Crystals

1. Two or more atoms combine to form a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Define molecule:

2. A molecule may contain atoms of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ element. Example:

3. Molecules can also form when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Example:

4. What is a compound? Are they considered pure substances?

5. The elements in a compound cannot be separated by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6. A compound has different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than those of the elements that make it up. Describe how water (H2O) is different than oxygen and hydrogen:

7. What is a chemical formula?

8. What is a crystal?

9. Answer EOG Practice 1.\_\_\_\_\_\_\_\_\_\_ 2.\_\_\_\_\_\_\_\_\_\_\_\_ 3.\_\_\_\_\_\_\_\_\_\_ 4.\_\_\_\_\_\_\_\_\_\_

Lesson 4- Mixtures

1. Elements and compounds are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Sometimes pure substances mix together. Define mixture:

2. The substances in a mixture do not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. They keep \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3. In any molecule of a compound, the elements are always found in the same \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ but the makeup of a mixture can \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. Mixtures exist in all\_\_\_\_\_\_\_\_\_\_\_\_. Name examples:

5. Heterogeneous mixture:

6. Homogenous mixture:

7. Draw the concept map on page 23.

8. What is a solution?

9. What are solutes and solvents?

10. When sugar dissolves in water\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The sugar molecules sit in tiny spaces between the water molecules, but the sugar and water **are not** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

11. Describe three ways to separate mixtures.

12. EOG Practice 1. \_\_\_\_\_ 2.\_\_\_\_\_\_\_ 3.\_\_\_\_\_\_\_ 4.\_\_\_\_\_\_