

Physical Science Assignment 4-3 & 4-4

Name _____

Class Period _____

Date _____

©1999 Sci-Ed Services

Read section 4-3 & 4-4. Then, based on the information in your textbook, answer the following questions :

1. According to your textbook, what is a *pure substance*?

2. What is the simplest *pure substance*? _____

3. Name five examples of pure substances.

_____	_____
_____	_____
_____	_____

4. State the definition for an atom as defined in chapter 4.

5. List the first thirty elements and print the symbol beside the name. ***Pay attention to the last sentence of the first paragraph on page 98.***

Name	Sym.	Name	Sym.	Name	Sym.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Please continue on the other side.

6. Explain why the symbol for **gold** is **Au** rather than G or Go.

7. What are **compounds**?

8. Explain how **compounds** are different from **elements** even though they are both pure substances.

9. Explain what happens when the element **sodium** comes in contact with the element **chlorine**.

10. What is a **molecule**?

11. Explain why a compound is not always a molecule. (**Look closely at the definitions for both.**)

12. What elements make up the rubbing alcohol molecule (C_3H_7OH) and how many of each kind of atom is in each rubbing alcohol molecule?

_____	_____
_____	_____
_____	_____

13. **Diatomic** elements exist in the pure state as pairs of atoms bonded together as molecules. Name the elements that have this "paired" characteristic and print the formula for a molecule of each.

Name	formula	Name	formula	Name	formula
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____