

Name _____

Date _____ Hour _____

Unit 7.2 Quiz Study Guide

1) A block of aluminum occupies a volume of 15.0 mL and weighs 40.5 g. What is its density?

2.7 g/mL

2) Mercury metal is poured into a graduated cylinder that holds exactly 22.5 mL. The mercury used to fill the cylinder weighs 306.0 g. From this information, calculate the density of mercury.

13.6 g/mL

3) Why does ice float in water?

It is less dense than water

4) How are the elements grouped on the periodic table?

According to their physical and chemical properties

5). Name **a chemical property** of matter.

Reactivity, number of bonds with hydrogen

6). List **two physical properties** of matter.

State of matter, metal vs non-metal, hardness, texture luster

Glucose has a chemical formula of $C_6H_{12}O_6$. Use this information to answer the next two questions.

7. How many elements are in one molecule of glucose?

3

8. How many atoms are in one molecule of glucose?

24

9. What is an element?

It is a kind of atom/ one type

10. Compare and contrast an element and a compound?

A compound is made up of 2 or more elements

Use the Periodic Table of Elements.

11. Name a noble gas?

helium (He), neon (Ne), argon (Ar), krypton (Kr), xenon (Xe), and radon (Rn).

12. What is a property of the noble gas?

Low/no reactivity, gas, 0 bonds with hydrogen, non-metal

13. Which family of elements are **NOT** usually reactive?

Noble gases

14. Which family of elements are all solids.

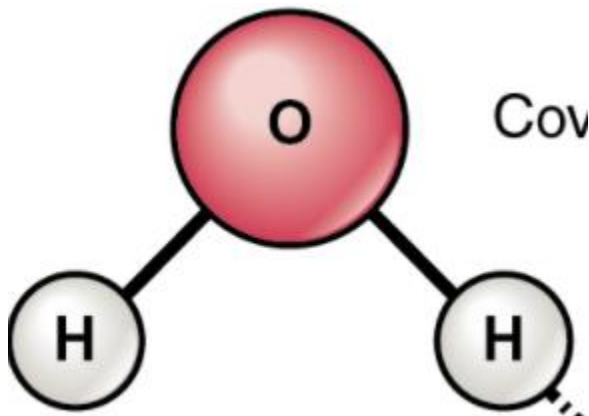
Alkali Metals, Alkaline Earth metals

15. Most elements are at what phase at room temperature?

Solid

16. Draw and label the following molecule:

Water (H₂O)



17. Find the following families on the periodic table and name their properties

Noble Gases-**Gas, Low/no reactivity, 0 bonds with hydrogen, non-metal**

Halogens-**non-metal, 1 bond with Hydrogen, reactive**

Alkali Metals-**Metal, solid 1 bond with hydrogen, highly reactive**

Alkaline Earth Metals- **Metal, solid, 2 bonds with hydrogen, reactive**