## Science 9

Chemistry I-III Practice Quest

Name:
Date:
Block:

This practice test is designed to help you determine what concepts you DO know and more importantly what concepts you DO NOT know!

Go through the practice test THREE times:
(1) On your own
1
(2) With your notes

(3) With another student


Each time, if you cannot answer a question, draw a circle around it to identify that you should review this concept when preparing for the test.

## Multiple Choice. Choose the BEST answer (1 mark each)

$\qquad$ 1. Ions of the same element have the same number of...
a. Electrons
c. Atoms
b. Protons
d. Ions
$\qquad$ 2. Which of the following is correctly paired?
a. Element - Air
c. Homogenous mixture - Copper
b. Compound - Coffee
d. Heterogeneous mixture -Cereal
__ 3. Which of the following would be an example of a chemical change?
a. Boiling water
b. Firewood burning
c. Cutting paper
d. Mixing cake batter
$\qquad$ 4. If an element can be stretched into thin long wires, the element is said to be...
a. Shiny
b. Brittle
c. Ductile
d. Malleable
$\qquad$ 5. Which of the following elements is the LEAST reactive?
a. Fluorine
c. Aluminum
b. Lithium
d. Argon

## Short Answers.

6. Discuss how the earliest forms of the periodic table was ordered. (2 marks)
7. Which scientist was responsible for changing the periodic table to its modern form? (1 mark)
8. Why are families grouped together? (1 mark)
9. Complete the following table: ( 0.25 marks each / 7 marks)

| Name | Symbol | Atomic <br> Number | \# of <br> Protons | \# of <br> Electrons | \# of <br> Neutrons | Atomic <br> Mass |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Aluminum <br> Atom |  |  | Ion <br> charge | Period <br> $\#$ | Group <br> $\#$ | Metal, <br> Non- <br> metal or <br> Metalloid? |  |  |  |  |
| Calcium <br> Ion |  | 8 |  | 10 |  |  |  |  |  |  |

10. What are TWO distinctive properties of METALLOID elements? (2 marks)
a.
b.
11. Draw a Bohr model for the following elements: (3 marks each)

| Oxygen Atom |  |
| :--- | :--- |
|  |  |
|  |  |


| Potassium Atom |  |
| :--- | :--- |
|  |  |
|  |  |

