Science 9
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Blank Periodic Table

Do NOT fill in the names or symbols of elements on this periodic table. The purpose of the blank table is for you to consolidate notes about the periodic table onto one sheet of paper. Below is a list of things you can put on your blank table. You may want to colour code the items and use a legend, write the terms in the appropriate spaces, add notes of your own, use arrows to show trends...use your imagination!

| Metal | Alkali Metal | Metalloid | Period |
| :--- | :--- | :--- | :--- |
| Liquid metal | Non-Metal | Halogen | Alkaline Earth Metal |
| Family of One | Atomic mass | Transition Metal | Noble Gases |
| Family | Liquid | Atomic number | Period |

## Using The Periodic Table

The left-hand column in the chart below contains statements about various elements. Write the name and symbol for the element each statement refers to.

| Description of Element | Name of Element | Symbol |
| :--- | :--- | :--- |
| It is the only gas in group 1. |  |  |
| This inert gas is in period 3. |  |  |
| There is no heavier member of group 2. |  |  |
| This element is the lightest of the halogens. |  |  |
| Group 16 contains this reactive non-metal gas. |  |  |
| The atomic mass of this metal is about 56. |  |  |
| Period 6 contains this group 2 metal. |  |  |
| This is the only liquid halogen. |  |  |
| This metallic element is liquid at room |  |  |
| temperature. |  |  |
| Photosynthesis produces this element. |  |  |
| This is the lightest element in period 2. |  |  |



## Periodic Table of Elements - Practice

Directions: Use the periodic table to fill in the below chart.

|  | Element | Symbol | Atomic Number | \# of protons | \# of electrons | Atomic Mass | Rounded <br> Atomic <br> Mass | \# of Neutrons (show work) | Period |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Oxygen | 0 | 8 | 8 | 8 | 15.999 | 16 | 16-8=8 | 2 |
| 2 | Helium |  |  |  |  |  |  |  |  |
| 3 | Carbon |  |  |  |  |  |  |  |  |
| 4 | Aluminum |  |  |  |  |  |  |  |  |
| 5 | Calcium |  |  |  |  |  |  |  |  |
| 6 | Sodium |  |  |  |  |  |  |  |  |
| 7 | Potassium |  |  |  |  |  |  |  |  |
| 8 | Nitrogen |  |  |  |  |  |  |  |  |
| 9 | Silicon |  |  |  |  |  |  |  |  |
| 10 | Iron |  |  |  |  |  |  |  |  |
| 11 | Hydrogen |  |  |  |  |  |  |  |  |

## REVIEW: The Periodic Table

Directions: Answer the questions with the proper information using your notes, textbook, the worldwide interwebs and/or the periodic table.

1. Define "family:
2. What is a period?
3. What is the symbol for the following elements.
a. Magnesium $\qquad$ b. Potassium $\qquad$ c. Iron $\qquad$ d. Copper $\qquad$
4. What are the names of the following elements.
a. C $\qquad$ b. Cl $\qquad$
c. Au $\qquad$ d. Sr $\qquad$
5. In what period are the following elements found?
a. He $\qquad$
b. Ge $\qquad$
c. Rb $\qquad$
d. I $\qquad$
6. In what group (family name) are the following elements found?
a. Sulfur $\qquad$ b. Ca $\qquad$
c. lodine $\qquad$ d. Fe $\qquad$
7. List one atom from each of the following "collections:
a. Halogen
b. Halogen
c. Alkali metal $\qquad$ d. Boron family
e. Lanthanide series $\qquad$ f. Alkaline Earth metal $\qquad$
g. Transition metal $\qquad$ h. Nobel gas
8. What is the atomic mass of mercury? $\qquad$
9. What is the atomic symbol for silver? $\qquad$
10. Ni is the symbol for what element? $\qquad$
11. What element has the atomic number 17 ? $\qquad$
12. List the symbols for two transition metals.
13. $\mathrm{Cu}, \mathrm{Ag}$, and Au are all in what group \#
14. Name two noble gases
15. Give the symbol for two halogens.
16. What is the symbol for element with atomic number 74 ? $\qquad$
17. What is the atomic mass of copper?
18. What is the last element in period 4 ?
19. What is the atomic number of:
a. Calcium $\qquad$ Iron $\qquad$ Gold $\qquad$ Uranium $\qquad$
20. What is the Atomic mass of:
b. Calcium $\qquad$ Iron $\qquad$ Gold $\qquad$ Uranium $\qquad$
21. How many protons do the following have?
a. Calcium $\qquad$ Iron $\qquad$

Gold $\qquad$ Uranium $\qquad$
22. How many electrons do the following have?
a. Calcium $\qquad$ Iron $\qquad$

Gold $\qquad$ Uranium $\qquad$
23. Does mercury have more protons and electrons than tin? $\qquad$
24. Is mercury a heavier element than tin?
25. Does potassium have more electrons than neon?
$\qquad$
$\qquad$

- Read the on-line document about Bohr Models
- Take notes in your notebook before moving on to do the worksheets.

