Directions: Answer the questions with the proper information using your notes, book, and the periodic table.

1. Define a family. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is a period? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is the symbol for the following elements.
   1. Magnesium \_\_\_\_\_\_\_\_\_\_\_\_\_ b. Potassium \_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Iron \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Copper \_\_\_\_\_\_\_\_\_\_\_\_

1. What are the names of the following elements.

a. C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Cl \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Au \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Sr \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What period are the following elements in?

a. He \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Ge \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Rb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What group are the following elements?

a. Sulfur \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Ca \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Iodine \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Fe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Give me an atom with the following characteristics.

a. Halogen \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Chalogen \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Alkali metal \_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Boron \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e. Lanthanide series \_\_\_\_\_\_\_\_\_\_ f. Alkaline Earth metal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

g. Transition metal \_\_\_\_\_\_\_\_\_\_\_ h. Nobel gas \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions: Use your Periodic table to complete the worksheet.**

1. What is the atomic symbol for silver?

2. What is the atomic mass of mercury?

3. Ni is the symbol for what element?

4. The element that has the atomic number 17 is?

5. List the symbols for two transition metals.

6. Cu, Ag, and Au are all in what group #

7. Name two noble gases

8. Give the symbol for two halogens.

9. What is the symbol for element with atomic number 74?

10. What is the atomic mass of copper?

11. What is the last element in period 4?

For questions 12 - 15, label the following Key box as it should appear on your periodic table

6

C

Carbon

12.01

12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **6.4 c Periodic Table of Elements** | | | | | | | | | |
| **Directions: Use the periodic table to fill in the below chart.** | | | | | | | | | |
|  | Element | Symbol | Atomic Number | # of protons | # of electrons | Atomic Mass | Rounded Atomic Mass | (show work) # of Neutrons | Period |
| 1 | Oxygen | O | 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 |  |  |  |  |  |  |  |  |

**Directions:** Use a Periodic table to find the information asked for below:

1. What is the atomic number of: 2. What is the Atomic mass of:

Calcium\_\_\_\_ Calcium\_\_\_

Iron \_\_\_\_\_ Iron\_\_\_\_\_

Gold\_\_\_\_\_ Uranium\_\_\_\_\_

Uranium\_\_\_\_\_ Copper\_\_\_\_\_

3. How many protons do the following have?

Calcium\_\_\_\_

Gold\_\_\_\_\_\_\_

Copper\_\_\_\_\_\_

Iron\_\_\_\_\_\_

4. How many electrons do the following have?

Gold\_\_\_\_

Iron\_\_\_\_\_

Copper\_\_\_\_\_

Uranium\_\_\_\_\_

5. Does mercury have more protons and electrons than tin?

6. Is mercury a heavier element than tin?

7. Does potassium have more electrons than neon?

8. Does hydrogen have more electrons than Uranium?

9. Which has more protons, sulfur or iodine?

10. Write the symbols or the names for each of these elements:

Chlorine \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Zn \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Copper \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Helium \_\_\_\_\_\_\_\_\_\_\_\_\_

Potassium \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Iron \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Silver \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ P \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Na \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Ne \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sn \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mercury \_\_\_\_\_\_\_\_\_\_\_\_\_\_