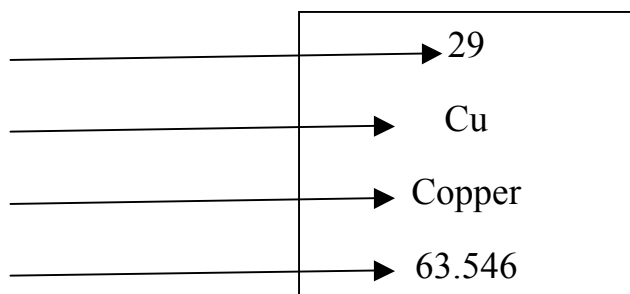
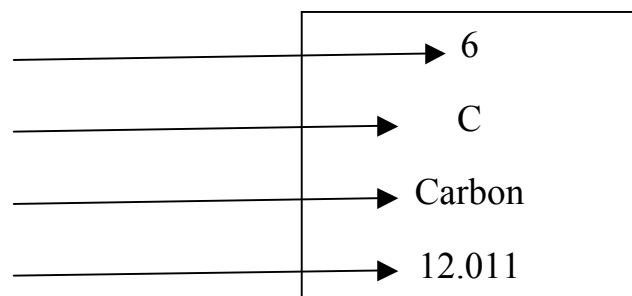


Introducing the Periodic Table

Back in 1869, Russian chemist Dimitri Mendeleev organized all the known elements into a chart according to their physical and chemical properties. Today that chart is known as the Periodic Table of Elements. The periodic table organizes information about the elements and their properties.

The periodic table is made up of horizontal rows and vertical columns of boxes. Each box contains specific information about a single element. This information includes the element's name, the chemical symbol for the element, the element's atomic number and the element's atomic mass.

With your teacher label the information indicated by the arrows below. Find each on your periodic table.



Materials: Copy of the Periodic Table, colored pencils

What To Do:

1. Element symbols are written with the first letter a capital letter and any other letters as lower case letters. Write the symbols for 5 different elements.

2. Find the numbers across the top. These vertical columns are called groups because the elements in them tend to have the same chemical and physical properties. How many groups are on the periodic table? _____
3. Find the numbers down the left side. These horizontal rows are called periods because they fall in order like a calendar. How many periods are on the periodic table?

4. Find the zigzag line that starts in the group 13. These seven elements (Boron, Silicon, Germanium, Arsenic, Antimony, Tellurium, Polonium) are the metalloids. They sometimes act like metals and at other times like nonmetals. Color them purple.
5. On the right side of the zigzag line are the nonmetals. Color them yellow.
6. Most of the elements are known as metals. Metals are located on the left side of the periodic table. The only element on the left side of the periodic table that is **NOT** a metal is hydrogen. Color hydrogen yellow.
7. Use a colored pencil to color the metals green. (Don't color them so dark that you can't read the information.)



Directions: Find the information on your Periodic Table.

1. What is found in group 1 and period 4? _____
2. What is found in group 16 and period 5? _____
3. What is found in group 17 and period 2? _____
4. In what group will you find copper? _____
5. In what group will you find krypton? _____
6. In what group will you find mercury? _____
7. What is the symbol for copper? _____
8. What is the symbol for gold? _____
9. What is the symbol for krypton? _____
10. What is the symbol for mercury? _____
11. What is the symbol for oxygen? _____
12. In what period will you find gold? _____
13. In what period will you find silver? _____
14. In what period will you find oxygen? _____
15. In what groups will you find metalloids?

16. What element has the symbol H? _____
17. What element has the symbol He? _____
18. What element has the symbol Ca? _____
19. What element has the symbol Cl? _____
20. What element has the symbol C? _____

Directions: Do Not Glue until teacher says.

Cut out each rectangle and glue them on the page only across the top. Draw something representing each topic.

THE PERIODIC TABLE

3 KINDS OF ELEMENTS

GROUPS

PERIODS

Name _____ period _____

EXIT TICKET

What's wrong with these element symbols?

1. CA _____

2. mg _____

3. aT _____

How should these element symbols be written?

4. CA _____

5. mg _____

6. aT _____

Conclusion: (capital, metals, small, symbol, nonmetals, metalloids)

Elements can be classified as _____, _____

and _____. Each element has a unique _____.

The first letter of a symbol is always a _____ and

the second letter of a symbol is always a _____

letter.

Name _____ period _____

EXIT TICKET

What's wrong with these element symbols?

1. CA _____

2. mg _____

3. aT _____

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4. CA _____

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