

U2-LM1B-WorkSheet - Periodic Table

1. The law that states that the properties of the elements are periodic functions of their atomic number is the periodic law.
2. Elements in the periodic table are arranged in order of increasing atomic number.
3. In the periodic table, each horizontal row is referred to as a period. On the other hand, each vertical column is called a a group or a family.
4. In a a group or a family elements have similar properties.
5. The elements of Group IA in the periodic table, except hydrogen, belong to the alkali metals family, while the elements of Group IIA belong to the alkaline earth metals family.
6. The following elements: F, Cl, Br, and I belong to the halogen family; they all exist as diatomic molecules in their most stable form.
7. The elements in Group 18 (8A) are part of the noble gasses family.
8. The periodic table is also divided into blocks that include the metals and the non-metals. Metals exist on the left side of the periodic table. Nonmetals exist on the right side of the periodic table.
9. Except for mercury all metals are solids at room temperature.
10. The non-metal that is a liquid at room temperature is bromine.
11. The nonmetal that is not a good heat insulator is carbon.
- in the form of diamond
12. Except for carbon nonmetals have poor electrical conductivity.
- in the form of graphite
13. The elements with properties intermediate between metals and nonmetals are known as metalloids or semi-metals. Three elements of this type are B, Si, Ge, As, Sb, Te, and Po.
14. Elements in the A groups are called representative elements.
15. Elements in the B groups are known as the transition metal elements.

16. Write down the name of the element represented each symbol:

Al **Aluminum**

Au **Gold**

Ar **Argon**

Sn **Tin**

Si **Silicon**

Hg **Mercury**

F **Fluorine**

Fe **Iron**

K **Potassium**

Br **Bromine**

B **Boron**

Ba **Barium**

O **Oxygen**

P **Phosphorous**

Xe **Xenon**

He **Helium**

Mg **Magnesium**

Mn **Manganese**

17. Write down the symbol of each of the following elements:

nickel **Ni**

nitrogen **N**

lithium **Li**

silver **Ag**

lead **Pb**

antimony **Sb**

selenium **Se**

tungsten **W**

rubidium **Rb**

strontium **Sr**

neon **Ne**

sodium **Na**

sulfur **S**

zinc **Zn**

arsenic **As**

18. Under the name of each element, write its symbol:

Calcium, carbon, copper, chromium, cobalt, chlorine, cesium, cadmium

Ca

C

Cu

Cr

Co

Cl

Cs

Cd

19. There are seven elements that exist in nature as diatomic molecules. Please list them here with their elemental name and in symbolic form.

Hydrogen H₂, Nitrogen N₂, Oxygen O₂, Fluorine F₂, Chlorine Cl₂, Bromine Br₂, Iodine I₂