

PERIODIC TABLE

Families of Elements

Using the periodic table, fill in the missing data in the table.

ELEMENT	Family name	Family number (look at top of chart)	Number of electrons in outer energy level
Chlorine			
Silicon			
Magnesium			
Hydrogen			
Aluminum			
Argon			
Selenium			
Nitrogen			

Using the periodic table, give the name of each of these elements and indicate whether it belongs to the alkali or alkaline earth family.

ELEMENT	NAME	FAMILY
Be		
Cs		
Li		
Ca		

In the table below place a check mark in the correct box depending on whether the characteristic described is a **physical or chemical** characteristic.

Characteristic	Physical	Chemical
Helium is a gas at normal temperatures.		
Sodium combines with chlorine to form salt.		
Oxygen is flammable.		
Calcium is a white metal.		

PERIODIC TABLE

Periods of Elements

The information in **two** of the phrases following each term **is true** for that term. The information in one phrase is not true for that term. In the space provide, write the letters of the true phrases.

- _____ **1** Active nonmetals
- are found in the upper right-hand corner of the periodic table
 - gain electrons from other elements
 - include Family 18 of the periodic table
- _____ **2** Active metals
- are found in the lower left-hand corner of the periodic table
 - do not react with other elements easily
 - easily lose electrons
- _____ **3** Metals
- most are solid at room temperature
 - are good conductors of heat
 - include the halogens
- _____ **4** Period
- is a horizontal row in the periodic table
 - begins a repeating pattern of physical and chemical properties of elements
 - consists of seven elements
- _____ **5** Metalloids
- have metal and nonmetal characteristics
 - include the element aluminum
 - are found on either side of the stair-step line on the periodic table
- _____ **6** Nonmetals
- most are gases at room temperature
 - most do not conduct heat or electricity well
 - include the transition elements

SKILLBUILDER

If elements in the periodic table were arranged according to Mendeleev in order of increasing mass, potassium would be in Family 18. How would this conflict with the outer energy levels of elements in Family 18? _____
