

REVIEW: Groups and Periods + Metals/Metalloids/Nonmetals

1. State which element is located in the following groups and periods.

a. _____ group 4, period 5

d. _____ group 18, period 1

b. _____ group 2, period 2

e. _____ group 13, period 3

c. _____ group 6, period 6

f. _____ group 15, period 6

All the metals appear on the left side.

All the non-metals (except hydrogen) appear on the right side.

The metalloids form a diagonal line toward the right side.

1	
H	
3	4
Li	Be
11	12
Na	Mg
19	20
K	Ca
37	38
Rb	Sr
55	56
Cs	Ba

					2
					He
5	6	7	8	9	10
B	C	N	O	F	Ne
13	14	15	16	17	18
Al	Si	P	S	Cl	Ar
31	32	33	34	35	36
Ga	Ge	As	Se	Br	Kr
49	50	51	52	53	54
In	Sn	Sb	Te	I	Xe
81	82	83	84	85	86
Tl	Pb	Bi	Po	At	Rn

2. For each of the following, label as a metal, nonmetal, or metalloid.

a. _____ poor conductor of electricity

b. _____ usually a gas at room temp

c. _____ ductile and malleable

d. _____ semiconductor

e. _____ good conductor of heat

f. _____ Chlorine

g. _____ Boron

3. Vertical columns on the periodic table are called _____.

4. Horizontal rows on the periodic table are called _____.

Name _____ Date _____ Class _____

5. The elements in groups 3 through 12 are called the _____.
6. The elements in group 1 are called the _____.
7. The elements in group 2 are called the _____.
8. The elements in group 17 are called the _____.
9. The elements in group 18 are called the _____.
10. The elements in group _____ are the most reactive metals.
11. The elements in group _____ are the most reactive nonmetals.
12. The elements in group _____ are very unreactive.
13. The elements in group _____ are very reactive metals, but less reactive than Alkali Metals.

Reactivity, Atom Size, and Outermost Electrons: Fill in the Blanks

Atoms within the same group in the periodic table have the same number of _____ in their outer shell.
The electrons in the outermost shell are called _____ electrons.

True or False?

1. The distance from the centre of the nucleus to the valence electrons determines the size of the atom.
2. As you move down a group, the elements have valence electrons that occupy higher and higher energy levels.
3. The farther the valence electrons are from the nucleus, the more easily they can be lost, and the more reactive the element is.
4. Atoms get larger and more reactive as you move from Left to Right across a period on the periodic table.
5. The reduced pull of the electrons towards the nucleus causes an increase in atom size.
6. The reduced pull is due to the atom having more protons.
7. Oxygen is larger and more reactive than Lithium.
8. Sodium is less reactive and smaller than Potassium.