

Groups in the Periodic Table.

- Elements in a group have similar properties, due to having the same number of valence electrons.
- **Valence Electrons** are the electrons in the highest occupied energy level of an atom.
- **Energy levels** are the possible energy amount electrons of an element can have (think of energy levels as steps an electron can go up or down on)

Group #	# Valence Electrons	Name	Properties
1	1	Alkali Metals	<ul style="list-style-type: none"> ● Very Reactive: therefore, never found as uncombined elements in nature. ● Pure forms are stored under oil because they are so reactive. ● Reactivity increases as one goes down group 1. ● All elements in this group are soft, metals. ● React violently with water! ● Please note: this group does NOT include hydrogen.
2	2	Alkaline Earth Metals	<ul style="list-style-type: none"> ● Less reactive than group 1, but more reactive than other metals on the periodic table. ● Good conductors of heat and electricity.
3-12	Varies	Transition Metals	<ul style="list-style-type: none"> ● These metals are the metals most of us are familiar with (like Gold or Iron) ● Less reactive than groups 1 and 2 ● The metals in this group are shiny and hard.
13	3	Boron Family	<ul style="list-style-type: none"> ● In this family all members except for Boron are white metals ● The most well-known member is Aluminium.
14	4	Carbon Family	<ul style="list-style-type: none"> ● This group contains Carbon which all living things are made up.
15	5	Nitrogen family	<ul style="list-style-type: none"> ● This group contains a non metals (nitrogen gas), metalloids, and metal!
16	6	Oxygen family	<ul style="list-style-type: none"> ● This group contains oxygen which is

			the most abundant element in the Earth's crust
17	7	Halogens	<ul style="list-style-type: none">• Highly reactive nonmetals.
18	8	Noble Gases	<ul style="list-style-type: none">• Extremely non reactive gases