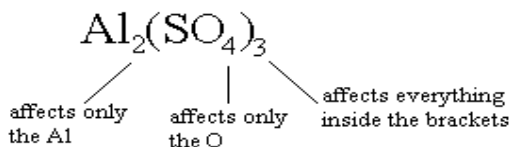


## Chemical Formulas

- a) when there is no subscript, assume a subscript of "1" is present
- b) subscripts following an element indicate the number of that element only
- c) subscripts following a close bracket indicate the number of all elements in the brackets
- d) subscripts inside brackets are multiplied by the subscript after the bracket
- e) add up the subscripts when elements occur in more than one place in the formula



In this example, the compound is made up of 2 Al, 3 S, and 12 O (3x4=12)

<u>Chemical Name</u>	<u>Formula</u>	<u>Number of atoms of each element</u>
e.g. Sodium chloride (table salt)	NaCl	<u>1 sodium, 1 chlorine</u>
1) Calcium chloride (road salt)	CaCl <sub>2</sub>	_____
2) Silicon dioxide (glass)	SiO <sub>2</sub>	_____
3) Calcium carbonate (sea shells)	CaCO <sub>3</sub>	_____
4) Sodium bicarbonate (baking soda)	NaHCO <sub>3</sub>	_____
5) with #4 makes baking powder	NaH <sub>2</sub> PO <sub>4</sub>	_____
6) Phosphoric acid (soda pop)	H <sub>3</sub> PO <sub>4</sub>	_____
7) Iron oxide (rust)	Fe <sub>2</sub> O <sub>3</sub>	_____
8) Sulfuric acid (car batteries)	H <sub>2</sub> SO <sub>4</sub>	_____
9) Ammonia (household cleaner)	NH <sub>3</sub>	_____
10) Sodium hypochlorite (Bleach)	NaClO	_____
11) Calcium sulfate (Gypsum wallboard)	CaSO <sub>4</sub>	_____
12) Magnesium hydroxide (antacid)	Mg(OH) <sub>2</sub>	_____
13) Apatite (mineral that makes up bone)	Ca <sub>5</sub> (PO <sub>4</sub> ) <sub>3</sub> F	_____
14) Acetic acid (vinegar)	CH <sub>3</sub> CO <sub>2</sub> H	_____
15) Ammonium nitrate (cold packs)	NH <sub>4</sub> NO <sub>3</sub>	_____
16) Sodium acetate (hot packs)	NaCH <sub>3</sub> CO <sub>2</sub>	_____
17) Aluminum hydroxide (antiperspirant)	Al(OH) <sub>3</sub>	_____
18) Glucose (makes up sugar)	C <sub>6</sub> (H <sub>2</sub> O) <sub>6</sub>	_____
19) Ammonium sulfide	(NH <sub>4</sub> ) <sub>2</sub> S	_____
20) Octane (gasoline)	(CH <sub>2</sub> ) <sub>6</sub> (CH <sub>3</sub> ) <sub>2</sub>	_____
21) Ethanol	CH <sub>3</sub> CH <sub>2</sub> OH	_____