

OXIDATION NUMBER RULES

RULE	APPLIES TO	STATEMENT
1	ELEMENTS	The oxidation number of atom in an element is ALWAYS zero
2	MONATOMIC IONS	The oxidation number of an atom in a monatomic ion EQUALS the charge on the ion
3	OXYGEN	The oxidation number of oxygen is -2 in MOST compounds (Exceptions: Hydrogen Peroxide H_2O_2 and other peroxides, where it is -1)
4	HYDROGEN	The oxidation number of hydrogen is +1 in MOST of its compounds (Exceptions: Metal Hydrides, such as NaH or CaH_2 , where it is -1)
5	HALOGENS	The oxidation number of fluorine is -1 in ALL compounds. Each of the other halogens (Cl , Br and I) has an oxidation number of -1 in <u>binary compounds</u> , except when the other element is a halogen above in the periodic table or oxygen.
6	COMPOUNDS AND IONS	The sum of the oxidation numbers of the atoms in a compound is ZERO . The sum of the oxidation numbers of atoms in a polyatomic ion EQUALS the charge on the ion.