

## COMMON OXIDIZERS AND REDUCERS

COMMON OXIDIZING AGENTS	PRODUCTS FORMED
MnO <sub>4</sub> <sup>-</sup> in acid	Mn <sup>2+</sup>
MnO <sub>2</sub> in acid	Mn <sup>2+</sup>
MnO <sub>4</sub> <sup>-</sup> in neutral or basic solution	MnO <sub>2(s)</sub>
Cr <sub>2</sub> O <sub>7</sub> <sup>2-</sup> in acid	Cr <sup>3+</sup>
HNO <sub>3</sub> concentrated	NO <sub>2</sub>
HNO <sub>3</sub> dilute	NO
H <sub>2</sub> SO <sub>4</sub> , hot, concentrated	SO <sub>2</sub>
Metal ic ions (higher oxidation. #)	Metal ous ions (lower oxidation #)
Halogens diatomic	Halide ions
Na <sub>2</sub> O <sub>2</sub>	NaOH
HClO <sub>4</sub>	Cl <sup>-</sup>
C <sub>2</sub> O <sub>4</sub> <sup>2-</sup>	CO <sub>2</sub>
H <sub>2</sub> O <sub>2</sub>	H <sub>2</sub> O

COMMON REDUCING AGENTS	PRODUCTS FORMED
Halide ions	Halogens
Metal element	Metal ion
Sulfite or SO <sub>2</sub>	Sulfate
Nitrite	Nitrate
Free halogen in dilute basic solution	Hypohalite ion
Free halogen in concentrated basic solution	Halate ion
Metal ous ion (lower oxidation #)	Metallic ion (Higher oxidation #)