

- **Multiple Ionic Charges**

- Earlier we said that the atom wanted to complete orbitals if 2, 8 or 8 electrons
- Not really true as we get to larger atoms as the orbitals are more complex
 - Good enough for first 20 elements
- Common metals have multiple ionic charges (valences)

- **Stock naming system**

- For elements with multiple ionic charges, we need to know which form is being used
- eg. Iron chloride

FeCl ₂	Iron (II) Chloride	Ferrous Chloride	Lower valence given suffix “ <u>ous</u> ”
FeCl ₃	Iron (III) Chloride	Ferric Chloride	Higher valence given suffix “ <u>ic</u> ”

- To distinguish between types we use roman numeral after the metal

- Must be in brackets
- (I) must not be used

- In the classical naming system, the Latin name for the element is used

Element	Symbol	Latin
Antimony	Sb	Stibium
Copper	Cu	Cuprum
Gold	Au	Aurum
Iron	Fe	Ferrum
Lead	Pb	Plumbum
Mercury	Hg	Hydragyrum
Potassium	K	Kalium
Silver	Ag	Argentum
Sodium	Na	Natrium
Tin	Sn	Stannum
Tungsten	W	Wolfram