

CHEMISTRY DATA SHEET

1 mole of any element contains 6.02×10^{23} molecules

FORMULAE OF COMMON IONS	
Positive	Negative
Ag ⁺	Br ⁻
Al ³⁺	Cl ⁻
Ca ²⁺	CO ₃ ²⁻
Cu ²⁺	HCO ₃ ⁻
Fe ²⁺	HSO ₄ ⁻
Fe ³⁺	I ⁻
H ⁺	NO ₃ ⁻
K ⁺	O ²⁻
Li ⁺	OH ⁻
Mg ²⁺	S ²⁻
Na ⁺	SO ₃ ²⁻
NH ₄ ⁺	SO ₄ ²⁻
Pb ²⁺	PO ₄ ³⁻
Zn ²⁺	HPO ₄ ³⁻
Ba ²⁺	H ₂ PO ₄ ⁴⁻

REACTIVITY SERIES	
Elements	Reactivity
Potassium	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;"><i>Most reactive</i></div> <div style="margin-bottom: 20px;">↓</div> <div style="margin-bottom: 20px;"><i>Decrease in</i></div> <div style="margin-bottom: 20px;"><i>Reactivity</i></div> <div style="margin-bottom: 20px;">↓</div> <div><i>Least reactive</i></div> </div>
Sodium	
Lithium	
Calcium	
Magnesium	
Aluminium	
(Carbon)	
Zinc	
Iron	
Tin	
Lead	
(Hydrogen)	
Copper	
Silver	
Gold	
Platinum	

SOLUBILITY OF SALTS AND HYDROXIDES IN COLD WATER

Soluble	Insoluble
All sodium, potassium and ammonium salts	
All nitrates	
Most bromides, chlorides & iodides	Bromides, chlorides & iodides of silver & lead*
Most sulphates	Sulphates of barium, calcium & lead*
Carbonates & hydroxides of sodium, potassium & ammonium	Most other carbonates & hydroxides
Calcium hydroxide is only slightly soluble	*lead salts are more soluble in hot water