

Chemistry Data Sheet

1. Reactivity Series of Metals

Potassium	most reactive
Sodium	↑
Calcium	
Magnesium	
Aluminium	
<i>Carbon</i>	
Zinc	
Iron	
Tin	
Lead	
<i>Hydrogen</i>	
Copper	
Silver	
Gold	
Platinum	↓
	least reactive

(elements in italics, though non-metals, have been included for comparison)

2. Formulae of Some Common Ions

Positive ions

Negative ions

	Name	Formula		Name	Formula
	Hydrogen	H ⁺		Chloride	Cl ⁻
	Sodium	Na ⁺		Bromide	Br ⁻
	Silver	Ag ⁺		Fluoride	F ⁻
	Potassium	K ⁺		Iodide	I ⁻
	Lithium	Li ⁺		Hydroxide	OH ⁻
	Ammonium	NH ₄ ⁺		Nitrate	NO ₃ ⁻
	Barium	Ba ²⁺		Oxide	O ²⁻
	Calcium	Ca ²⁺		Sulfide	S ²⁻
	Copper(II)	Cu ²⁺		Sulfate	SO ₄ ²⁻
	Magnesium	Mg ²⁺		Carbonate	CO ₃ ²⁻
	Zinc	Zn ²⁺			
	Lead	Pb ²⁺			
	Iron(II)	Fe ²⁺			
	Iron(III)	Fe ³⁺			
	Aluminium	Al ³⁺			

Turn over ►

Physics Equations Sheet

GCSE Science A/Physics (SCA1, SCA2 and PH1)

$E = m \times c \times \theta$	<i>E</i> energy transferred <i>m</i> mass <i>θ</i> temperature change <i>c</i> specific heat capacity
efficiency = $\frac{\text{useful energy out}}{\text{total energy in}} (\times 100\%)$	
efficiency = $\frac{\text{useful power out}}{\text{total power in}} (\times 100\%)$	
$E = P \times t$	<i>E</i> energy transferred <i>P</i> power <i>t</i> time
$v = f \times \lambda$	<i>v</i> speed <i>f</i> frequency <i>λ</i> wavelength