Chapter 1 Formulas

$T(°C) = T(K) - 273.15$

$T(°F) = 9/5 [T(°C)] + 32$

Density = mass/volume

average atomic weight = (exact mass of isotope) (fractional abundance of isotope) + ...

Chapter 1 Conversions

1 in	2.54 cm
1 mi	5280 ft

Diatomic Molecules

H_2

N_2

O_2

F_2

Cl_2

Br_2

I_2

Polyatomic Ions

Chapter 4 Oxidation Numbers

element by itself	0
Group 1A	+1
Group 2A	+2
Halogen	usually -1 / positive with Oxygen
Monatomic Ion	ion charge
H	+1 with nonmetals / -1 with metals
O	usually -2 / -1 in peroxide (O_2)
F	ALWAYS -1

Chapter 4 Solubility Rules

exceptions	soluble ionic compounds	insoluble ionic compouns	exceptions
	Na^+	OH^-	Na^+, K^+, Ba^{2+}
	K^+	O^{2-}	Na^+, K^+, Ba^{2+}
	NH_4^+	S^{2-}	Na^+, K^+, NH_4^+, Ba^+
	NO_3^-	CO_3^{2-}	Na^+, K^+, NH_4^+

Chapter 4 Solubility Rules (cont)

$CH_3CO_2^-$	PO_4^{3-}	Na^+, K^+, NH_4^+
ClO_3^-		
ClO_4^-		
Pb^{2+}, Ag^+, Hg_2^{2+}	Cl^-	
Pb^{2+}, Ag^+, Hg_2^{2+}	Br^-	
Pb^{2+}, Ag^+, Hg_2^{2+}	I^-	
Ca^+, Sr^+, Ba^{2+}, Pb^+	F^-	
Ca^+, Sr^+, Ba^{2+}, Pb^+	SO_4^{2-}	