Environmental Science and Technology

FORMULAS			
$C = \frac{m}{v}$	C: concentration m: mass V: volume	$W = \Delta E$	W: work ΔE: variation in energy
$V = RI$	V: potential difference R: resistance I: electric current intensity	$W = F\Delta d$	W: work F: force Δd: distance travelled
$R_{eq} = R_1 + R_2 + ...$	R_{eq}: equivalent resistance	$F_g = mg$	F_g: gravitational force m: mass g: gravitational field intensity
$\frac{1}{R_{eq}} = \frac{1}{R_1} + \frac{1}{R_2} + ...$	R_{eq}: equivalent resistance	$E_p = mgh$	E_p: gravitational potential energy m: mass g: gravitational field intensity h: height
$E = P\Delta t$	E: energy consumed P: power t: time	$E_k = \frac{1}{2}mv^2$	E_k: kinetic energy m: mass v: velocity
$P = VI$	P: power V: potential difference I: electric current intensity	$Q = mc\Delta T$	Q: quantity of heat m: mass c: specific heat capacity ΔT: change in temperature
$F_e = \frac{kq_1q_2}{r^2}$	F_e: electrical force k: Coulomb's constant q: charge of particle r: distance between two particles		

QUANTITIES		
NAME	**SYMBOL**	**VALUE**
Coulomb's constant	k	$9 \times 10^9 \ \frac{Nm^2}{C^2}$
Gravitational field intensity	g	9.8 N/kg
Specific heat capacity for water	c	$4.19 \ \frac{J}{g°C}$

Resistor Colour Chart

Colour	Black	Brown	Red	orange	Yellow	Green	Blue	Purple	Grey	White
Digit	0	1	2	3	4	5	6	7	8	9
Multiplier	10^0	10^1	10^2	10^3	10^4	10^5	10^6	10^7	10^8	10^9