			Units:	Formulae point charges **only**	
Vectors	Electrostatic Force:	$\vec{F_e}$	Newtons: $\mathrm{N} = \frac{\mathrm{kg\ m}}{\mathrm{s}^2}$	$F_e = K\frac{\lvert q_1 q_2\rvert}{r^2}$	$\vec{F} = q\vec{E}$
	Electric Field:	$\vec{E}$	$\frac{\mathrm{Newtons}}{\mathrm{Coulomb}} = \frac{\mathrm{N}}{\mathrm{C}} = \frac{\mathrm{V}}{\mathrm{m}}$	$E = K\frac{\lvert q\rvert}{r^2}$	
Scalars	Electric Potential Energy:	U_{elec}	Joules: $\mathrm{J} = \mathrm{N\ m} = \mathrm{V\ C}$	$U_{elec} = K\frac{q_1 q_2}{r}$	$\Delta U_{elec} = q\Delta V = -qE\Delta x$
	Electrostatic potential:	V	Volts: $\mathrm{V} = \frac{\mathrm{N\ m}}{\mathrm{C}}$	$V = K\frac{q}{r}$	$\Delta V = -E\Delta x$
	Change in Potential Energy	ΔU_{elec}			
	Potential Difference	ΔV	Volts: V		

Capacitors:

Charge:	Q	Coulomb: C	$Q = C\,\Delta V_C$	
Capacitance:	C	Farad: F	$C = Q/\Delta V_C$	$C = \kappa\varepsilon_o A / d$
Potential energy stored in a capacitor	U_c	Joules: J	$U_c = ½\, Q\Delta V_C = ½\, C(\Delta V_C)^2 = ½\, Q^2/C$	
Other useful relationships for capacitors:			$\vec{F} = q\vec{E}$	$\Delta V = -E\Delta x$

$K = 8.99 \times 10^9\ \mathrm{Nm^2/C^2}$

$\varepsilon_o = \frac{1}{4\pi K} = 8.85 \times 10^{-12}\ \mathrm{C^2/Nm^2}$

Electron charge: $e = -1.6 \times 10^{-19}$ C

μ = micro = 10^{-6}

n = nano = 10^{-9}

p = pico = 10^{-12}