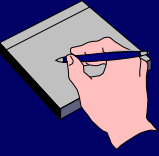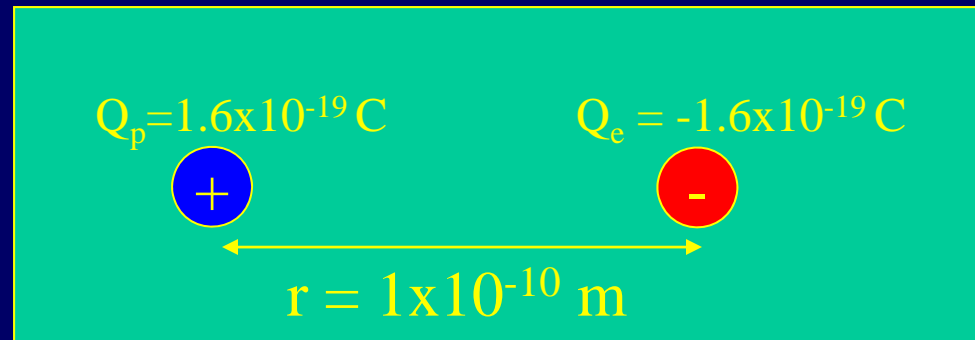# Coulomb's Law

- **What is the magnitude of the force on the proton due to the electron in hydrogen?**

$$F = k \, q_1 q_2 / r^2 \qquad k = 9 \times 10^9 \; Nm^2/C^2$$

$Q_p = 1.6 \times 10^{-19} \, C$ $Q_e = -1.6 \times 10^{-19} \, C$

+   −

$$r = 1 \times 10^{-10} \, m$$

Magnitude