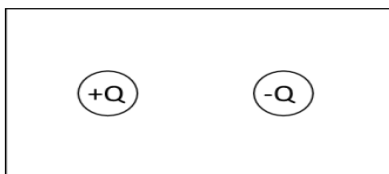


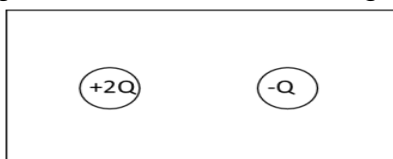
Laboratory 2

<https://phet.colorado.edu/en/simulation/charges-and-fields>

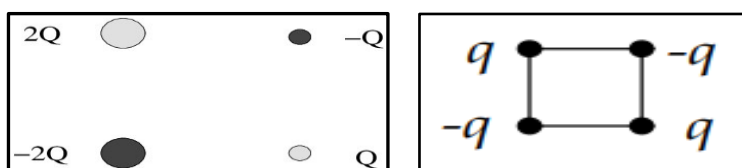
1. Plot the electrical field lines and equipotential surfaces by estimation for
 - (i) Single positive charge ($+1\text{ Q}$),
 - (ii) Single negative charge (-2 Q),
 - (iii) Single dipole (one positive charge and one negative charge)



- (iv) One charge with $+2Q$ and one charge with $-Q$



- (v) Quadrupole arrangement



2. Determine the variables that affect the strength and direction of the electric field for a static arrangement of charges.
3. Investigate the variables that affect the strength of the electrostatic potential (voltage).

<https://phet.colorado.edu/en/simulation/balloons-and-static-electricity>

4. Describe and draw models for common static electricity concepts (transfer of charge, induction, attraction, repulsion, and grounding)