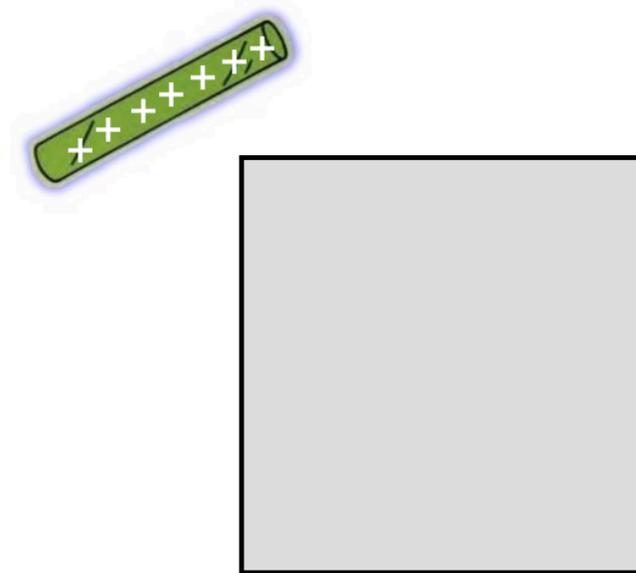


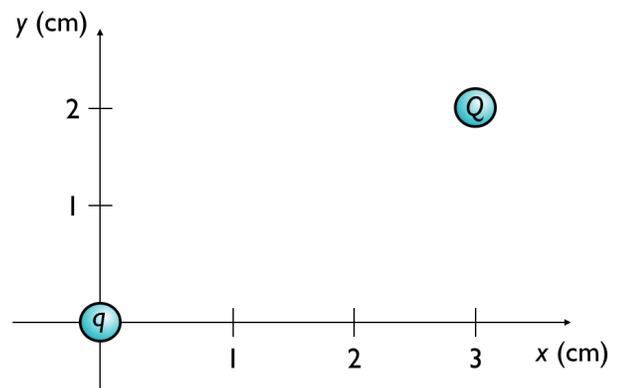
Name:

Student Number:

- 4) A positively charged inanimate rod is brought near a metal box. In the metal box draw a possible configuration of both positive and negative charges.



- 5) Two charges with charge $q = 2 \text{ nC}$ and $Q = -1 \text{ nC}$ are in a configuration as shown to the right. What is the force that charge q exerts on charge Q ? Write your answer in terms of unit vectors. What is the force that Q exerts on q ?



Name:

Student Number:

6) A constant electric field points to the right. Describe the effects of this field on:

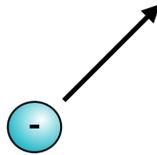
a) A stationary electron:



b) A stationary proton:



c) An electron 45° up and to the right.



d) An electric dipole:

