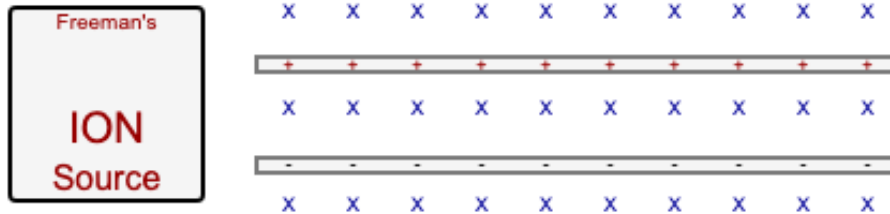# Velocity Selector

Step 1: Fill in all the values for the picture below. Show the path of a particle that is moving too slow to emerge from the capacitor, show the path of a particle that is moving too fast to emerge from the capacitor and show the path of a particle that is moving at the perfect speed to emerge. Label all three paths

Step 2: Calculate the strength of the electric field between the plates of the capacitor. Show your work neatly below

Step 3: Calculate the force electric on the charge when it is between the plates of the capacitor. Show your work neatly below

Step 4: Calculate the speed of the particle that will emerge from the capacitor undeflected. Show you work below and then put your answers in your program to make sure you did everything properly