Electric Field Hockey Lab

To be completed in your notebook

Objective: Score goals in an Electric Field Hockey simulation and learn about Electric Fields.

Procedure:

1. Follow link to open simulation.
2. In your notes, draw the following:
    1. starting location of the puck
    2. goal/obstructions
    3. location/sign of all charges
    4. Use a dashed line to draw path of puck
    5. Some of the electric field arrows (enough to get the idea of field strength/direction)

Go to:

https://www.physicsclassroom.com/Physics-Interactives/Static-Electricity/Put-the-Charge-in-the-Goal/Put-the-Charge-in-the-Goal-Interactive

Analysis Questions

1. When the positively charged test puck was close to a point charge that you placed around the rink, did the electric field get stronger or weaker? How do you know?

2. If the positively charged test puck was placed exactly between two negatively charged point charges, what would the positively charged test puck experience?

3. What did you notice about the magnitude of the electric force you saw on the positively charged test puck as it moved closer to the other particles?

4. What three things affected the strength of the force felt by the positively charged test puck?

5. If multiple negatively charged point charges were placed near each other, did the positively charged test puck move towards them faster than if there was only one negatively charged point charge? Why or why not?