Lab Name: <u>Electric Field</u> Your Name: <u>Meet Patel</u>

SUMMARY: look at your lab notes while doing this!

1. Write down one major conclusion you can draw from this week's laboratory. Please explain.

When positive charges are placed the arrows goes in the opposite direction, but when negative charges are placed the arrows are attracted towards negative charges. Also, the close they are to the charges the bigger/stronger the bond with the charges.

- 2. Describe the experimental evidence that supports your conclusion. Please explain. The simulation allows us to experiment the how strong the bond is and how does the arrows behave during positive and negative charges. First, I placed a sensor, then I placed a positive charge near that sensor which showed that the arrows go in opposite direction and bigger in length. When the positive charge was placed farther and farther the arrow was getting smaller and smaller. Similarly, to the positive charge, the negative charge does the same, but arrow instead of going in opposite direction, it points towards the negative charge.
- 3. Give one example of applications/situations for the finding(s) you described above in your everyday life outside of physics lab.

I would say a battery or magnets, they both work in the same way described above.