

Name _____

Physics

Electric Fields Lecture Handout

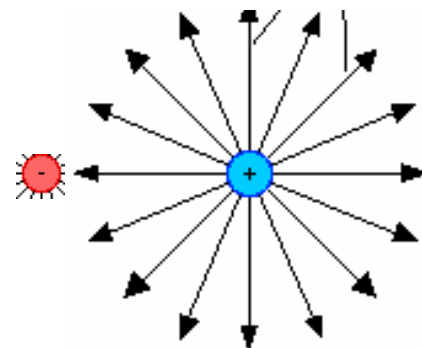
Directions: Complete the Notes and sample problems below according to the lecture.

- **Electric Field Strength, E** , is the force on a stationary positive test charge per unit charge in an electric field

Formula:

Sample Problem:

- What is the force on an electron that is 0.5 m away from a positive 2C point charge?
- What is the electric field strength at this point?



Potential Difference Equation:

Practice Problem

- Moving a point charge of 3.2×10^{-19} C between plates in an electric field requires 4.8×10^{-18} J of energy. What is the potential energy difference between these points?

