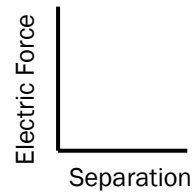
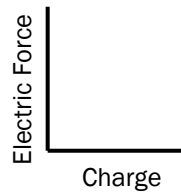


Questions

1. A balloon gains a charge of -3.7 pC after being rubbed on your hair. How many excess electrons is this?
2. In an experiment, moving a charge through an electric field requires 11 eV of work. How much work is this in Joules?
3. Calculate the electric force between two electrons if their centers are 2.7×10^{-3} meters apart.
4. A charge of $+48 \text{ C}$ experiences a force of 0.8 N when located a certain position in the electric field produced by a second charge. What is the magnitude of the electric field strength at that point?
5. If 56 joules of work is required to move 7.0 coulombs of charge between two plates, the potential difference between the two plates is

Sketch the following graphical relationships



Electrostatics

Name _____

Definitions

1. Electrostatics - _____

2. Insulators - _____

3. Conductors - _____

4. Grounding - _____
5. Polarization - _____

6. Conduction - _____

7. Induction - _____

8. Electric Field - _____

9. Electric Potential Energy - _____

10. Potential Difference - _____

11. Electronvolt - _____

Equations (on Reference Tables)

- | | |
|----|----|
| 1. | 2. |
| 3. | 4. |
| 5. | |

Equations (NOT on Reference Tables)

- | | |
|----|----|
| 6. | 7. |
| 8. | |

Draw the electric field around each case below.

	<div style="border: 1px solid black; width: 80%; margin: 0 auto; padding: 5px; text-align: center;"> + + + + + + + + </div> <div style="border: 1px solid black; width: 80%; margin: 10px auto; height: 20px;"></div>