Name:
Period:

Coulomb's Law

Record some observations below:
Identify two ways you can change the charge the objects experience. How could you increase electric force using each factor? How could you decrease electric force using each factor?
One factor is ……..

A second factor is .........

Complete the chart for each scenario below:

Charge 1 Location 1 Charge 2. Location 2 Force (1 on 2). Force (2 on 1)

10 x 10-9 C 3 cm 10 x 10-9 C. 7 cm. .......... N .......... N

10 x 10-9 C 1 cm 10 x 10-9 C 9 cm ….......N ..........N

10 x 10-9 C 1 cm 5 x 10-9 C 9 cm ..........N ...........N

5 x 10-9 C 1 cm -5 x 10-9 C 9 cm ..........N ...........N

Summarize:
Determine whether each statement is true or false.

\_\_\_\_ The electric force increases as objects move closer together.
\_\_\_\_ The electric force increases as an object’s charge increases.
\_\_\_\_ If two objects have different charges, the more charged object pulls with a greater force.

Apply:
The first charge is pulling on the second. Is.the second pulling on the first? Explain your reasoning.
The electric force is a force of attraction or repulsion between objects based on their charges and their distance apart.
When is the electric force attractive?
When is the electric force repulsive?

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