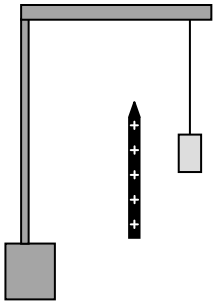
 Name _____

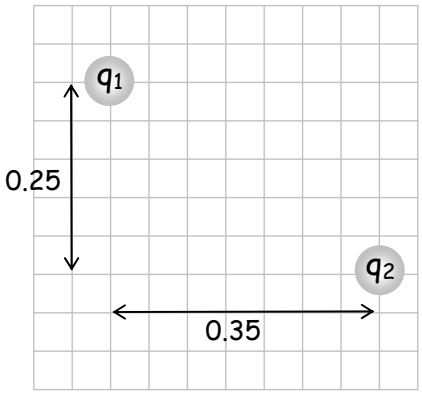
Quiz 1

1) a)[2] When a positively charged rod is brought near a small piece of suspended (neutral) aluminum foil, the rod **(attracts, repels)** the foil. Explain **Why**.



b)[2] After a positively charged rod touches a small piece of suspended (neutral) aluminum foil, the rod **(attracts, repels)** the foil. Explain **Why**.

2)[6] The charges shown are q_1 = 5 μC and q_2 = -7 μC.
a)[3] Find the magnitude of the force on q_1 due to q_2 where k = 8.99x10^{+9} Nm^2/C^2.
b)[3] find the direction of the force on q_1 due to q_2. Give an angle. Sketch the angle and an arrow representing the force vector on the graph.



$$F = \frac{k|q_1||q_2|}{r_{12}^2}$$