Vocabulary: Coulomb Force (Static)

Wocabulary

- <u>Coulomb's law</u> a law that describes the *electrostatic force* between two charged objects.
 - Coulomb's law states that the electrostatic force between two charged objects (F_q) is equal to a constant (*k*) multiplied by the product of the charges $(q_1 \text{ and } q_2)$ divided by the square of the distance between them (*R*):

$$F_q = k \frac{q_1 q_2}{R^2}$$

- <u>Electrostatic force</u> the force between charged objects.
 - Opposite charges (positive and negative) will attract one another.
 - o Similar charges (positive-positive or negative-negative) will repel one another.
- <u>Vector</u> a representation that specifies the direction and magnitude of a quantity.
 - In physics, vectors are used to represent displacement, velocity, acceleration, force, and other quantities that have a specific direction.
 - Vectors are represented visually by arrows.

