

Name _____ Period _____

Static Electricity Quiz 3

1. A Styrofoam ball with a mass of 1.742 grams is suspended by gravitation and electricity 2.13 cm above a charged plate (The plate is curved upward – concave, so the distance to all the parts of the plate from the ball is 2.13 cm). The plate has a charge of $-3.26 \mu\text{C}$. What is the charge on the ball?

2. A balloon with a charge of $-4.73 \mu\text{C}$ experiences a force of 2.46 N to the right. What is the magnitude (size) and direction of the electric force field?