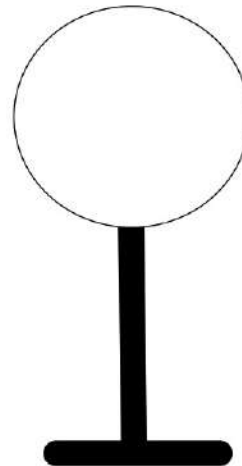


NAME _____

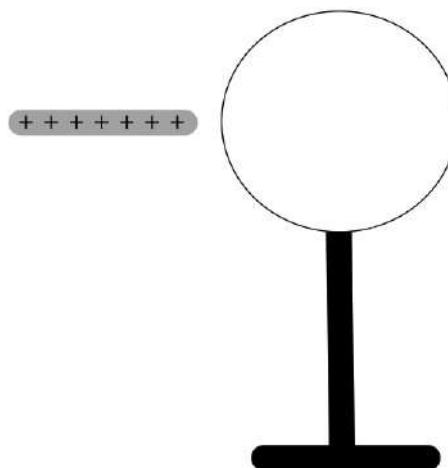
DATE _____

Scenario*A neutral conducting sphere sits on a flexible insulating stand.***Using Representations**

PART A: On the diagram at right, sketch a sample distribution of charges to represent the neutrality of the sphere.



PART B: A positively charged rod is now brought near but not touching the sphere. Sketch a sample distribution of charges to represent what happens to the charges because of the introduction of the charged rod.

**Argumentation**

PART C: Make a claim about the direction of the force exerted on the sphere by the rod.

_____ to the left _____ to the right _____ no force exerted on the sphere from the rod

Explain your answer.

8.A Conservation of Electric Charge

PART D: Based on your explanation above, could you use a similar experiment to provide evidence for the two-charge model? If not, why, and what evidence based on scientific principles would you need to collect to test the two-charge model?
