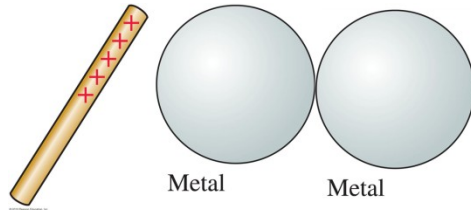


Quiz #7
Physics 221

Name: _____

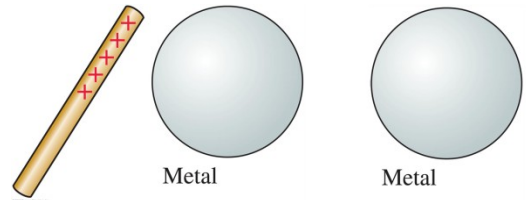
1. A piece of metal receives a negative charge, does it gain mass, lose mass or stay the same mass? Why?

2. Two neutral metal spheres are touching. A positively charged plastic rod is brought near, *but does not touch*, the left sphere. While the plastic rod remains near the left sphere, the right sphere is moved away. Then the rod is moved away.



- a. In the third diagram, what, if any, is the charge on the left sphere?

- b. In the third diagram, what, if any, is the charge on the right sphere?



- c. On all three diagrams given show the charge distribution on the spheres for that situation.
d. Explain clearly how your answers to a and b came about using your diagrams from c.

