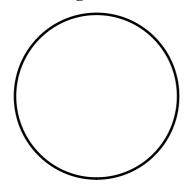
Charge Distribution:

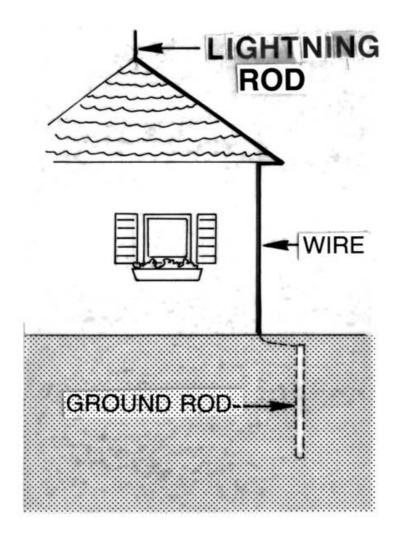
- Electric charge is distributed uniformly around uniform objects.
- * diagram the sphere charge distribution

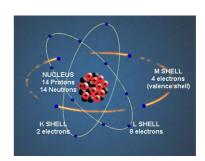


- * This is why you are safe from a lightning strike inside a car.
- In fact, there is NO CHARGE inside a hollow charged object, all the charge resides on the outer surface.

- Charge is <u>not</u> uniformly distributed around pointy objects, but is concentrated at the points.
- * this is why it is easier to shock someone with a finger than an elbow,
- "pear shaped" object

http://www.youtube.com/watch?v=AUquJQ_OgeE





Conductors and Insulators:

- Conductors are materials that easily allow the transfer of electrons through them. Metals such as Cu, Ag, Au
- Insulators resist the flow of electrons (they do not stop it altogether). Most non metals. Plastic, wood, air.

http://video.google.com/videoplay?docid=-669273266191606415&ei=2yhPS__CAs75lQfwzf2XCw&q=conductors+and+insulators+&hl=en#

http://video.google.com/videoplay?docid=-669273266191606415&ei= 2yhPS__CAs75lQfwzf2XCw&q=conductors+and+insulators+&hl=en#docid=607770679217647

Glowing Pickle!