Physics 100 Name: _____
Unit 2: Electricity
Practice # 2: Conductors & Insulators, and Charging by Induction

Conductors and Insulators

1. Define "conductor" and give two examples.

2. Define "insulator" and give two examples.

3. a. What types of charged particles actually move around, causing static charges to build up?

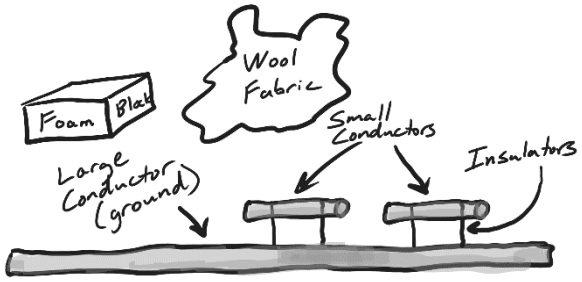
   b. Why are these particles the ones that move?

4. What is a "ground," in the electrical sense?

5. What usually happens to an object when the object is "grounded?"

Charging By Induction:

You're given the neutral materials on the right, and you are asked to charge one of the small condutors. In the beginning, every item has a neutral net charge (net charge = 0), and the foam block likes electrons more than the wool fabric does.



Method 1: Write a step-by-step procedure for giving one of the small conductors a negative net charge, without touching the small conductor with any other object.

Method 2: Write a step-by-step procedure for giving one of the small conductors a positive net charge. This procedure must involve grounding the small conductor.