**Simulation #2: John Travoltage**

Access: Go to <http://phet.colorado.edu>, click on “Play with Sims”, then choose “Electricity, Magnets, and Circuits” simulation. Click on “John Travoltage” and click on “Run Now”.

1) Use the mouse to rub John’s foot on the carpet. What do you observe?

2) Why do the charges spread out through John?

3) Use the mouse to bring his hand close to the door knob. What do you observe?

4) What is the net charge of the door knob, before he touches it? Is his charge positive or negative?

5) Why do you think the charges flow out of John?

6) Find a way to charge John with maximum negative charge. Why don’t the charges leak back to the ground through his feet?

7) Does this simulation leave you with any unanswered questions? If so, what are they?