

Electrostatics

Step 1 : Physics Tutorials

Go to the Physics tutorials at : <https://www.physicsclassroom.com/class/estatics>

(If the link doesn't open do a Google search for physics classroom electrostatics tutorials

Review all the Lesson 1 and Lesson 2 tutorials on Electrostatics

Step 2: Physics Interactives

1) Complete the "Name that Charge Interactive" at :

<https://www.physicsclassroom.com/Physics-Interactives/Static-Electricity/Name-That-Charge>

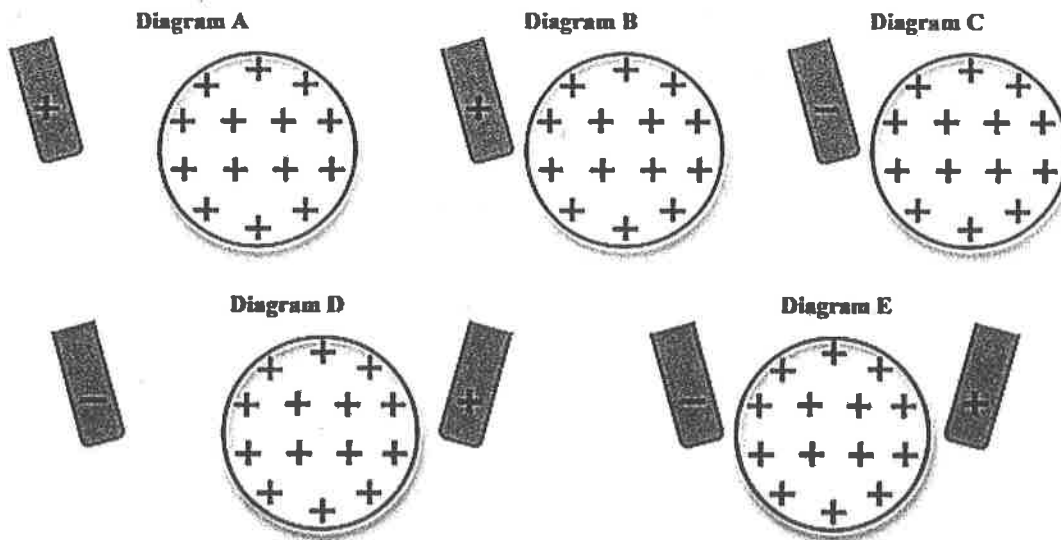
In the space below summarize what you have learned in this activity. Specifically tell how objects obtain positive and negative charges, what charges are able to move, how grounding works, etc. Not simplistic general statements.

2) Complete the "Aluminum Can Polarization Activity"

<https://www.physicsclassroom.com/Physics-Interactives/Static-Electricity/Aluminum-Can-Polarization>

Explore-Interact-Learn:

Investigate the interaction between a glass rod and a rubber rod and the aluminum can. Play with the simulation, moving the rods about the screen and observing the behavior of charges within the pop can. Then complete the models below by shading in the areas where electrons tend to congregate most densely.



Conclusion:

Describe what must happen inside of an aluminum can in order for it to be attracted to a positively-charged and to a negatively-charged object.

Part 3: Concept Builder

Go to the Concept Builder page at: <https://www.physicsclassroom.com/Concept-Builders>

Complete the Concept Builders on "Charge by charging", "Charge Interactions", "Polarization", and "Charging by Induction"

Record Your results for each:

Charge by charging

Charge Interactions

Polarization

Charge Interactions