

Store a Charge!

Procedure

- 1. Collaborate** Work with a partner. Tape the foam cup upside down onto the middle of an aluminum pan. Bend the two prongs of the LED gently apart.
- 2. Experiment** Place the foam plate upside down on a tabletop. Rub the plate with the wool cloth for one minute.
- 3. Experiment** Using the cup as a handle, place the aluminum pan on top of the foam plate, then lift it off again. Be careful not to touch the pan itself! Continue to hold the pan through step 4.
- 4. Observe** If possible, darken the room. Holding one prong of the LED between your thumb and index finger, touch the other prong to the aluminum pan. Record your observations below.

- 5. Repeat step 4. Record your observations below.**

Conclusion

Write the answers to the questions below.

1. **Infer** What did you observe when you touched the LED to the aluminum pan the first time? How could you explain what you observed?

2. **Compare** What did you observe when you touched the LED to the aluminum pan the second time?

3. **Hypothesize** Develop a hypothesis to explain the difference in your observations between steps 4 and 5. How could you test your hypothesis?

Investigate More!

Design an Experiment Repeat the procedure you used to store a charge using other materials. Predict how each material might respond. How can you account for differences in the way various materials store charges?

