

Post-Field Trip Activity

Grades 9-12



The Smart Energy Hub

The following are suggested activities to help students reflect on their field trip experience.

After the Trip

Ask students their overall impressions of the field trip. **What did you enjoy? What didn't you enjoy? What surprised you? What do you want to learn more about?** Have them share their general observations and reactions. You may want to have the class compose and send thank-you notes to the field trip site host and/or other persons that supported the field trip. Mention a favorite activity or information learned during the field trip.

Demonstrate Knowledge

During the trip, students learned about the smart grid, smart meters, and other smart technologies that might be used in the future. Lead a discussion with students about what they know about these smart technologies. **What is a smart technology? In what ways are the smart grid and smart meters changing how ComEd workers do their jobs and how electricity is being delivered?**

If students need to review information about the smart grid, watch The Power of the Smart Grid video at: <https://www.comed.com/technology/smart-meter-smart-grid/Pages/smart-grid.aspx>

How the smart grid and smart meters are changing jobs and the delivery of electricity:

- The smart grid and smart meter can alert overhead electricians to potential problems in the grid and let them know immediately when someone's power is out.
- The smart grid has the ability to automatically reroute electricity to reduce the amount of time someone is without power.
- ComEd employees will have to learn more about smart technologies and how to fix smart switches and smart meters.
- Homes can generate their own electricity.

Then allow time for students to complete the Your Microgrid Community activity sheet. Students will design and sketch their own community which uses a microgrid system to deliver electricity.

Have students read the information about microgrids found at the website below before they begin:

https://www.comed.com/documents/newsroom/comed_fact_sheets_microgrid.pdf

Name _____

Date _____



Your Microgrid Community

Design and sketch a small community that utilizes the microgrid system for delivering electricity.

Think about the following:

- How will your community generate electricity?
- Where will important facilities be placed, such as hospitals, schools, fire and police departments, and utility companies.
- How will your microgrid work with the larger grid, or other microgrids in the area?

Describe how microgrids will improve the delivery and reliability of electricity: