Field Trip Chaperone Guide

Energy on the Move!

BEFORE YOU START

You don't have to be a science expert!
The goal of this guide is to support you in deepening students' experiences. We've provided some questions you can ask to focus their explorations. Remember to have fun and enjoy your visit!

Make it your own!
Try to make this experience unique for yourself and your group by sharing related stories or asking your own open-ended questions. Feel free to visit the listed exhibits at any time during your field trip and in any order.

What is the value of this guide?
The topic, exhibits, and questions in this guide were designed to enrich your students' learning. There is a lot to think about as a chaperone, and this guide will walk you through an experience chosen by your teacher.

Where are the exhibits?
Look at the labeled map on the back to find the exhibits you will visit. We often move exhibits around. If you need help finding an exhibit, just ask an orange-vested Explainer.
## LET'S GET STARTED!

Read these instructions out loud to your group of students.

I will guide you to three exhibits related to how energy can transfer into different forms.

At each of the exhibits we will explore, investigate, and share.

### Step 1: Explore the exhibit
First, we will play with the exhibit. We can use all of our senses to make observations and compare different parts of the exhibit.

[Tips for Facilitation: Model making observations and asking open-ended questions. Encourage taking turns.]

### Step 2: Investigate questions
While at the exhibits, I will read some questions and things to try. We can also come up with our own questions.

[Tips for Facilitation: Repeat or rephrase questions to help guide the students. It’s OK if students don’t get to an answer.]

### Step 3: Share ideas
Finally, we will step away from the exhibit and discuss ideas about what’s going on. Don’t worry, this is not about getting the “right answer.” It’s about sharing ideas.

[Tips for Facilitation: Stand or sit in a small circle and give each student a chance to share. Add your own thoughts on the exhibit or different discussion questions.]

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**Pedal Generator**

- **COMPARE:** What happens if you pedal faster or slower? Can you get more than one appliance to turn on?

**Circuit Workbench**

- **TAKE A CLOSER LOOK:** Look around the exhibit. Is it plugged into an electrical socket? Where is the exhibit getting its energy?

**See a Sound Wave**

- **LOOKING CLOSELY:** Try turning the volume all the way up. Where does the sound seem to be coming from?

**WARM-UP QUESTION:** Was there anything about this exhibit that surprised you?

**EVERYDAY CONNECTIONS:** What forms of energy do the appliances produce? (Examples: light, sound, wind) Do you use any of these appliances in your home?

**EVERYDAY CONNECTIONS:** What is the source of the energy of the circuit?

**EVERYDAY CONNECTIONS:** This exhibit shows energy from sound moving a liquid. Can you think of other times you have made a liquid move without touching it?