

## Constructing Explanations and Designing Solutions Grades 3-5 - Chaperone Guide

**Goal:** In this activity, students will explore exhibits, make observations, and talk with classmates to figure out how exhibits work!

**Background Info:** The skills practiced through this activity are important parts of the scientific process. Obtaining, evaluating, and communicating information allows students to make new inferences and develop a deeper understanding of the world around them. When students interact with exhibits and each other, they will learn how to better communicate new ideas and learn from the scientific process.



**Science Standards:** *Next Generation Science Standards, Science and Engineering Practices*

**Led By:** Chaperone

**Explored By:** Students Grades 3-5

**Activity Length:** 30-45 Minutes

**Materials:** This worksheet and a writing utensil **OR** This document on a mobile device and pen and paper

### Getting Started:

- 1) Help students understand that making observations, evaluating evidence, and constructing scientific explanations are important tools used by scientists to discover new things about the world we live in. Good scientists work hard to learn about their surroundings so they can solve problems and explain how things work, then they share their ideas with the world!
- 2) Students will need to follow the instructions found in the student packet. Help lead them through this experience, but remember, *they* are the ones who should make all observations and explanations.
- 3) It is crucial to complete this activity in small groups and for chaperones to ask students questions along the way to guide student thinking. Here are some examples to help:
  - *What did you observe?*
  - *How do you think this exhibit works?*
  - *What do you think would happen if we...*
  - *What was similar between your idea and your partner's idea? What was different?*
  - *Why do you think scientists have to make good observations?*
  - *Why do you think it's important for scientists to communicate their discoveries to others?*
  - *How did you and your partner come up with your scientific explanation?*
- 4) Remember, today is about exploration and discovery. Encourage *all* students to participate and remind them that not all scientists know the correct answer right away!
- 5) See a MiSci Activator in a white lab coat if you have any questions or need further assistance!