

Exploring the Science Museum of Minnesota



Student Journal

NOTE TO TEACHERS

“That was awesome!” “I remember when we went to the Science Museum and...” “What I don’t get is...” “Can we do that again?” “Hey, try this!” “Can we... next time?” These might be typical comments from students during and after a field trip.

A field trip to the Science Museum can deepen and support student interest in STEM. The excitement of a day away from school, with experiences that are meaningful, fun, and personally involving can extend the impact of your visit beyond a single day, throughout the rest of the school year. Thank you for choosing the Science Museum of Minnesota for your field trip!

Chances are that you planned this field trip to motivate and inspire your students. This field trip guide was specially designed to provide a place and opportunity for students to capture their questions, ideas, and impressions, to focus attention, inspire interest, and, in turn, support student motivation. The Student Journal pages provide prompts and questions to allow students to discover, explain, question, and reflect on their experiences. Students can use these personally meaningful comments or sketches for post visit reflections and sharing.

Connecting sparks of interest to continued interest and learning

Researchers have suggested phases of interest development, from triggered situational interest (that AWESOME exhibit experience during your field trip), to well-developed individual interest, that promotes persistence, even with challenging content. Interest can develop over time, with support and opportunities. How to extend that field trip “glow”?

Based on a 4-phase model of interest development by Suzanne Hidi and K. Ann Renninger, educational professors and researchers*, here are some ideas:

- 1. Triggered Situational Interest**
Using the Student Journal, each student focuses attention on what grabs their interest. The trigger may be something new to the student, or it may link to something they have done in class or on their own.
- 2. Maintained Situational Interest**
Back in the classroom, students divide into small groups to talk about “what I would like to do again at SMM (Science Museum of Minnesota)” and share their ideas with the class.
- 3. Emerging Individual Interest**
Students delve into “An exhibit that made me curious, and I want to know more about...”
 - In class, students have the opportunity to generate more “curiosity” questions about the content of an emerging individual interest, sparked by that initial encounter at the museum.
 - Based on their curiosity questions, students continue digging deeper by using print or digital sources for research, or develop a group project with others of similar interest areas.

On their way to:

- 4. Well-Developed Individual Interest**
A field trip to the Science Museum is a crucial part of developing student interest in STEM.

NEW! Using the Exploring the Science Museum of Minnesota Student Journal

Share the journals with students before the field trip so they are familiar with the sets of questions.

Share the following “How to be a Science Museum Explorer” ideas with your students before the field trip:

- Spend time with things that capture your interest.
- Make observations with your senses.
- Talk about information on signs and how it helps you understand an exhibit.
- Try out experiments. Share what happens with a partner.
- Make connections to things you’ve done at school or in your neighborhood.
- Chat with museum staff. They may have interesting things in their pocket.

The question sets are not tied to any particular gallery or exhibit. Students can fill in the “Where I am...” section on the pages to record their location. Encourage students to draw or write their responses, or both!

As student groups and their chaperones investigate areas of the museum, they can take time to stop, perhaps find a place to sit, and then answer a set of questions in the guide.

**The Four-Phase Model of Interest Development
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