

Creating Interactive Learning Experiences at Explora and Beyond



Ideas You Can Touch
Ideas que puedes tocar

Introduction

Explora's exhibits inspire people of all ages to actively explore concepts such as Gravity, Water, Air, Light and Shadow, Math, and Electricity.

Amazingly, a single exhibit can provide a meaningful experience for a 3-year-old, their 8 year old sibling, their parents, and their grandparents. Everyone enjoys the pleasure of finding things out on their own—manipulating fun objects, building extravagant structures, and designing and testing ideas.

Not every person is going to be inspired by every exhibit. One person might want to spend a lot of time at one exhibit, and very little time at the next. Having someone in the group take on the role of Asking Great Questions can help inspire, extend, and motivate learning.

Inspire Learning and Exploration by Asking Great Questions

Things to Consider:

- Ask open-ended questions, rather than those that have a “yes” or “no” answer.
- Ask questions that inspire the learner to thoughtfully analyze a situation and consider consequences: “What do you think will happen if you do *this*?”
- Give the learner time to answer the question: ask the question, then wait. A while. Trust us: thoughtful answers take time.
- When a learner tells you what they think, respond by repeating and paraphrasing what they have said without criticism.
- Actively participate with the learner. This will model appropriate behavior. The learner can learn a lot about how to think critically and problem-solve by watching you and working with you.
- Avoid telling learners what to do. Let them have the experience that inspires and motivates them.
- Don't give too much praise, or reject ideas. Telling a learner they are right or wrong can discourage them from generating additional ideas or pursuing deeper exploration.

Examples of Good Questions

Opening Questions

Opening Questions work great for most people at most exhibits. Opening questions provoke curiosity and invite involvement.

- What happens when you try this?
- What does this remind you of?
- Have you ever seen this before? Tell me about it.

Exploration Questions

For those that seem to be really interested, *Exploration Questions* can help focus attention and encourage active play, experimentation, discovery, and thoughtfulness.

- Tell me what happened?
- What did you notice?
- What does it look like?
- What is it made of?
- What would happen if....?
- What difference did you notice?
- What might you try instead?
- What can you tell me about your experiment?
- How did you do that?
- What does this make you think of?
- In what ways are these the same?
- In what ways are these different?
- What materials did you use?
- What can you do instead?
- What do you feel, see, hear, taste, and/or smell?
- What are some different things you could try?

Making-Meaning Questions

For some, *Making-Meaning Questions* can help solidify their experience into a true learning event. These questions help support reflection, learning, and understanding.

- Why do you think that happened?
- What evidence makes you think that?
- What would happen if we changed . . . ?
- What do you think this tells us about . . . ?
- Do you have any idea how we could test this out?
- What would you need to find out more?