



**NATURAL HISTORY
MUSEUM OF UTAH**

Rio Tinto Center | The University of Utah

Exhibit Experts

Field Trip	Enduring understanding: Recording observations and communicating those ideas to others is engaging in the scientific process.	Alignment to Utah Core Curriculum
Grade Level: 8		Intended Learning Outcomes (ILO's): 1. Use science process and thinking skills. 2. Manifest scientific attitudes and interests. 3. Understand science concepts and principles. 4. Communicate effectively using science language and reasoning.
Process Skills: <ul style="list-style-type: none">• Collaboration• Communication• Observation		

Field Trip in a Flash

Students will become experts on one exhibit at the Museum and then use that expertise to create a label for the Museum.

Before the Museum

Do a Science Process Lesson

Do the “Peer Review” lesson found at the Natural History Museum of Utah’s website. Other supporting lessons are: Facts and Inferences, Wonder Why, and You Are a Scientist. These can be found at www.nhmu.utah.edu/lessonplans

Create a list of Exhibit Expert Lenses

It is not feasible for all viewpoints, languages, interests, capacities, ages, learning styles be represented for exhibits at the Museum. Nor would it be enjoyable or engaging for every part of every exhibit to be interpreted for the audience. That means there is a multitude of ways to reinterpret exhibits, or create original interpretation of unexplained sections of the galleries.

As an educator, think about what lenses/visitor identities you want to view the exhibits through- are they a scientist reviewing for current content and accuracy? an indigenous person with a strong understanding of the natural world that is explained in ways differing

from western scientific thought? a person whose primary language is not English? a teenager? an avid amateur geologist? an artist? a person with sight or hearing impairments?

You can assign these lenses to your students, or have them create their own. If there are lenses that are authentic to your students- culturally, linguistically, or physically, please think seriously about using them, they will be a much more powerful tool for critical analyses than some arbitrarily assigned lens. However, assigning an identity can also be meaningful- it may help students develop an understanding of the importance of different perspectives. In this instance, it may be helpful to partner students with different life experiences to help them analyze exhibits from multiple viewpoints.

Introduce the Field Trip Plan

Ask students if they have ever been to a Museum. Have those who have explain to those who have not what a Museum is like, why it exists, and how it works to those who have never been. If everyone has been to a Museum, have them explain to you, pretending that it is a totally foreign concept.

Share this quote from The Museums Association about the purpose of Museums:

'Museums enable people to explore collections for inspiration, learning and enjoyment. They are institutions that collect, safeguard and make accessible artifacts and specimens, which they hold in trust for society.'

Discuss what your students think this quote means.

Discuss what it means if learning and access are supposed to be central to the purpose of all museums. What are ways to learn? How does that look different for different people? What does access mean? How do people access Museums, knowledge, etc. differently?

Ask students who they think visit Museums. Write their ideas on the board. Include their ideas, probe them about groups they may not have identified, such as parents bringing their children for fun, hobbyists, school groups on field trips, teenagers, people visiting from out of town, people whose primary language is English, people with a variety of educational backgrounds, people with physical disabilities, etc.

Explain that you will be among those people who go to Museums. As a class, you will be visiting the Natural History Museum of Utah. While there, the students will be using one of these visitor identities just discussed to help them analyze an exhibit at the Museum.

During the visit, students will become experts on one exhibit. They will need to observe it closely, ask questions, look for answers, identify interesting features, analyze details and record all of this information accurately.

They will then use this information to:

- identify the big idea of the exhibit: what are the themes and understanding the institution wants individuals to walk away with
- determine audience- who was the exhibit created for, are there multiple audiences, does it meet the needs of the visitor identity you are using as a tool
- analyze the signage- is it easy to read, interesting, long or short, large or small print, where is it positioned, is it too much or too little information
- infer the perspective of the people who created it- were they scientists, artists, people from a variety of cultural backgrounds

Give students the evaluation sheet found at the end of this lesson. Review it, have students ask for any clarification they need, and have them record the identity they are using and the gallery where they are finding the exhibit they will analyze.

Select a Gallery

Discuss the galleries at the Museum. Introduce their names and their content. The permanent galleries are:

First Peoples- The story of Great Basin's prehistoric peoples is told while putting visitors in the shoes of archaeologists who use science to interpret the past. Explore Median Village, a reconstruction of an actual archaeological dig site excavated in the 1960s in Sevier County, Utah. Stop in the Dry Caves Learning Lab to learn more about what makes Utah so spectacular for preserving archaeological evidence.

Gems and Minerals- Rough mineral forms are juxtaposed with elegant cut gemstones, all in brilliant colors. Peer in to see minerals that fluoresce and take in 12 vertical feet of minerals suspended before you.

Lake- The compelling narrative of the Great Salt Lake, a remnant of ancient Lake Bonneville is brought to life through hands-on interactives, sounds, smells, and a spectacular view of the Lake itself. Take a "walk around" this large terminal body of water in the midst of a vast inland desert. Get an up-close view of some of the lake's smaller inhabitants.

Land- A journey through three distinct physiographic regions formed over millions of years, the Land showcases Utah's Middle Rocky Mountains, Basin and Range, and Colorado Plateau. While navigating the switchbacks, touch real rock specimens and explore interactive exhibits on earthquakes, plate tectonics, erosion and much more. Be sure to venture out onto the outdoor terrace for an up-close look at the foothills of Utah's Middle Rocky Mountain region.

Life- The web of life is illustrated in a series of exhibits exploring complexity from DNA to Ecosystems, with a focus on Utah's extraordinary biological diversity. This exhibition is



rich with images, sounds of the landscape, hands-on experiences, live animals, and research stories.

Native Voices- The traditions of Utah's five native nations—Shoshone, Goshute, Paiute, Ute, and Navajo—are featured in this circular gallery nestled in the hillside at the top of the building. Designed in consultation with Utah's Indian community, this exhibition depicts Native American art and culture and interprets the deep memory and contemporary presence of Utah's indigenous people. Visit the Storytelling circle where you can listen to stories of origin and connection to the land.

Past Worlds- A sequence of snapshots in time spanning 500 million years depicts a range of Utah's ancient environments and their changing life forms. Utah's Late Cretaceous and Eocene are brought to life in displays that capture plant and animal diversity, sights, sounds and smells of the time. Participate in the Cleveland-Lloyd Dinosaur Quarry mystery by "casting your vote" on the theory you agree with most, be a paleontologist for a day in our dinosaur dig, and be a guest at an Ice Age dinner party. In this gallery there are over 30 skeletal reconstructions on display, including a Gryposaurus (duck-billed) dinosaur made of original fossil material, and the world's only display of 14 Ceratopsian (horned) dinosaur skulls.

Sky- Weather, climate, astronomy, and the sun are interpreted in this gallery with its adjacent rooftop terrace. Check out the views of the Salt Lake Valley and learn about some of the Museum's "green building" features from the Sky terrace.

Utah Futures- This thought-provoking environment—the Museum's crystal ball—is a place to explore pressing contemporary issues with local and global implications for the future. You are encouraged to participate in an engaging interactive game where you can see the results of your everyday individual choices play out and learn more about how they might affect Utah on a broad scale.

You can have your students select a gallery to focus on, you can assign a gallery, or you can allow your students to explore the Museum until they find an exhibit that is particularly interesting to them.

Logistics

Divide your students into groups- this can be assigned by you, selected by peers, or based on the exhibits or visitor identities your students have selected.

Prepare your chaperones:

- communicate the purpose of the field trip
- provide them with a chaperone sheet
- communicate the gallery/galleries you are going to do the activity in
- provide the chaperones with a bag to hold the students' field trip supplies

At the Museum

Provide students with science notebooks or papers, an evaluation sheet, and pencils. Students can work as individuals, in pairs or in groups, but however they work, please encourage dialogue when analyzing the exhibits. Multiple perspectives is always beneficial.

Communicate a meeting time and space to the students and chaperones.

Go and explore the Museum. Students can choose to go to the gallery they selected first, or they can spend time exploring the Museum and do the activity when they naturally arrive at the gallery they have selected. If students find an exhibit that they enjoy or want to analyze, and it is not in the gallery they identified, that is great. It is important that students are able to select something that they find engaging.

After the Museum

Have the students use the information they gathered at the Museum to write labels. Discuss what is involved in technical writing- word choice, editing, etc. If students have the capacity to write/translate labels in a language other than English, please encourage them to do so. They can write it in just that language, or they could write it as a bilingual panel. When the new labels/interpretive panels are finished you can have the class peer review them.

You can also submit the labels/interpretive panels to the Museum. If there are outstanding or thoughtful panels, they may be selected to go on display in the galleries as additional interpretation.



Name

Date

Visitor Identity:

Gallery I have selected:

What is the big idea of the exhibit? What are the themes and understanding the institution wants individuals to walk away with?

Who do you think is the audience? Why?

Analyze the signage:

Is it easy to read?

Interesting, why?

Long or short?

Large or small print?

Where is it positioned?

Is it too much or too little information

Infer the perspective of the people who created it. Who were they? Scientists, artists, people from a variety of cultural backgrounds?