University of Alaska Museum of the North
Directed Discovery Field Trip

Museum Science
2nd-3rd Grades
1½ hours

Introduction, Welcome & Rules (20 min)
Gather the class in the Education Center to welcome them to the museum, remove coats, review museum rules, & divide into groups. Introduce yourself and other docents. Tell the class what will happen during the tour.

Ask the students if they collect things. Allow a few of them to answer and tell you what they collect. What does a library collect? Books! A museum is kind of like a library. We collect things and organize them. Here at this museum we collect rocks, fossils, birds, mammals, fish, insects and more! Utilize hands-on objects to illustrate some of the types of things we collect. Tell them they will see some of our collection in the galleries but most of it is stored in the basement. Museum collections are used by people all over the world to learn about things. All these scientists are good observers. They learn to pay attention to details and how to sort things. Today we're going to practice observing and sorting.

I. Observe It! *(20 minutes)*
This half of the class will explore the Gallery of Alaska with a docent. As a group, you will be looking at exhibits and hands-on materials to see what you can learn from close observation. The main idea will be looking at animal habitats and physical adaptations. Exhibits may give clues about animal habitats (ex. polar bear). Hands-on skulls can be used to examine teeth and eye sockets which give clues about what an animal eats. Choose ~4 animals to highlight or allow students interest to guide you. Remember to focus on encouraging the students to look closely and see what they can deduce from observations.

II. Classify It! *(20 minutes)*
This half of the class (~14 students) will work in the Education Center (or classroom) with a docent. The group will practice sorting and classifying objects.

Pass out a pile of objects to small groups. Ask students sort them. Don't give them any other guidelines. The method is up to them! Allow ~5 minutes for this.

Discuss how the students decided to group objects. Ask about any difficulties they had or objects that were hard to classify in their scheme. Then, discuss how scientists must agree upon a method for sorting all the living things in the world. Briefly explain taxonomy (Kingdom, Phylum, Class, Order, Family, Genus, Species). Sort objects into those representing living things and non-living things. See what further divisions the students can think of. If they don't think of plants and animals, prompt them. Then, help them think about animal groups (fish, bird, mammal, insect).

We have agreed upon a way to divide animals that works for most of them. But what if we encountered many new animals? Give each student a "mystery creature" card. Ask them which group they would put it in (fish? mammal?). It may need a new group! Have the kids put all their

mystery creatures together on the table. Look for similarities and differences and discuss possible classification schemes for the creatures (those with antennae, those with 2 eyes, etc.). By pooling our creatures together, we can learn more than if we just had one. It's like a collection!

Collect It! *(20 minutes)*

Near the end of the field trip, the entire class will spread out in the Gallery of Alaska to search for objects. The students will be allowed to wander and find items of their own choosing. The goal is to get them thinking about relationships between objects and how they might be sorted or classified. Docents should pass out writing boards, pencils and worksheets.

Wrap-up & Review (10 min)

Gather students back together in the Education Center. Review and hand out coats. Encourage students to explore and examine the world around them. Remind them that scientists study the wide diversity of life. Suggest that they think of themselves as scientists and attempt to notice relationships within the natural world that can help to make sense of it.