# Predator versus Prey

**Location**: Natural History Gallery

Intended grade level: K-3 (recommended)

**Duration:** 90 minutes

**Objective**: This tour is designed to introduce students to the wildlife of British Columbia Students will explore the Natural History Gallery in search of animals that may be predators and animals that may be prey (and animals that may be both!). They will be encouraged not only to look for these connections, but to analyze *why* an animal makes a good predator, or *how* an animal might defend itself.



#### Introduction: 10 minutes

What is a predator? What kinds of animals do you think of when you think of predators?

We often group animals in terms of whether they are the *predator* or the *prey*. The predator hunts and eats another animal. The prey is the animal that is eaten.

Can some animals be both predator and prey? Explain.

An example is the Steller Sea Lion. Sea lions are huge (as you will see when you go into the exhibit) and do not look like they have very many predators. Sea lions are predators that eat a variety of smaller animals and fish.

Do you think that a sea lion could also be prey? What kind of animal might eat a sea lion? (Orcas and sharks eat sea lions!)

What do we call animals that eat meat from other animals? What do we call animals that eat only plants? What do we call animals that eat both?

What is a food chain?

A food chain is a way of showing which animals eat which other animals (show example). Animals with no predators go at the top of the food chain. Below that animal goes the animal that it eats, then the animal that that animal eats, and so on. At the bottom of the food chain are typically insects and then plants or microorganisms.

What kinds of animals do you think might be at the top of the food chain? Can you think of any that are found here in B.C.?

All of the animals in this exhibit can be found in B.C. (or at least, used to be found in B.C.!) While you explore the exhibit, I want you to look very closely at the animals that are in it.

#### **Orientation: 10 minutes**

In order to orient groups to the gallery, guides will give a quick orientation tour. Important points to note are meeting places and bathrooms.

### **Exploration: 10 minutes**

Students will be given time to explore the exhibit. Depending on the age of the group, parent or teacher volunteers may keep small groups to move with.

### **Second Exploration: 20 minutes**

Guides will distribute cards with prompting questions to students or chaperones. These questions will help guide students' thinking as they revisit and consider the exhibits in terms of the predators and prey within them.

- 1. What animals do you think are predators? Why?
- 2. What animals do you think are prey? Why?
- 3. What features do predators have that help them survive?
- 4. What features do prey have that help them survive?
- 5. Can an animal be a predator and prey? Why or why not?

#### Discussion and conclusion: 40 minutes

Students regroup at the designated meeting place for discussion and follow-up activities.

#### Discussion (10 minutes)

Guiding questions will be used to prompt discussion. Students will be given the opportunity to share their learning and ask further questions.

#### **Activity Ideas (30 minutes)**

Students/guides will choose one or more of these follow-up activities as time allows. These suggestions can also be used back in the classroom to enhance what students learn at the museum!

- 1. Observe some **animal skulls/jaws**. Give all students a chance to look and feel. What kind of teeth does it have? What do you think it eats and how can you tell?
- 2. Build a **food chain** together with animal photos from the galleries.
- 3. **Draw** a predator and at least one thing that it might eat (or, draw a prey and one thing that might eat it!)
- 4. Play a game of predator vs. prey **tag** outside. Decide on one predator animal, and one prey animal. Choose a few students to be predators they stand in the middle of the field. The rest of the students are prey. The prey must run from one side of the field to the other without getting tagged. If a prey gets tagged they become a predator. If a predator does not tag any prey, they become prey.

## Resources

The following question card will be distributed to students during the "Exploration" stage of the tour. Depending on the grade level of the group, chaperones may carry the question card and use it to prompt their students.

### **Guiding Questions**

- 1. What animals do you think are **predators**? Why?
- 2. What animals do you think are prey? Why?
- 3. What **features** do predators have that help them **survive**?
- 4. What **features** do prey have that help them **survive**?
- 5. Can an animal be a predator **and** prey? Why or why not?

# Prior to Your Visit

This tour does not require preparation prior to your visit. However, some optional suggestions are provided below to prepare your students and enhance the tour experience.

#### **Ask Some Preliminary Questions**

These questions can help students prepare for the visit by encouraging them to think about the topic of predator and prey.

- Are you a predator or prey? Why?
- What are some qualities that predators typically have?
- What are some qualities that prey typically have?
- Can something be a predator AND prey? Why or why not?

#### Visit the Learning Portal

The Royal B.C. Museum Learning Portal has many resources and themes for you to explore. For information related to this exhibit, see the playlist "Predator and Prey" accessible at the address below:

www.learning.royalbcmuseum.bc.ca/playlists/continuity-and-change-in-b-c-s-natural-history/

# Curricular Connections

	Social Studies	Science
BC IRPs – Social Studies (K-7) and Science (K-7)	Skills and Processes (PLOs K-3)  Participate co-operatively in groups (K-3) Gather information from personal experiences (K-3) Organize information (Gr. 3)	<ul> <li>Life Science (PLOs K-3)</li> <li>Describe features of local plants and animals (K)</li> <li>Compare common animals (K)</li> <li>Classify living things (Gr. 1)</li> <li>Describe how the basic needs of plants and animals are met in their environment (Gr. 1)</li> <li>Classify familiar animals (Gr.2)</li> <li>Describe ways in which animals are important to other living things (Gr. 2)</li> <li>Describe ways in which plants are important to other living things and the environment (Gr. 3)</li> </ul>
BC Draft Curriculum (2013)  Critical Thinking Analyze and critique Question and investigate	Curricular Competencies Social Studies Inquiry Processes (K-3)  Ask questions Gather ideas Communicate findings Continuity and change Sequence events and objects (K) Cause and consequence Determine multiple causes and consequences of an event, decision, or development (Gr. 3)	Curricular Competencies Questioning and Predicting  Demonstrate curiosity and a sense of wonder about the world (K-3)  Ask simple questions about familiar objects and events (K-3)  Make predictions based on prior knowledge (Gr. 3)  Planning and Conducting  Make exploratory observations using their senses (K-1)  Processing and analyzing data and information  Discuss observations (K)  Identify patterns and connections (Gr. 2)  Communicating  Share observations and ideas orally (K)  Sort and classify data and information using methods such as drawing or provided tables (Gr. 3)  Concepts and Content  Features of local plants and animals that help them meet their basic needs (K)  Classification of living things (Gr. 1)  Behavioural adaptations of animals in their area (Gr. 1)  Plants, animals, and fungi in their local ecosystem (Gr. 3)  Food chains, food webs (Gr. 3)