#### **INSPIRED BY THE RIVER**

Through visual and dramatic arts, students become inspired by the mighty Fraser River. Students collaborate to create a river mural and use drama and play to explore their personal connections to the Fraser and the many ways British Columbians rely on the river.

Grades: K-6 Length: 1.5 hours Maximum group size: 30 students

### **Program Components:**

- Identify visual patterns outside FRDC.
- Collaborate on a mural of land and water, using the patterns identified outside.
- Find a person with a matching item by only asking descriptive yes/no questions.
- Story about the ecology and industry of the Fraser River, with interactive sound effects for all ages, and a discussion about imports/exports for the older students.
- Drama game, acting out aspects of the Fraser River (wildlife, recreation, jobs, transportation).

#### FROM POLLUTION TO SOLUTION

In this program, students learn about pollution by examining different types of pollutants and where they come from. They will then evaluate how individual actions contribute to the health of the river. A slide presentation introduces students to the Fraser River, then the class breaks into smaller groups to explore Non-Point Source Pollution sources and solutions and the difference one individual's actions can make.

Grades: 2-5 Length: 1.5 hours Maximum group size: 30 students

- Power Point presentation on point source and non-point source pollution in the Fraser River basin.
- See the movement of PS and NPS pollutions into the river and ocean using an interactive model.
- Sort objects into the categories of Pollution or Solution, and discuss.
- Learn about ways we waste water through a visual metaphor of water droplets from a leaky tap.
- Learn about ways to conserve water through a team matching game.
- Watch a short, non-verbal film about pollution through the water cycle, and discuss.

#### LIVING DINOSAURS

Sturgeon are amazing fish that have been around since the time of the dinosaurs. Human influences over the past 150 years have threatened their existence. In this program, students will learn about the sturgeon lifecycle, survival needs, and what we can do to protect this remarkable species.

Grades: K-7 Length: 1.5 hours Maximum group size: 30 students

### **Program Components:**

- Introduction to sturgeon, threats to their survival, and conservation efforts.
- Explore sturgeon anatomy and life cycle, using models and biological specimens.
- Play a board game as a sturgeon attempting to reach adulthood.
- Age-dependant activity
  - o Felt Board Habitat (K-2): Using a felt board, represent the many stages of a sturgeon's life.
  - Water Testing (2-3): Test the turbidity and pH of the Fraser River, to see if it is acceptable for sturgeon.
  - Modified Tagging Lesson (3-4): Perform biological tests on a model sturgeon, such as taking measurements and determining age.
  - Tagging Lesson (5-7): Perform biological tests on a model sturgeon, such as taking measurements and determining age (more complex tests).

#### **OUR BONES ARE MADE OF SALMON**

Indigenous people have relied on salmon since the fish became abundant in the Fraser River about 5000-6000 years ago. This program explores the connection between Indigenous people and salmon on the Fraser River. Students get hands-on experience with fishing technology, learn about wind-drying salmon, and discover that salmon is in the hearts of Indigenous people living along the Fraser River today.

Grade: 4-7 Length: 1.5 hours Maximum group size: 30 students

- Watch and discuss a film, featuring two Indigenous Elders telling stories about how Salmon came to the Fraser River, and their connections to the Fraser River.
- Explore authentic and replica tools to learn about Indigenous fishing techniques, and create a group presentation.
- Learn about wind-drying salmon through the replica drying rack, and practice sharpening a kwetsetel (Indigenous slate knife).

#### THE TRADING TRAIL

The Fraser River is one of the world's great rivers not only in its contribution to the environmental, cultural, and historical wealth of British Columbia, but because of its current pivotal role in the economy of BC. We are going to explore how people have used and shared the resources of the Fraser River, focusing on the tumultuous time when First Nations and Fur traders shared the river.

Grades: 4-7 Length: 1.5 hours Maximum group size: 30 students

### **Program Components:**

- Power Point presentation introducing the history of trade on the Fraser River.
- Learn proper archeological protocol, excavate archeological artifacts, and learn what each represents.
- Keep an archeologist's journal, drawing diagrams and answering questions about stone and metal tools.
- Play "Deal or No Deal" to understand the value of items traded between First Nations and European traders.

## TAKING THE PULSE OF THE FRASER

Students in grades 6-9 follow each step of the scientific method to conduct a water quality investigation. During this 2 hour workshop students observe and become curious about the Fraser River, do background research, construct hypotheses, test their hypotheses by doing experiments, analyze their data, draw a conclusion, and report their results.

Grades: 6-9 Length: 2 hours Maximum group size: 30 students

- Take a sample of the Fraser River and make empirical observations.
- Conduct background research, using the exhibits as sources, and share with the other groups.
- Construct a hypothesis about salmon survivability in the Fraser based on turbidity and pH levels.
- Follow scientific protocol and test the turbidity and the pH level of the Fraser River sample.
- Compare results to the hypothesis.

#### FRASER TRADE BRIGADE

The Fraser River is one of the world's great rivers, not only in its contribution to the environmental, cultural, and historical wealth of British Columbia, but because of its current pivotal role in the economy of BC. We are going to explore the role of BC in the global economy through interactive games and activities.

Grades: 5-9 Length: 1.5 hours Maximum group size: 30 students

### **Program Components**

- Power Point introduction to the history of trade along the Fraser River.
- Play a game to understand the influence of supply and demand on the cost of goods.
- Calculate the cost of shipping goods through different transportation methods, to decide on the more cost-effective option.
- Play as a country and make trade deals with other countries, all while reacting to situations like a decrease in global fish stocks or a change in the value of a good.

## WHO'S JOB IS IT, ANYWAY?

Students in grades 2-5 learn the process of spill cleanup in the Fraser River and the Burrard Inlet, and how oil is used in our daily lives. During this 1.5-hour workshop, students roleplay a spill response drill using equipment from the OSCAR trailer. Students also engage in a game to introduce them to the variety of uses of oil to maintain the lifestyles we have created.

Grades: 2-5 Length: 1.5 hours Maximum group size: 30 students

- Watch a puppet show introducing the spill response team.
- Ask descriptive yes/no questions to find someone with the same item as you, then learn about the imported items and animals that rely on the Fraser River.
- Practice a spill response drill, with each student taking on a different role.
- Using visual models, learn about common household items made from oil.

#### **WELCOMED BY THE WATER**

Indigenous people have relied on salmon since the fish became abundant in the Fraser River about 5000-6000 years ago. This program explores the connection between Indigenous people and salmon on the Fraser River. Students experience the movement of salmon, storytelling and oral histories, and the nurturing of nature through an Indigenous perspective.

Grades: K-3 Length: 1.5 hours Maximum group size: 30 students

- Introduction to the First Salmon Ceremony through a storybook and discussion.
- Understand the stages of a salmon's life cycle and migration by acting out the story of one salmon's life.
- Learn about some of the edible and medicinal native plants in our region, and then create your own plant, including its uses.
- Hear the story of how sockeye came to the Fraser River from two First Nations elders. View map of the traditional lands of the First Nations people in the Fraser River Basin, and use a visual metaphor to understand how long the First Nations people have lived along the Fraser River.