

I AM RIVER

Level : Cycle 1 (grade 1&2)

Time : 45 minutes - 1 hour

Driving Question :

Who is the Saint Lawrence River, and how does this river interact with us and with the other animals living in and along its waters?

Big Idea :

The Saint Lawrence River is an amazing entity that encompasses many ecosystems, and supports many animals, plants and people. We are a part of this system, and our actions impact this River.

Curriculum connections :

Earth and space ; Living things ; Places ; The Material World

Objectives :

Get familiar with the Saint Lawrence River, understand how it was formed, its ecozones and their respective flora and fauna. Discuss what the River does for us, and what we can do for the River.

Vocabulary :

Plant and animal names, glacier, iceberg, freshwater, marine, steward / stewardship, pollution (various types), ecosystem, habitat.

Materials :

- *I am River* book
- Ice cubes, cups
- Whale plushies with sound
- Ice cubes, cups

Lesson Procedure

Introduction

Before the book reading, introduce the concept : we are reading a book about the Saint Lawrence River. Perhaps some of you have seen this River, since it runs through Quebec, which is the province you live in! Ask students what they think might be in this River.

Book Reading

This section will be separated by pages. For each two-page spread, read the book and then do the activities described here.

Page 1-2 : Hello River

Action : ask students to say and wave hello to the River.

Questions :

- Has anyone seen a River (show of hands)?
- Has anyone seen the Saint Lawrence River? Note that Old Port and any bridge out of Montreal counts.

Page 3-4 : Glacial Melt

Action : Ask students to look closely at the page.

Questions :

- Point to the glacier and ask what is this? What is it made of?

Explain : A long long long time ago, this area was covered in ice. Eventually, the ice melted and turned to water. This became the Saint Lawrence River.

Experiment : Have a container with an ice cube, and ask students what they think will happen to it while you read. Tell them they've made a *hypothesis* - an educated prediction.

Page 5-6 : Great Lakes & Thousand Islands

Questions :

- Has anyone been to a lake (show of hands)?
- Has anyone been to the ocean (show of hands)?
- What did you notice about the water at the lake?
- How was the water different between the lake and ocean?

Explain : Lakes have freshwater - that means it is not salty. Oceans have salty water - that's why if it gets in your eyes, it hurts! The Saint Lawrence River runs from freshwater lakes all the way to the ocean, so it has both salty and freshwater sections.

Action : Observe the page.

Question : What animals do you see?

Explain : Some animals only like salty water and some only like freshwater, so different parts of the River have different animals. Point out the frog.

Question : Does anyone know how frogs breathe?

Explain : Frogs breathe through their mouths AND skin.

Question : Knowing that saltwater in your eyes hurt, do you think it would be a good thing to breathe in? (No) So do you think there would be any frogs in a saltwater habitat? (Probably not!)

Page 6-7 : Estuary

Explain : We just talked about how the Saint Lawrence River has freshwater and saltwater sections. The estuary (enunciate) is where they mix!

Action : Have everybody mix with their arms (roll arms over each other) and say "estuary" back at you a couple times.

Explain : Because the water is mixing, there are a lot of nutrients! This means the estuary has a lot of animals living in it.

Question : What animals do you see here?

Action : Introduce your friend, Beluga. Have everyone say hi.

Explain : Beluga is a kind of whale, and while most of them live in the Arctic, some live here in the Saint Lawrence River!

Question : What do you notice about Beluga?

- Small fins, white, small tail, big bump on head

Explain : The bump on Beluga's head is called a "melon" and it helps him talk! The melon is a big lump of fat that makes Beluga's voice louder, and helps him make stranger noises than you and I can make.

Action : Play the Beluga sounds, and then have students try to make the same noises.

Explain : It's hard for us to make those noises, but belugas do it all the time thanks to their melons. In fact, belugas love to make noises, it helps them find each other, find food, make friends, etc.

Page 9-10 : Gulf of the Saint Lawrence

Explain : Now we have arrived all the way at the ocean! The water here is salty, and there are different animals than in the freshwater lakes and mixed estuary.

Action : Have students look closely and observe what they can see in the water.

Question : What is the big animal on the bottom right?

Explain : That is another kind of whale, but not a beluga. In the ocean part of the River, we can find bigger whales.

Action : Introduce your friend, Humpback.

Question : What do you notice about humpback?

- Long fins, big tail, no melon.

Explain : Humpback doesn't have a melon, but he still loves to make noises. Humpback whales are the "Singers of the Sea."

Action : Play humpback song, ask students to sing along. Tell them it was lovely.

Explain : Humpbacks don't sing to find food, but they use it to find each other! Singing is very important to them.

Action : Hold up pictures of a beluga and humpback whale.

Question : What is the same between these two animals?

Whales, two flippers, flat tail, blowhole, eyes on side of head.

- What is different?

Size, flipper length, throat pleats, melon, colour.

Explain : Humpback and Beluga live in different habitats, so their bodies are adapted to different things. Beluga is small and white to navigate and blend in with glaciers in the Arctic. Beluga eats fish, so he has teeth and a smaller mouth. He talks in clicks and whistles, so he has a melon.

Humpback is large, with long flippers to coast through the open ocean. Humpback is black on top and white on the bottom to blend in when seen from above or below. Humpback has grooves in her throat that help her mouth open especially wide because she eats tiny plankton, and needs to eat a lot of them. In fact, Humpback has no teeth - only a baleen: a kind of filter that helps her catch plankton.

Page 11-12 : Montreal

Question :

- What is a community?
- Who is in your community?
- Where is this? Do you recognize anything here?

Explain : Community is the people, animals and places that you care a lot about, and that care about you.

Page 13-14 : Gratitude

Question :

- Why might you be thankful towards the River?

Explain : Not only does the River benefit animals, it gives us water to drink, to grow our plants and food, to swim in, etc.

Action : Have students say “thank you” to the River.

Page 15-16 : Damage Done

Action : Observe the page closely.

Question :

- What do you see in the water?
- Why might the River not like have garbage in its water?
- Why is the whale sad?

Explain : Garbage can get wrapped around wildlife, making it hard for them to swim. Sometimes, they accidentally eat it and get very sick. The whale is sad because the boat is very loud. Remember that whales love to talk and sing. When it is very loud, they can't hear each other!

Page 17-18 : Damage Repair

Question :

- What are the people on this page doing?
- What can you do to help the river?

Explain : Putting garbage in the garbage is good, but even better is to make less garbage in the first place! Bring a tupperware instead of a bag, wear hand-me-down clothes, eat less fish and meat, etc. Also, talking about the issue with your family, friends, everyone really! When we talk about things we show that they are important to us, and we can get others to help too. Share what you learned and have a conversation about what you can all do to help.

Page 19-20 : What I have Always Done

Explain : By helping the River, they also help all the animals that live within, and they help themselves and their families, since we all rely on this River.

Action : Check back on the ice cube experiment. Reiterate that this glacial melt happened a really long time ago. That this river has been taking care of people and animals and plants for thousands of years.

Page 21-22 : Goodbye River

Action : Have students say and wave goodbye to the River.

Question : Are you a friend of the River now?

Action : Thank the students for listening so well. Ask if they have any questions.

The End!

