

CANADA'S OCEAN BASINS

WORD SEARCH

Did you know that Canada has the longest coastline of any country in the world? It's over 200,000 kilometers long! To walk the whole thing would take about 30 years.

Can you find these words about Canada's three ocean basins, and the waterways that flow to them?



J I P S I S E C J Q A R C T I C C H A R
 A R Z Z R I G H T W H A L E R B B Q D D
 R I V E R S N P M S I C E B E R G S A S
 N M O D P K C B S A Q U H E A Q K I O Z
 L B G J T A D X U F D S E A I C E Z K U
 V I A Z K E L P F O R E S T U B K I D H
 Y D P X N O T F N A W T Z C N G F G O B
 O F R I G H T W H A L E J O Z R I H Q T
 S C S I L O B S T E R F T R O L A K E S
 A R V N P Z O C R H H F M K M K O N G Q
 L A T E H Y D R O T H E R M A L V E N T
 M B J O X S Z U C L R H P O P F B M B G
 O H U H S A Y B F O Y S T E R S S W S A
 N S V E Y L F A M E R I C A N E E L O C
 C E G R W T W A L R U S F S W E Z C D R
 O A O R J W D W H Q K L J E S T U A R Y
 A L R I B A N C O D F I S H I X Z L M N
 S T C N D T B T N X I H P U F F I N Z L
 T T A G L E P R C Y D A M R Y W E P L L
 L Z I Q A R D W E T L A N D S N S T M F

ARCTIC OCEAN

- sea ice
- saltwater
- icebergs
- arctic char
- coast
- walrus

ATLANTIC OCEAN

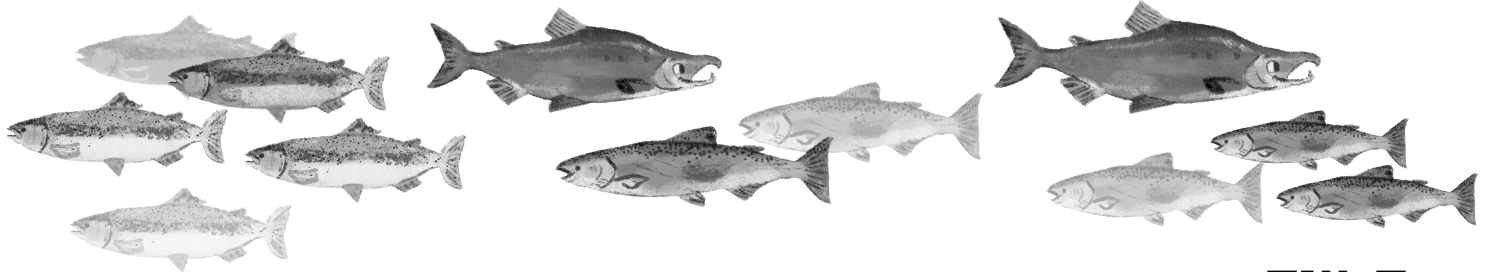
- lobster
- puffin
- right whale
- crab
- codfish
- oysters

PACIFIC OCEAN

- kelp forest
- salmon
- seal
- orca
- herring
- hydrothermal vent

FRESH WATER

- lakes
- ivers
- wetlands
- american eel
- estuary



Find more more about
 Canada's three unique
 ocean basins here:



OCEAN CONNECTION CROSSWORD

Here in Ottawa, we are connected to our one global ocean and our rivers, lakes and estuaries in many different ways. Can you solve this puzzle to find out how?

ACROSS

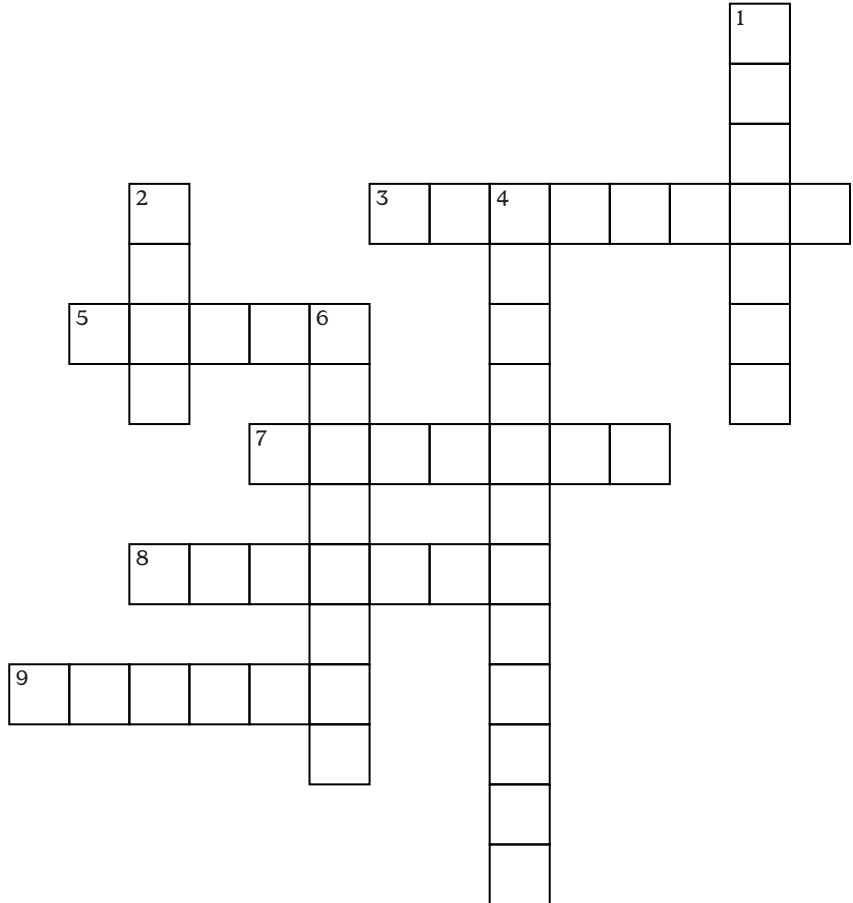
3. People live in communities, like towns, villages and cities. Animals in the ocean have special places they live, just like us, which provide them with food and safety. These places are called _____.

5. People use _____, from canoes and kayaks to shipping vessels, to access the ocean and waterways for transporting a lot of our stuff across the globe, for fishing, for exercise, and more.

7. Since before we had farming, people have been _____, for food, recreation, and cultural reasons.

8. We often think it's the atmosphere that is responsible for determining the Earth's _____, but actually the biggest impact comes from the ocean.

9. Plants in the ocean are responsible for creating half of all of the _____ on the planet, which animals need to breathe.



DOWN

1. Human settlements are built on the shores of waterways and the ocean, for food, transportation and more. Water has shaped who we are and our _____.

2. Fish is one of the most important sources of _____ for people across the planet.

4. The ocean is home to the blue whale, the largest animal that has ever lived on Earth, and to microbes, the smallest living organisms – the ocean is a place of great _____.

6. _____ is a way we connect with water to get exercise, splash around, and have fun with our friends and family.

Understanding our connection to the ocean – how we impact the ocean and how the ocean impacts us – is called ocean literacy. To learn more about why our ocean connection is so important, even living in Ottawa, see:



ANSWERS: ACROSS: 3. habitats, 5. boats, 7. fishing, 8. climate, 9. oxygen. DOWN: 1. culture, 2. food, 4. biodiversity, 6. swimming.



OCEAN CREATURE CLUES

Using the clues below, can you guess the names of these animals that live in Canadian ocean waters?



I live on the seabed across the world, from the poles to the equator, and from the shore to up to 6 km below the surface of the ocean. I'm a predator and I'm strong – I can pull open tightly closed clam and oyster shells to eat the meat inside.

I AM A:



I live along the coasts of the Pacific Ocean, including in Canada. I'm furry, and I like to float on my back to sleep and relax, and to carry my babies on my tummy. I can eat sea urchins, even though they're covered in spines.

I AM A:



I live in the cold Arctic ocean, and migrate to freshwater lakes to spawn (lay eggs). I'm an important food source for the Inuit, and critical to the Arctic food web: I am the connection between the shrimp, insect larvae, snails, clams and small fish that I eat, and the sea otters, polar bears, ferocious trout, other fish, and humans that eat me.

I AM AN:



I live on the ocean floor in shallow coastal waters. I'm an important fisheries resource on the east coast of Canada, where fishers set baited traps on the seafloor that I crawl into. I'm not picky about what I eat. My diet includes small plants, shrimp, marine worms, and more, but I also eat carrion (dead meat).

I AM A:



I'm a special kind of this marine animal that only exists at the bottom of the Pacific Ocean in a place called the Endeavour Hydrothermal Vents, a marine protected area. I'm named for the eight-legged creatures that live on land because I look a lot like them.

I AM A:



I have been living in the ocean since before the dinosaurs existed. I drift with currents and I don't have a brain. I'm a carnivore, mostly. I eat fish, shrimp, crabs and tiny plants. There are over 2,000 known species like me.

I AM A:



For over 14 thousand years, each spring the Háltsaqv (Heiltsuk) people of coastal British Columbia have been harvesting my species' fish eggs. I live in the Pacific and Atlantic Oceans, and migrate in a large group (a school) to the coast to spawn, covering kelp leaves and rocky surfaces in millions of tiny eggs.

I AM A:



I've been nicknamed the "unicorn of the sea". I live in the Arctic, and in Inuktitut, my name is "Qilalugaq gernerdaq," which means "the one point to the sky." I spend winters under the sea ice, and rely on cracks in the ice to allow me to come up for air. My 'tusk' is actually a tooth that can grow up to three metres long!

I AM A:

ANSWERS (left to right, top to bottom): starfish, otter, arctic char, lobster, sea spider, jellyfish, herring, narwhal.

AMERICAN EEL MAZE



PATH TO OTTAWA

To get to Ottawa, American eels swim north along the coast of North America, then up the Saint Lawrence River to Montreal, and then up the Ottawa River.

American eels face many obstacles in their migration to Ottawa:



TURBINES



INVASIVE SPECIES



POLLUTION



DAMS



ACID RAIN

Help the American eel migrate safely from the Sargasso Sea to Ottawa.

THREATS

American eels that live in the Ottawa River swim 5,000 kilometres to the Sargasso Sea near the Caribbean island of Bermuda to spawn (lay eggs). The hatched eels move with ocean currents, and eventually (after up to 10 years in the open ocean), migrate up the coast of North America, and into rivers and streams on the east coast of the Americas. In Canada, the American eel is found from the Great Lakes to Labrador.

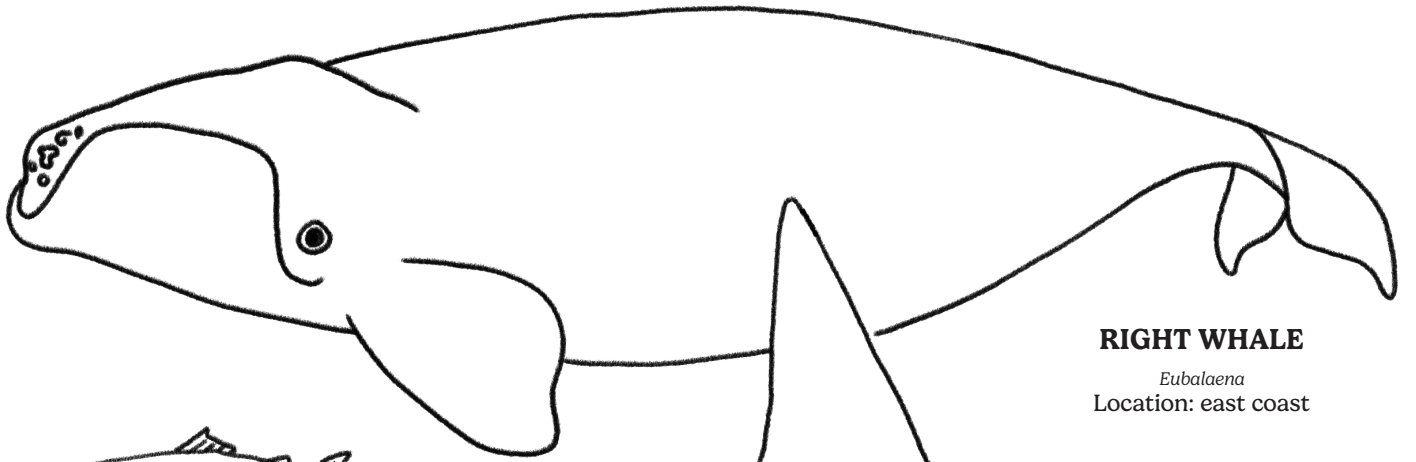
The American eel has historically been an important species for the Algonquin people of this region, for food, as well as spiritual, healing and cultural reasons. In the Algonquin language, the American eel is known as Kichisippi Pimisi, which means “big river eel”.



WRITING PROMPTS

Use these prompts to think about your connection to the ocean, and to tell stories, in writing or out loud, about your local waterways and the ocean.

1. Ottawa's water - flowing along the Ottawa River, the Rideau River and Canal and the Gatineau River - eventually makes its way to the Atlantic Ocean. On its way, the water has many adventures and meets many animals.
 - Tell a story about the catfish, Canada geese or American eels it meets along the river.
 - Tell a story about the water meeting the salty ocean, and the belugas, sea cucumbers, dolphins and right whales that live there.
2. Tell the story of the first time a baby Atlantic puffin takes off from the rock where it was born and sails on its wings out over the ocean. What does it see? Who does it meet?
3. Was the ocean always here on Earth? Tell a story about the birth of the ocean and the first animals that came to live in it.
4. The deepest part of the ocean, the Mariana Trench, is deeper than Mount Everest is high (by over 2 kilometers!). Tell a story about a tiny seahorse that decides it wants to go from the coral reef where it lives to the deepest point of the ocean.



RIGHT WHALE

Eubalaena
Location: east coast



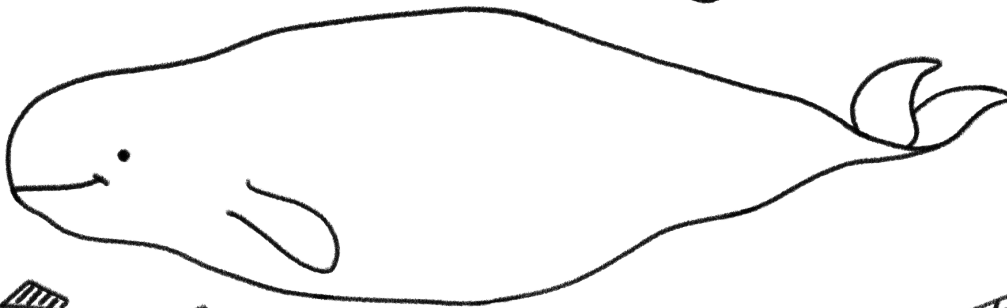
COHO

Oncorhynchus kisutch
Location:
west coast



ORCA

Orcinus orca
Location: west
coast (Pacific)



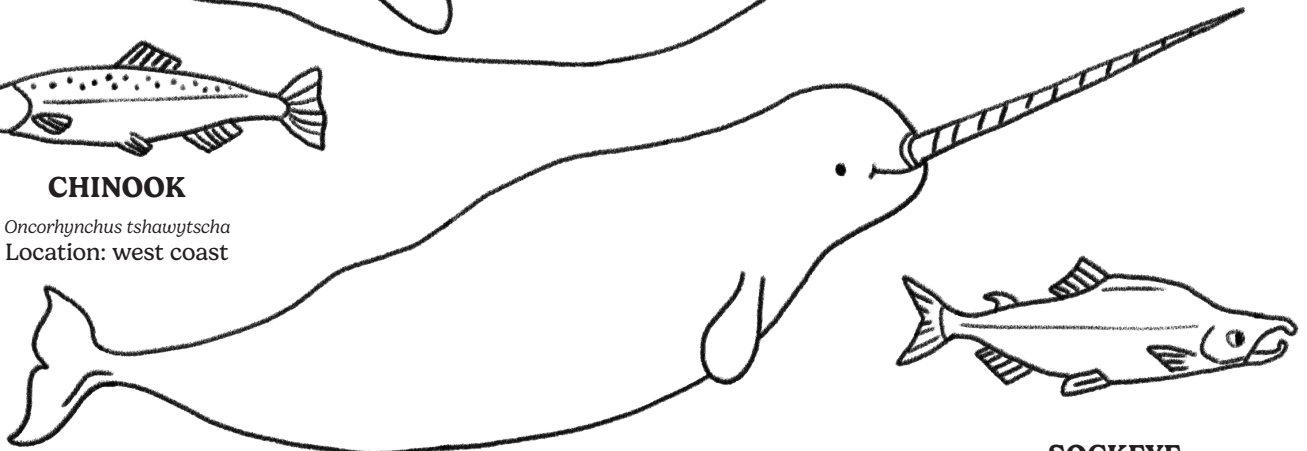
BELUGA

Delphinapterus leucas
Location:
Arctic coast



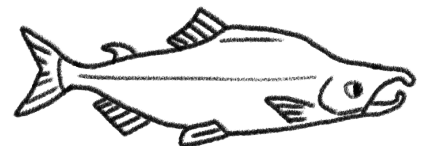
CHINOOK

Oncorhynchus tshawytscha
Location: west coast



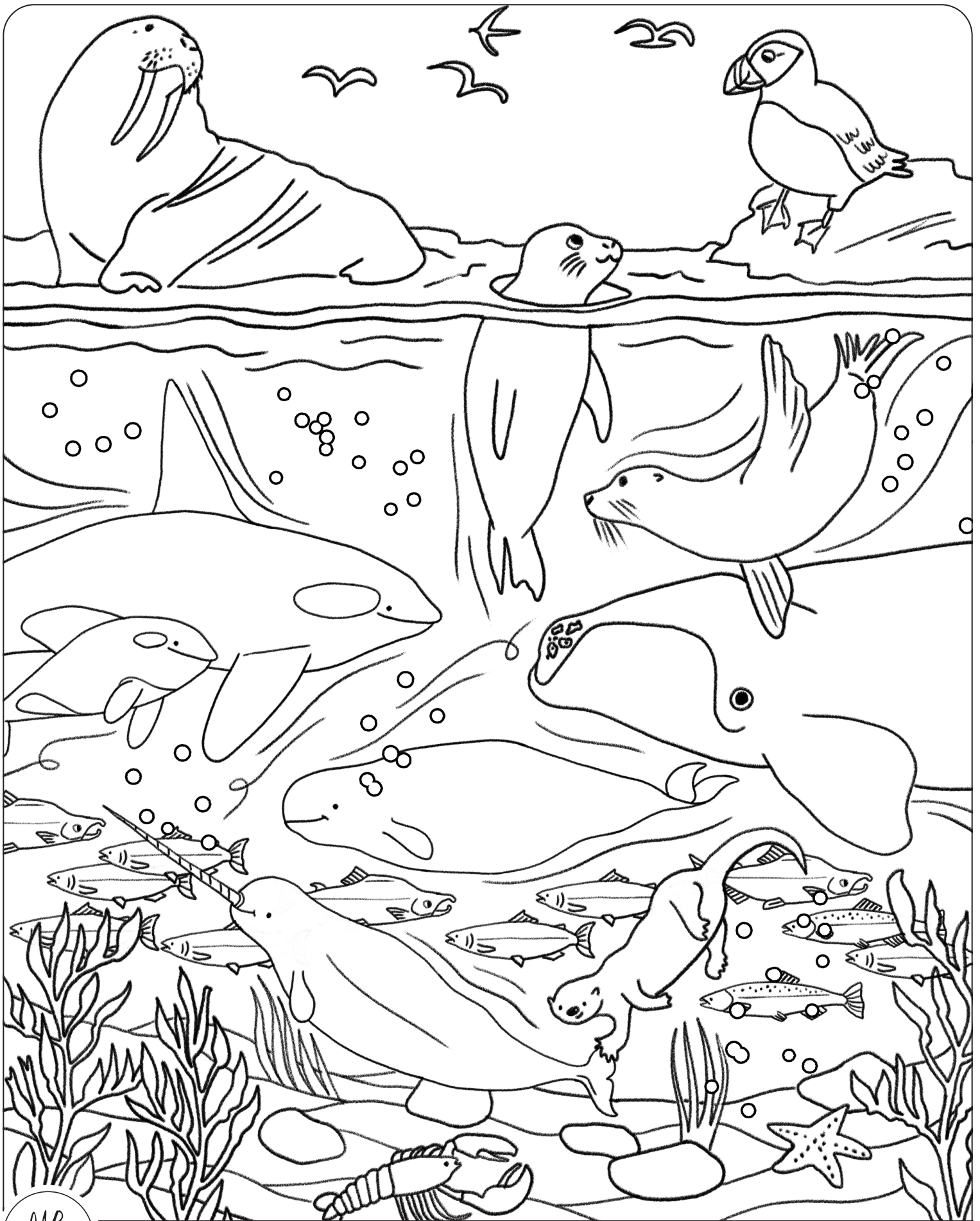
NARWHAL

Monodon monoceros
Location: Arctic coast



SOCKEYE

Oncorhynchus nerka
Location:
west coast



A DAY AT THE BEACH

Create your own graphic novel about a visit to the Ottawa River or another coast. Fill in the speech bubbles and then draw what happens next.

