Wally the walrus and the great storm

Student

workbook
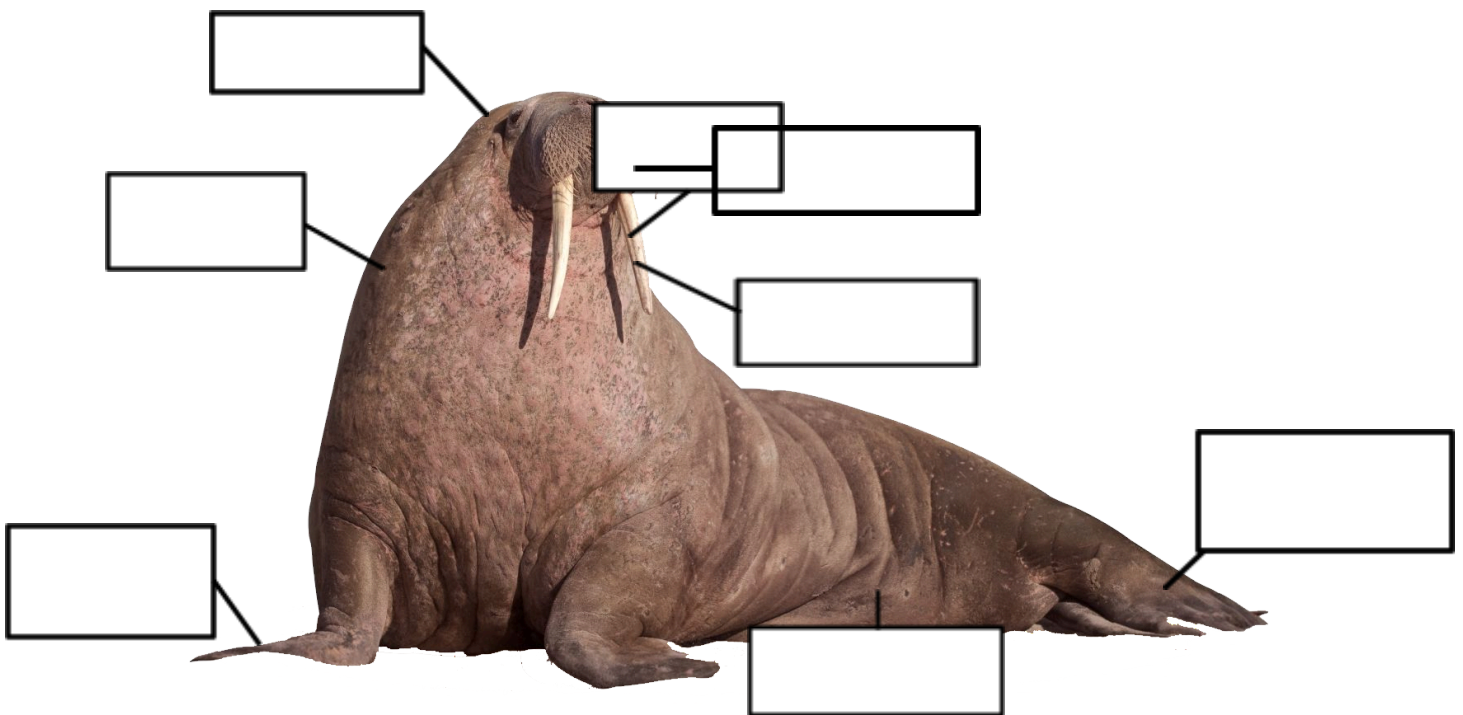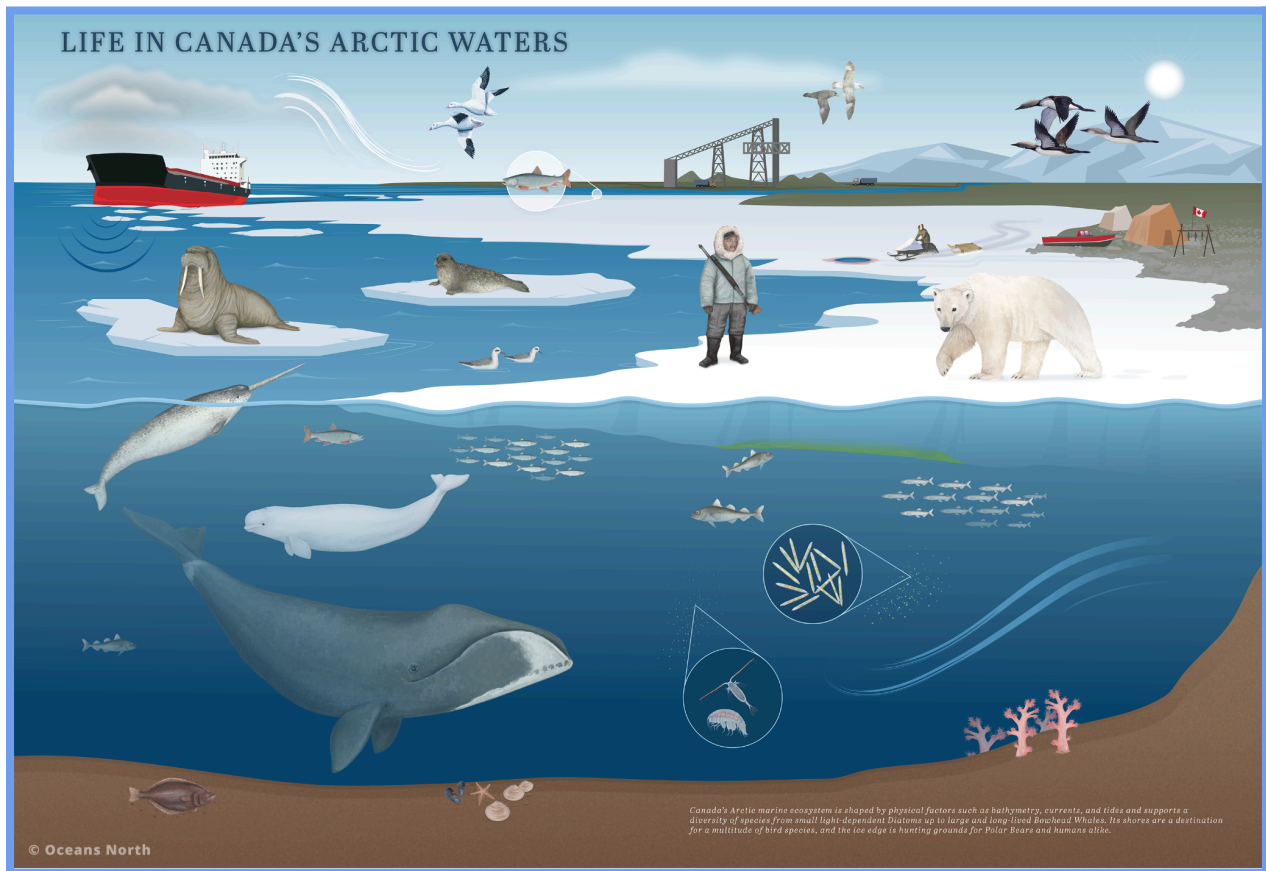
génielab.

Chapter 1

The body parts of a walrus

(Elementary Cycle 2)

As you know, Wally is a walrus, a pinniped mammal and the only member of the Odobenidae family. The Inuit call him Aiviq. Wally has a massive body, a huge neck and a small head disproportionate to the rest of his body. Its skin is thick (6 cm) and wrinkled, with a few scattered coarse hairs. It is cinnamon-colored, but its friends can also be gray, with pink in the folds and on the belly. The lower limbs are actually flippers, and the upper limbs can swing forward to allow movement on land. Wally's family and friends, both male and female, have large upper canines that extend into tusks up to 60 cm long. The muzzle is adorned with a thick moustache of highly flexible hair.

Using the description above, can you identify the main parts of Wally's body? (Tusk, whiskers, neck, head, lower flippers, upper flippers, snout, underbelly)

The Atlantic walrus ecosystem
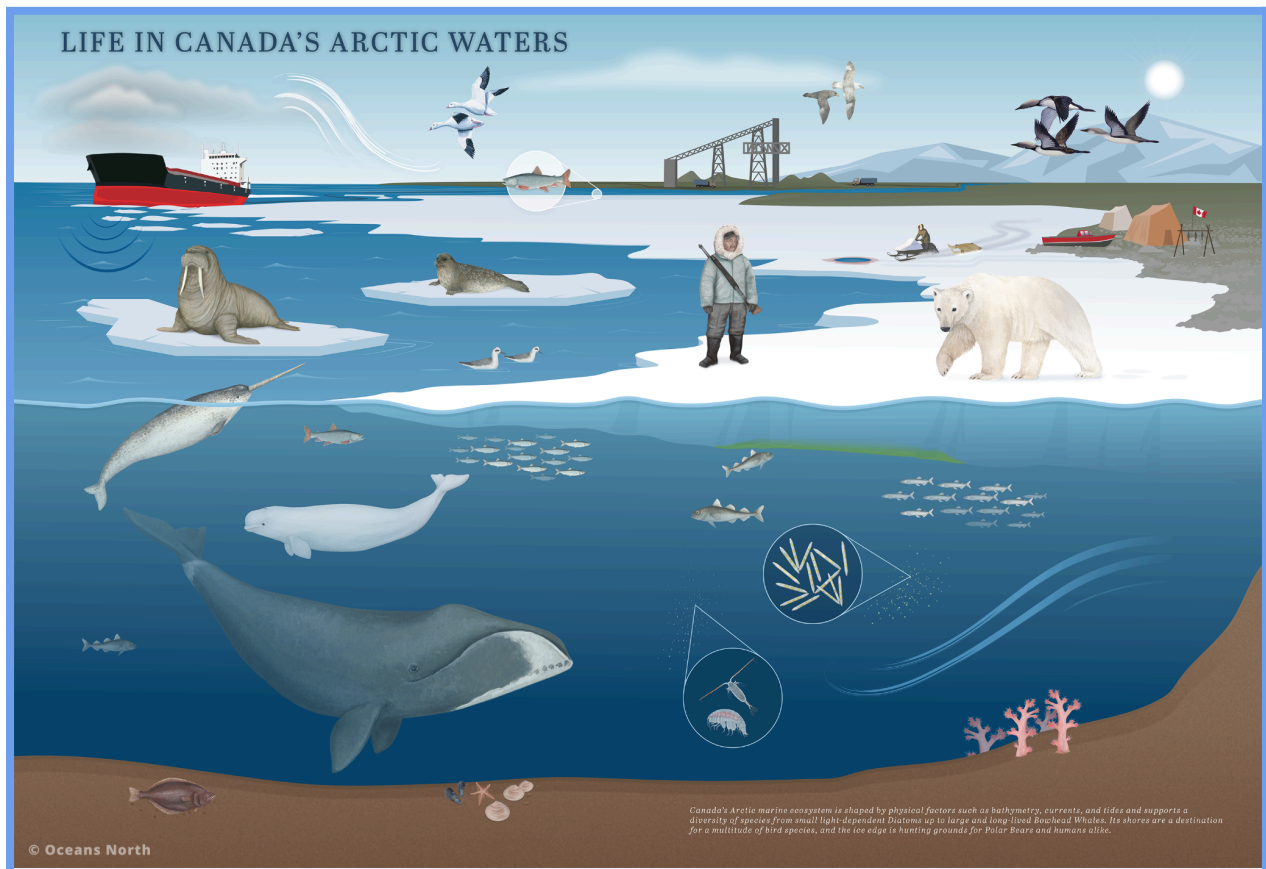# (Elementary Cycle 2 version)

1

This is the walrus environment in the Arctic and northern Canada. Wally would like you to discover the living environment of his Canadian cousins. Can you identify as many elements as possible in the illustration above? To help you, use the following word bank, cut them out and paste them in the right place on the illustration.

Zooplankton	Polar bear	Walrus	Industry
Birds	Narwhal	Boat	Benthos
Corals	Seal	Bowhead whale	
Fish	Beluga whale	Inuit	

1 https://oceansnorth.org/wp-content/uploads/2018/09/Atlas-marin-de-l%E2%80%99Arctique-canadien.pdf

The Atlantic walrus ecosystem

(Elementary cycle 3 version)

LIFE IN CANADA'S ARCTIC WATERS

Canada's Arctic marine ecosystem is shaped by physical factors such as bathymetry, currents, and tides and supports a diversity of species from small light-dependent Diatoms up to large and long-lived Bowhead Whales. Its shores are a destination for a multitude of bird species, and the ice edge is hunting grounds for Polar Bears and humans alike.

© Oceans North

2

This is the walrus environment in the Arctic and northern Canada. Wally would like you to discover the living environment of his Canadian cousins. Can you identify as many elements as possible in the illustration above? To help you, use the following word bank, cut them out and paste them in the right place on the illustration.

Phytoplankton	Polar bear	Northern fulmar (birds)
Amphipods and pteropods	Narwhal	Boat
Corals	Seal	Loon (birds)
Cod (fish)	Beluga	Inuit
Halibut (fish)	Walrus	Goose (birds)
Herring (fish)	Bowhead whale	Benthos

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2 https://oceansnorth.org/wp-content/uploads/2018/09/Atlas-marin-de-l%E2%80%99Arctique-canadien.pdf

Northern Canada

Wally's cousins currently live in northern Canada, on the Arctic coast. On the following map, can you identify the territory where walruses now live? To help you, here's an extract from the Canadian Encyclopedia:

"In Canada, the Atlantic walrus population can be divided into four groups: 1) Southern and Eastern Hudson Bay, 2) Northern Hudson Bay, 3) Davis Strait and 4) Foxe Basin and Baffin Bay. (...) Today, the Atlantic walrus range extends south to the level of James Bay and the Labrador coast."
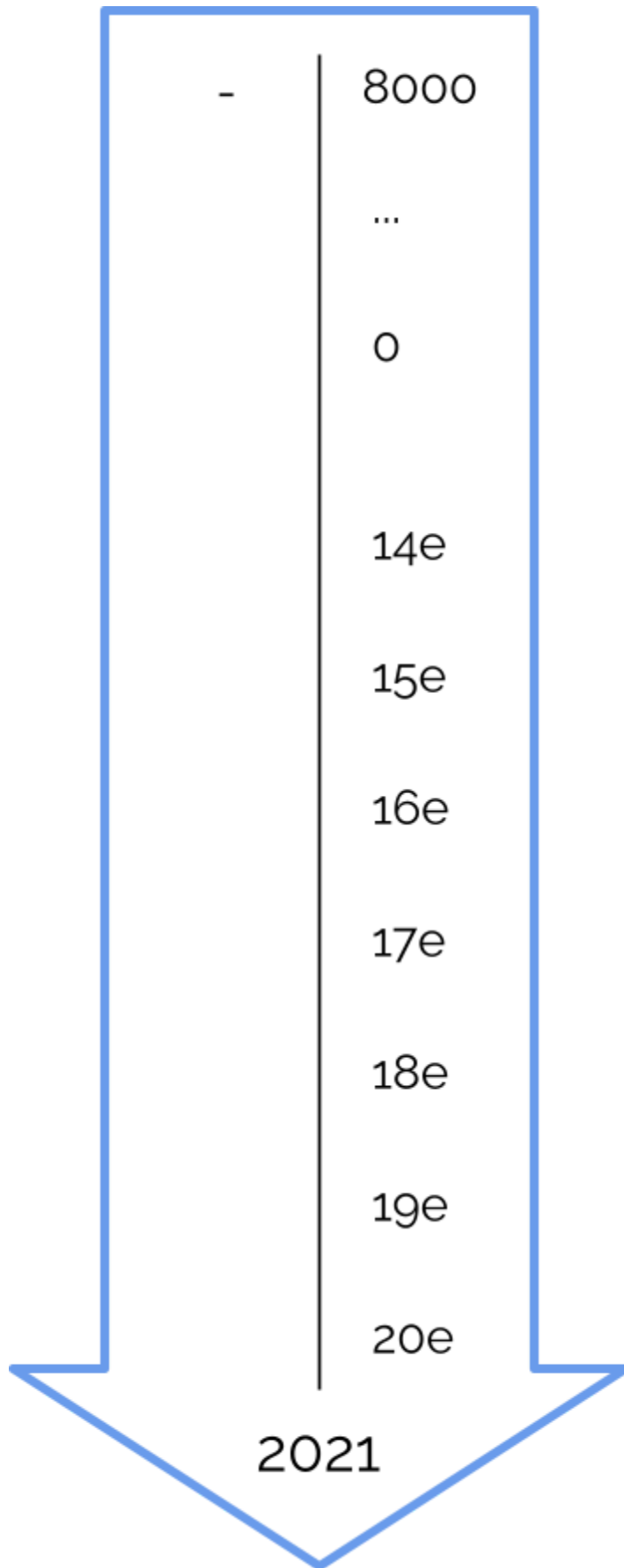
The history of walruses in the Maritimes

(2nd and 3rd cycles of elementary school)

As you read earlier, Atlantic walruses live in northern Canada, whereas before the 17th century they were found all along the north coast of Quebec, and especially on the Magdalen Islands. We're going to build our own timeline to commemorate the presence of Atlantic walruses on the Islands.

"Around this island, there are several large beasts like great oxen, which have two teeth in the mouth like the elephant and which live in the sea". - Jacques Cartier 1534	The first peoples of the Mi'kmaq nation have hunted walrus for 8,000 years on the Islands.	In the 16th century, the walrus became a choice prey for its blubber and ivory tusks.
Walrus bones and tusks are still found in the Magdalen Islands two centuries after their disappearance.	Walrus oil was considered an inexhaustible resource in the early 18th century.	The last walrus was seen in 1799 on the Magdalen Islands.
New England fishermen came to hunt walrus by the thousands in 1774.	 "Acadian man"	The presence of walrus attracted the Islands' first employer, Richard Gridley, who hired 22 Acadians in 1763 to supply and operate an oil mill, the Sea Cow Fishery.

-     8000

...

0

14e

15e

16e

17e

18e

19e

20e

2021

Chapter 2

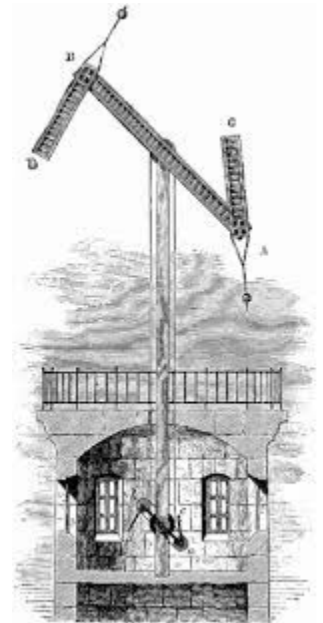## Your own Chappe telegraph (Elementary cycles 2 and 3)

It's time for an engineering challenge! Can you build a Chappe telegraph to transmit a secret message to your classmate? This activity will take the form of a challenge to solve.

A quick reminder:
Considered the first modern telecommunications system, aerial telegraphy was developed by Claude Chappe in 1791.

Materials :

- Cardboard sheet in the color of your choice
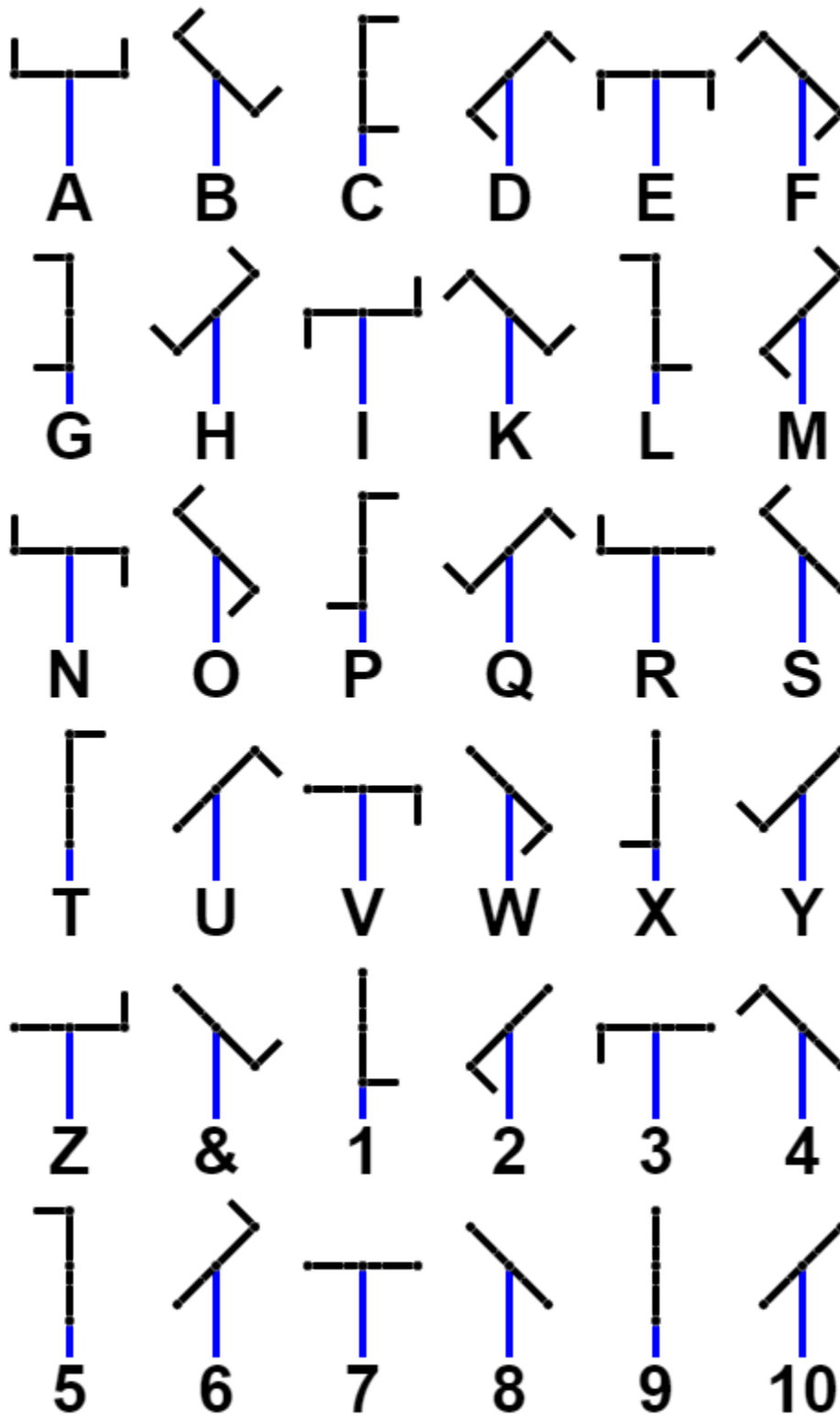
- Bedbugs

- Ruler

- Scissors

- Glue

Instructions :

1. Hold up a sheet of regular cardboard measuring 30 cm long by 23 cm wide.
2. For the first step, you need to divide your sheet of paper into 3 equal parts along the length of the sheet.
a. You will then have 3 rectangles measuring 23 cm by _____ cm.
3. Cut out the 3 rectangles.
4. Each rectangle should be folded back on itself about 4 times, lengthwise.
a. You will then have 3 rectangles measuring 23 cm by _____ cm.
5. Glue the inside of each rectangle so that they become very solid, rather like sticks.
6. Cut one of these "sticks" down the center to make 2.
7. Challenge: Now you can assemble your Chappe telegraph using the 4 parts and 3 tacks.

The Chappe code

Challenge 1

Toi et un.e ami.e, placez-vous à plus de 2 mètres dans la classe. Tu dois transmettre un mot au hasard sur cette liste à ton ou ta partenaire d'activité dans un silence complet, à l'aide de ta liste de code et de ton télégraphe. Quand tu as terminé, il ou elle doit deviner le mot et le cocher sur sa liste. Ensuite ton ou ta collègue fera la même chose. Vérifiez vos réponses ensemble et recommencez.

List 1

	Inuit		Iceberg		Seal		Telegraph
	Glacier		Walrus		Arctic		Atlantic
	Fatidic		Beacon		Mystic		Ingenious
	Bear		Invention		Narwhal		Fish
	Hunting		North coast		island		Defense
	Fins		Oil		Programming		Chappe

List 2

	Narwhal		Arctic		Seal		Beacon
	Glacier		Walrus		Defense		Atlantic
	Fatidic		Telegraph		Mystic		Oil
	Bear		Fins		Island		Fish
	Hunting		North coast		Night		Iceberg
	Invention		Ingenious		Programming		Chappe

Code and decode Morse code

What's your Morse code like? Using the following grid, translate the following words into Morse code. Put a slash (/) between each letter to distinguish them.

ex: Hello ; ● ● ● ● / ● / ● ▬ ● ● / ● ▬ ● ● / ▬ ▬ ▬

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

Inuit _____

Walrus _____

Beacon _____

Telegraph _____

Iceberg _____

Programming _____
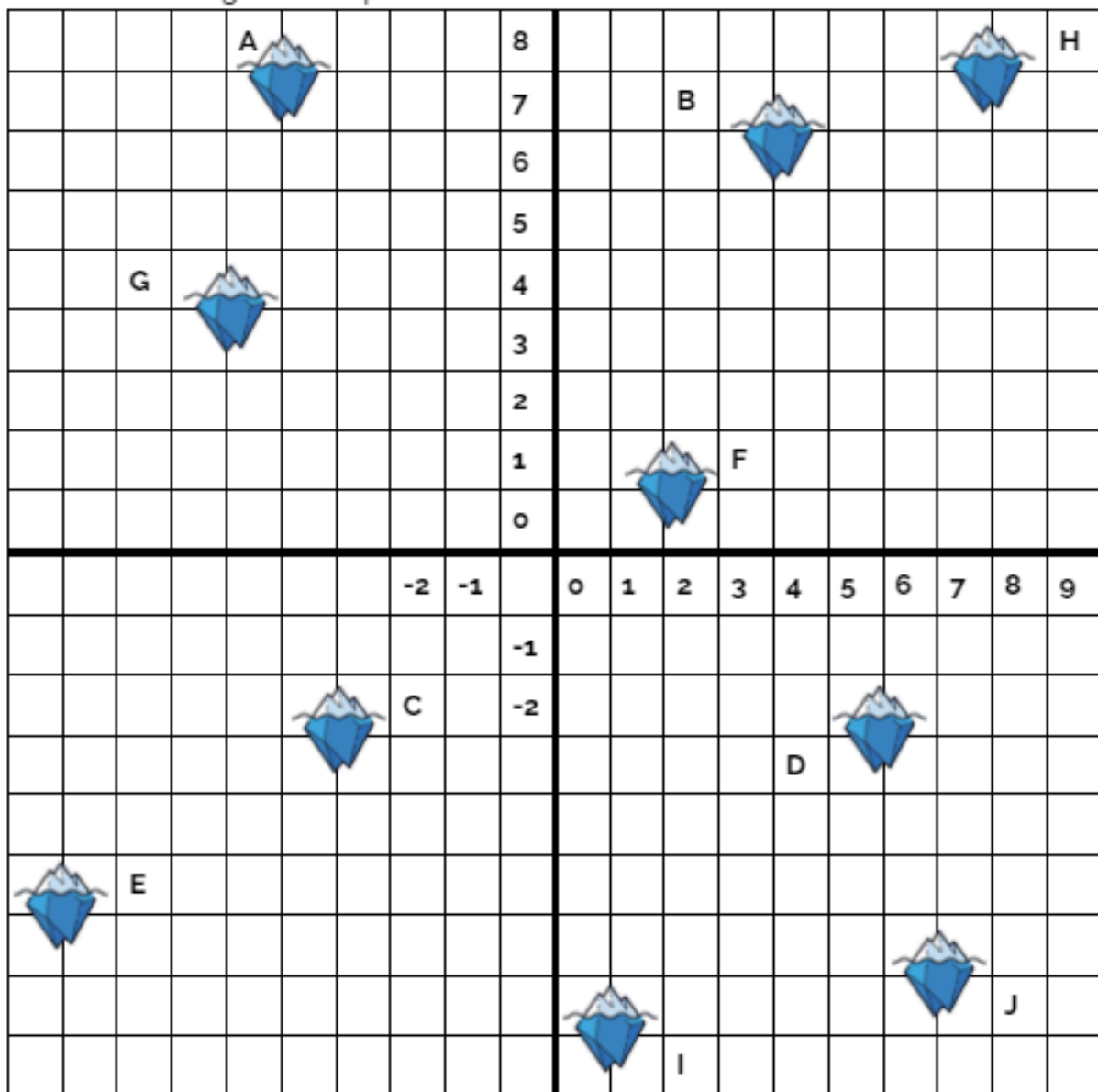
Arctic _____

S.O.S _____

Mystic _____

Atlantic _____

Challenge 2

As a class, using a flashlight or whistle, your teacher will spell out a classroom object in Morse code. The game is to find the object and bring it in as quickly as possible. To help you, you can use your Morse code alphabet, a piece of scrap paper and a pencil.

Chapter 3

Identifying icebergs (Elementary cycles 2 and 3)

To help Wally save the villagers, can you identify the coordinates of the various icebergs on the following Cartesian plane?

A																			

A _____   B _____   C _____   D _____   E _____

F _____   G _____   H _____   I _____   J _____

Chapter 4

History, geography and French (2nd and 3rd cycles of primary school)

Lighthouses of Quebec

Do you know what a lighthouse is? A lighthouse is a tower with a light source at the top to guide ships along maritime routes at night. In Quebec, the first lighthouses appeared in the 18th century. Did you know that there are 176 lighthouses in Quebec?

For the next project, I'd like you to introduce us to a lighthouse in Quebec and share it with your class. Using the following worksheet, do some online research on what you think is a memorable lighthouse. Once you've completed the worksheet, present your project to the class in the form of a PowerPoint presentation or poster.

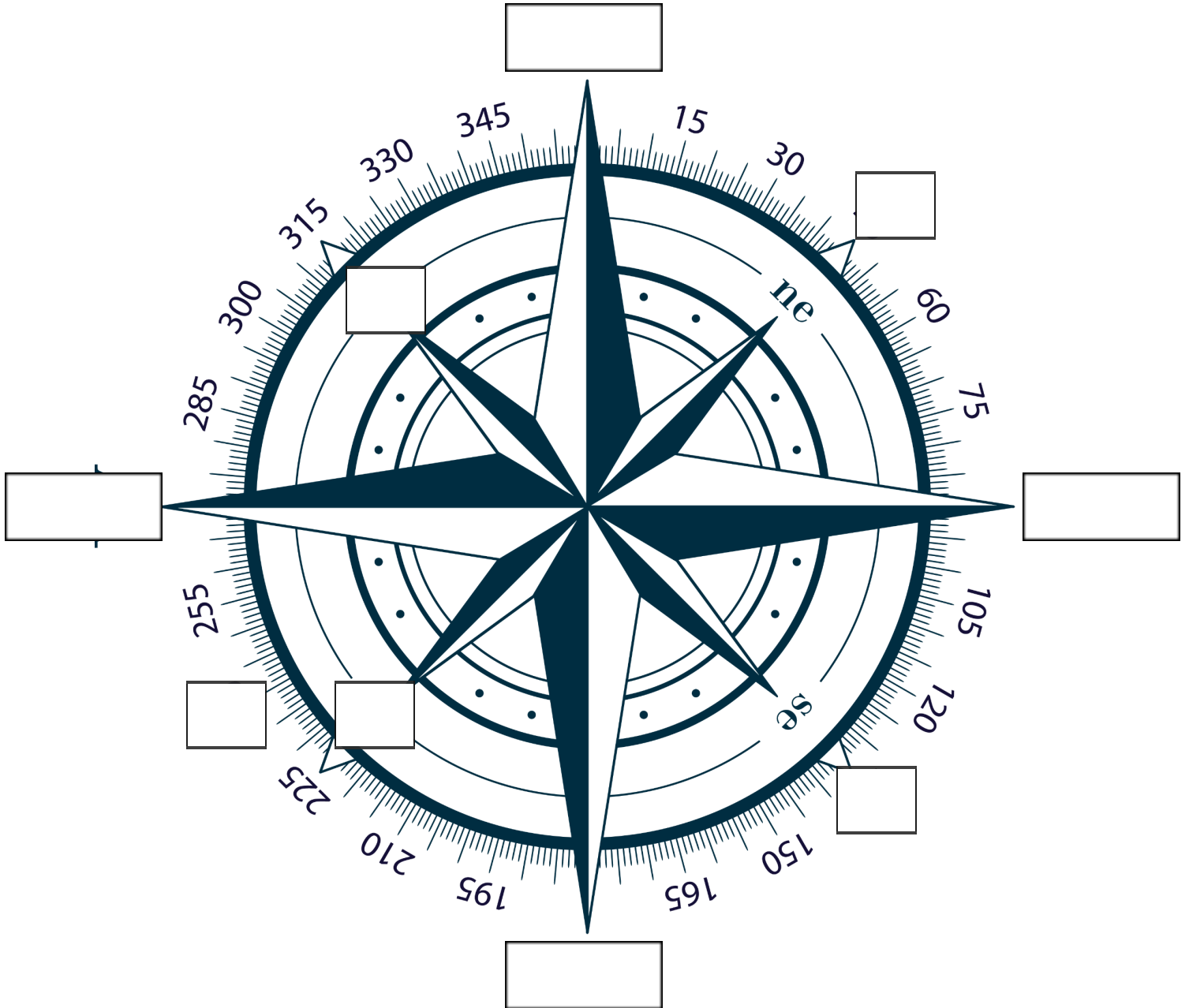| Lighthouse name			
Construction date		Is he still in business?	
Nearest town			
Administrative region			
What can you tell us about its history?			

Can you draw your lighthouse on this map?

Can you draw your lighthouse?

Chapter 5

Mathematics (2nd and 3rd cycles of primary school)

The compass

The following compass is missing several elements. Can you complete it to complete the challenge on the next page?

Word bank: West, North, South, East, NO, SO, 135, 45, 240

Compass navigation

Using the following instructions, move your boat so that it reaches the côte safely:

Head two 90° squares, one north square, one 315° square, one northwest square, four east squares, one southeast square, two 180° squares, two 90° squares, three north squares, two 315° squares, two 0° squares, two 90° squares.

Congratulations, you've reached the lighthouse!

Chapter 6

French - c2, reading a variety of texts (2nd cycle of elementary school)

Wally et la grande tempête - Reading comprehension

Once upon a time, somewhere in the Geniesphere, ingenious walruses lived near a fishing village on the northern coast. In ancient times, fishermen's boats often ran aground on these rocky shores. To help the villagers, the walruses came up with an elegant idea: install lighthouses all along the coast to guide the boats and warn them of dangerous spots using a mystical language, a secret, ancient code known as Morse code. They built white towers with beacons of fire at the top. Wally, the elder, was the last of the walruses to remember the mystical Morse code.

Then, one morning, a storm! The storm every sailor dreads hits the northern coast. The storm was violent. Suddenly, lightning strikes the great lighthouse. The walruses notice that not only is the great lighthouse extinguished, but so are all the other lighthouses. What's more, a ship is out to sea, coming dangerously close to shore.

Wally, despite being the oldest walrus in the clan, is the first to react. He rushes to the great lighthouse. To get there, he has to use the ancient language of Morse code. Wonderful! The door disappears as soon as the code is spoken. Without missing a beat, Wally climbs the lighthouse stairs as fast as his flippers will carry him. At the top of the stairs. Now he has to turn the beacon back on. To reactivate all the lighthouses on the coast, Wally has to send them a flashing signal, the most basic way of communicating in Morse code. All the beacons come back on. However, he notices that an unusual quantity of icebergs has drifted close to the coast due to the storm. Worried, he returns to the water to find the other walruses.

As soon as he arrived, screams drew his attention somewhere behind the glaciers. He swims towards the source of the sound, and sees to his horror that the boat is now trapped by the rapidly approaching ice! The walruses quickly swam around the

boat to analyze the area and find a way out of the death trap. The walruses have identified a safe route, but it won't be easy to navigate! They'll have to guide the boat, giving it directions to get out of this maze before the boat is crushed. The boat zig-zags between the last glaciers that prevent it from regaining its freedom. It escapes just in time to see the ice mountains crash into each other in a gigantic boom that echoes all along the coast. The villagers aboard the boat are relieved to finally be able to return to shore, thanks to the help of the walruses!

The next day, the sky is clear again and nothing remains of the storm. The villagers on the trapped boat tell of how they were saved by the walruses from an agonizing death. Many songs were sung to remember that fateful day and the heroes who turned darkness into light.

Reading comprehension (2nd cycle of primary school)

Voyons ce que vous avez appris de l'aventure de Wally.

1. What do you think the following terms mean?
   a. Ingenious
      i. Fast
      ii. Crazy
      iii. Intelligent
   b. Mystic
      i. Disturbing language
      ii. A surprising language
      iii. Spiritual language (related to religious beliefs)
   c. Beacon
      i. An office tower
      ii. Device for guiding a navigator
      iii. A flashy object
   d. Fatidic
      i. Happy
      ii. Fatal
      iii. Funny

2. Who is Wally?

   _____

3. What do sailors on the North Coast dread?

   _____

4. What code does Wally use to save the villagers?

   _____

5. Which of the following words are threats to the villagers?

    a. The fire

    b. A shipwreck

    c. Icebergs

    d. An earthquake

6. Underline all the verbs in this excerpt:

The next day, the sky is clear again and nothing remains of the storm. The villagers on the trapped boat recount how they were saved by walruses from an agonizing death. Many songs were sung to remember that fateful day and the heroes who turned darkness into light.

7. How would you continue Wally's story? What would be his next adventure?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____