

SECONDARY IV Week of May 4, 2020

Table of Contents

Where Children Sleep	2
Haïku-iser notre nouvelle réalité	3
Les caractéristiques des haïkus	5
Exemples de haïkus	5
Dodging Statistics	6
Appendix A – Group Work	7
Appendix B – Formula Sheet	8
Appendix C – Answer Key	9
The Relationship Between the Atmosphere and the Oceans	10
Appendix A: Experiment	12
Percentage of Oxygen in Water	12
Appendix B: Impact of Carbon Dioxide	13
Titre de l'activité Error! E	Bookmark not defined.
Busting some moves!	16
The Many Impacts of COVID-19 (Part 2: Values and social distancing)	17
Creating Canada – The British North America Act	19



Where Children Sleep

Image source: https://www.jamesmollison.com/where-children-sleep

Information for students

- You've probably spent a lot of time in your bedroom these last few weeks. This activity asks you to consider what your bedroom says about you. What could an outsider learn about you and your life from viewing a picture of where you sleep?
- Go to https://www.jamesmollison.com/where-children-sleep and view the images from James Mollison's book Where Children Sleep.
- Think about what you can learn from someone's bedroom. Using the visual clues in the photographs on the website, both of the bedrooms and the children themselves, infer what these children's lives and personalities might be like. How does a bedroom reflect the person who sleeps there? What does someone's appearance (hair, clothing) tell you? What can't we tell? Is it always true that a person's appearance and environment reflect their "real" self?
- Choose a child from one of the photos on the website and attempt to write a journal entry from their point of view. Using what you have inferred from the photographs, try and enter their world and their head. Use a first-person point of view to capture what you think you know about them. Where do they live? Who do they live with? What do they do all day? Be as creative as you like.
- Share your writing with a friend or family member. Have a competition with them to see who can come up with the most creative and believable backstory to an image.

Optional

• For more information on the children in the photographs, you could visit this section of James Mollison's website https://www.jamesmollison.com/wcs-exhibitions

Materials required

- Device with Internet access
- · Paper and writing materials

Information for parents

- Review the instructions with your child, if necessary.
- The best things your child can do are: read every day, write every day and talk every day.



Haïku-iser notre nouvelle réalité...

Information for students

- En guise d'introduction, lis les articles suivants: Les mots de la COVID-19 : exprimer la pandémie et Les bienfaits antistress du haïku.
- Prends ensuite le temps de te familiariser avec la structure des haïkus. Voir l'annexe ciproposée.
- Activité 1 : Prends connaissance des vers de 5 et 7 pieds offerts ci-bas (Voir lien : tw-haiku.ac-dijon.fr... content). Associe-les dans l'ordre suivant : un vers de 5 syllabes, un vers de 7 syllabes et un vers de 5 syllabes. Lis les poèmes obtenus. Prends en note ceux qui te plaisent le plus.
- Activité 2 : Choisis maintenant les deux premiers vers (vers de 5 et de 7 syllabes) parmi la même sélection, mais compose le troisième vers. Refais l'exercice en tirant au hasard le premier vers mais en écrivant les deux suivants. Fais quelques exercices supplémentaires pour pratiquer.
- Activité 3 : Lorsque tu te sens capable, crée tes propres haïkus, mais en insérant des mots tirés de l'article Les mots de la Covid-19 : exprimer la pandémie. Un néologisme (mot nouveau ou sens nouveau) par haïku. Une autre option serait de t'inspirer des photographies présentées sur la galerie de photos ci-proposée (Voir lien : tw-haiku.ac-dijon.fr... galerie-de-photos).
- Fais une compilation de tes haïkus (dans un cahier ou en ligne). Tu peux les accompagner d'une photographie ou d'un dessin. À toi de choisir!

Materials required

https://www.lapresse.ca/societe/sante/202004/15/01-5269494-les-mots-de-la-covid-19-exprimer-lapandemie.php

https://fr.chatelaine.com/societe/entrevues/les-bienfaits-antistress-du-haiku/

http://tw-haiku.ac-dijon.fr/wp-content/uploads/2014/02/annexe2-2015.pdf

http://tw-haiku.ac-dijon.fr/galerie-de-photos/





Information for parents

This activity involves sensitivity, calm and a willingness to practise writing poetry. Haïku do not require any emphasis on rhymes! This activity is stress-free and will make your child proud of their accomplishments. Everyone can write haïku! It is a fun and fulfilling activity to do on a daily basis.

Le poème en prose (ne rime pas)	Un tercet (poème écrit en 3 vers) *I vers = 1 ligne dans un poème
Le 1 ^{er} vers : 5 syllabes Le 2 ^e vers : 7 syllabes Le 3 ^e vers : 5 syllabes Comment compter les syllabes dans un vers? Rappel : https://www.ralentirtravaux.com/lettres /sequences/sixieme/sequence_2/versification.php	Chaque vers est un « bout » de phrase représentant une idée / une image
Thèmes privilégiés: <u>La nature, les saisons & le temps</u>	Le lecteur doit identifier la présence d'une <u>émotion</u> à la lecture du haïku
Une forte présence sensorielle (au moins un des 5 sens est sollicité au cours de la lecture du poème)	La présence d'une rupture ou d'une contradiction



Les caractéristiques des haïkus

Tableau inspiré par :

http://tw-haiku.ac-dijon.fr/decouvrir-les-haikus-avec-ses-eleves/

Exemples de haïkus

Référence:

https://www.association-francophone-de-haiku.com/exemples-de-haikus/haikus-hiver/billet d'amitié — deux tulipes se touchant les pétales

Ana Drouot

premier son de cloche dans le boisé de la cour deux brins de muguet

Céline Lajoie

pluie printanière son parapluie à mon bras pleurs silencieux

Christiane Ourliac

entrée principale du centre pour personnes âgées lilas en fleurs

Claude Rodrigue

pont solitaire il s'est trouvé un ami le vent vagabond

Anne Brousmiche



Dodging Statistics

Information for students

- Your school has just wrapped up its intermural dodgeball season (the Marie Curie Dodgeball League).
- For your math class, you and your group are asked to present some statistics pertaining to the league this past season.
 - Freddie gathered the data on the players who made the All-Star teams, while Joan compiled the data on the rest of the players in the league.
- Additionally, your teacher would like you to provide the following information based on this year's results:
 - o The linear regression of the games played in relation to the eliminations scored
 - o How many eliminations should someone who plays 10 and 20 games be expected to get?
 - If a new player were to join the league and score 25 eliminations, what percentile would they be in?
 - Finally, you need to create a scatterplot with all the data.

Materials required

- Appendix A: The statistical information relating to your teammates
- Appendix B: Formula sheet with information on determining the regression line and percentile

Information for parents

- Read the instructions to your child, if necessary.
- Discuss the task together with your child, outlining the steps they need to carry out.
- For the regression line, students can use the method they are most comfortable with to determine the equation, as the solutions for Mayer and Median-Median have been included in the answer key (Appendix C).
- Once the task is completed, you and your child can go over the task with the answer key provided.
- Your child may obtain answers that could be slightly different from the answer key, depending on how they round off their results. Being off by a few tenths is fine. There is no need to worry about inconsistencies in rounding off the results. The important thing is that your child is able to show that they can solve the problem.





Appendix A – Group Work

Freddie's Stem-and-Leaf Plots

22 Games	
1	
2	258
3	1

23	Games
1	
2	368
3	3

24	Games
1	
2	559
3	1

25	Games
1	
2	7 9
3	05

Joan's Table of Values

Games Played	Eliminations
8	10
10	11
12	12
12	16
13	15
14	15
15	16
15	17
15	19
16	18
18	25
18	22
19	23
20	18
21	15
21	26
22	29
22	25



Appendix B – Formula Sheet

Percentile

Percentile =
$$\left(\frac{\text{number of data values less than } x + \frac{\text{number of data values equal to } x}{2}\right) \times 100^{-2}$$

Regression Line - Median-Median Method

For example:

X	У	Median (M)
1	10	
1	12	M. (2 11)
3	9	M_1 (2, 11)
4	15	
5	15	
8	16	M_2 (8, 16)
9	18	
10	19	
11	22	<i>M</i> ₃ (12, 21)
13	20	IVI3 (12, 21)
15	25	

- 1) Organize the points on the scatterplot in numerical order according to the *x*-axis.
- 2) Divide the distribution into three groups. Each group should have the same number of ordered pairs, if possible. The first and third group need to have the same number of ordered pairs.
 - 3) Find the median of each group.
 - 4) Using the three medians, find the average of both the *x* and *y*-coordinates to find point *P*
 - 5) Using the coordinates of M_1 and M_3 , find the slope $(\frac{y_2-y_1}{x_2-x_1})$.
 - 6) Plug point P into the equation y = ax + b after the slope has

been determined.Regression Line - Mayer Line Method

For example:

Х	У	Average
1	10	
1	12	
3	9	P ₁ (2.8, 12.2)
4	15	
5	15	
8	16	
9	18	
10	19	D- (11 20)
11	22	P ₂ (11, 20)
13	20	
15	25	

- 1) Organize the points on the scatterplot in numerical order according to the *x*-axis.
- 2) Divide the distribution into two groups, as evenly as possible.
- 3) Determine the average of both the x- and y-coordinates in each group to find point P_1 and P_2 .
- 4) Using the coordinates of P_1 and P_2 , solve for the equation y = ax + b.



Appendix C – Answer Key

Linear Regression Line (Median-Median Method)

- The three medians are (14, 16), (22, 24), and (25, 29)
- Point P is (20.33, 23)
- The equation of the line is y = 1.18x 0.99

Linear Regression Line (Mayer Line Method)

- The two points are (15.82, 18.06) and (24.35, 27.76)
- The equation of the line is y = 1.14x + 0.03

Linear Regression Line (according to Microsoft Excel)

• y = 1.12x + 0.5

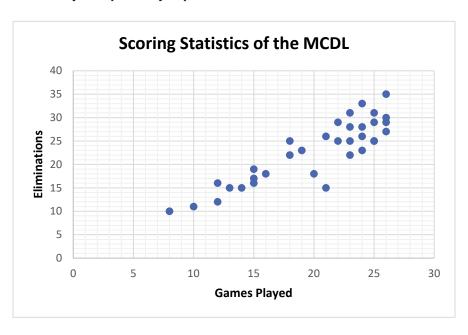
Eliminations for 10 and 20 games played (using all three equations)

Games	Median-Median	Mayer	Excel
10	10.81	11.43	11.70
20	22.61	22.83	22.90

Percentile Rank

•
$$\left(\frac{17 + \frac{6}{2}}{35}\right) \times 100 = 57.142 \rightarrow 58$$
th percentile

Scatterplot (example)





The Relationship Between the Atmosphere and the Oceans

Information for students¹

- Essential Question: How is the ocean like sparkling water and why is that a problem?
- Since the beginning of the industrial revolution, scientists have been keeping track of the following two things:
 - Increases in the average atmospheric temperature
 - Increases in the acidity of the oceans
- Review or research the following ideas:
 - Composition of air
 - Greenhouse gases
 - Carbonated water
 - o pH
- Conduct the experiment described in Appendix A.
- Using the information in Appendix B, reflect on the impact of carbon dioxide.

Materials required

- Paper, writing and drawing materials
- Bowl of water
- Candle
- Transparent glass (or graduated measuring cup to measure amounts of water)
- Matches or lighter (be careful with fire!)
- For the experiment, you may replace the candle and matches with steel wool and vinegar.
- Device with Internet access (optional)



¹ Vancouver Bites! Pic of sparkling water taken at Brix restaurant in Vancouver, 2010, JPEG, 1.63MB, Vancouver, Canada, https://commons.wikimedia.org/wiki/File:Sparkling_Water_(4675945072).jpg



Science and Technology

Information for parents

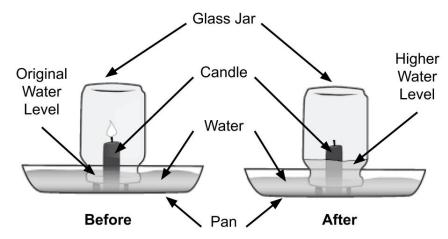
- Help your child find the link to the video, if necessary.
- Read the instructions to your child, if necessary.
- Discuss the questions together.
- Brief video explanation: https://www.youtube.com/watch?v=fgBozLCGUHY (optional)



Appendix A: Experiment

Percentage of Oxygen in Water

Objective: Calculate the percentage of oxygen in the air by burning a candle standing in a bowl
of water and observing the amount of water displaced into an inverted glass placed over the
candle (see image below).



- What do you notice? Why is this happening?
- Sketch and explain what was in the glass before and then after the experiment. Why is this
 calculation of the percentage of oxygen in the air not perfectly accurate? Share your thinking
 with the hashtag #ScienceAtHomeQC-grade10
- You may do a similar experiment that does not require burning a candle by replacing it with a
 piece of steel wool and letting it rust (this also consumes oxygen but takes a few hours see
 this link: https://www.youtube.com/watch?v=xQNl2EdteDE). (Optional)



Appendix B: Impact of Carbon Dioxide

Carbon can be dissolved in water. This can be done artificially, by pumping carbon dioxide gas
into a solution, as is done to make carbonated drinks (e.g. soft drinks or sparkling water).
 However, carbon can also be dissolved in a solution naturally, as is the case in the exchange of
carbon between the atmosphere and the hydrosphere. The following chemical equation shows
how carbon dioxide interacts with water:

$$H_2O + CO_2 \rightarrow H_2CO_3$$

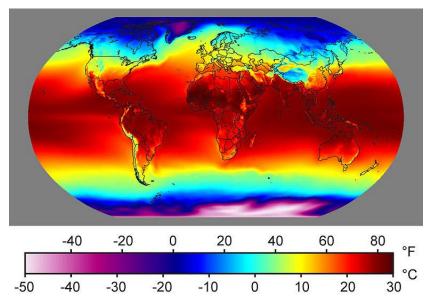
 The product of this reaction is called Carbonic Acid. It dissociates in water to form the following ions:

$$H_2CO_3 + H_2O \rightarrow [HCO_3]^? + [H_3O]^?$$

What are the missing charges on top of each ion on the right-hand side? What is the name of each ion?

Interpret the following two charts:

Chart 1: Global Annual Temperature²

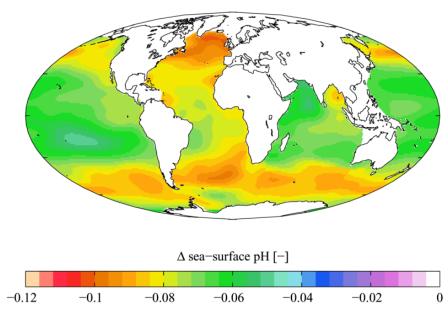


² Rohde, R.A., Annual Average Temperature Map, 2008, JPEG, 385 KB, https://commons.wikimedia.org/wiki/File:Annual Average Temperature Map.jpg



Science and Technology





- o What parts of the planet are the warmest? Why do you think this is the case?
- What parts of the ocean are becoming more acidic? Why do you think this is the case?
- Based on these two charts, infer how temperature might affect the solubility of carbon dioxide in water. Explain your thinking.
- o If greenhouse gases like carbon dioxide warm the average temperature of the planet, what effect will that have on the oceans' ability to absorb carbon dioxide from the air? Explain your thinking.
- o How does a more acidic ocean affect aquatic life? Give as many examples as you can.

³ Plumbago, WOA05 GLODAP del pH AYool, 2009, PNG, 234 KB, https://commons.wikimedia.org/wiki/File:WOA05_GLODAP_del_pH_AYool.png



Learn About the Cardiovascular System and Get Moving!

Information for students

Activity 1: Learn about the function of your heart during exercise

 Watch <u>this video</u>. Speaking to a friend or a family member, can you summarize the function of the cardiovascular system and how it performs that function? Challenge yourself to remember as many details as possible. For example, can you remember how many times your heart beats in a year or how many valves your heart has?

Activity 2: Get moving!

- Complete the following training programs on three separate days:
 - o <u>Day 1 Abs</u> <u>Day 2 Lower body</u> <u>Day 3 Arms and back</u>
- Make sure you select the workout level (number of sets) according to your personal fitness level.
- Do not forget that the number of repetitions (reps) is a suggestion only. If you can no longer hold or perform a technique, stop the set and rest.

If you are up for practicing your French and want to explore more activity ideas, visit the Reste Actif! website.

Materials Required

None

Information for parents

About this activity

Children should:

- learn about the cardiovascular system
- complete the at-home training programs

Parents could:

- discuss the circulatory system with their children
- join their children in completing one of the proposed training programs



Busting some moves!

Information for students

- This week, we'll go beyond building choreographies to trying some dance tutorials and getting
 inspired by some pop culture dance moves.
- Go to https://www.youtube.com/user/DanceTutorialsLIVE. Select one of the choreography videos. Make some space and give it a try.
- After having done some of the steps in the videos, reflect on the following questions:
- How would you have done it differently? What could be done to make the choreography personal?
- Try it out!
- Optional: Film yourself to see how it looks if you don't have a mirror to dance in front of.

Materials required

Device with Internet access

Information for parents

- This activity is designed to be simple and build students' repertoire of dance moves and reflection around their creations.
- We hope it will appeal to your child whatever their grade level.



The Many Impacts of COVID-19 (Part 2: Values and social distancing)

Information for students

- Read and reflect on the Montreal Gazette article "As usual, Canadians excel at obedience in the COVID-19 era"
- Write a short response to the article. Consider the following questions in your response and refer to the values word cloud below if needed: What are some Canadian values that have resulted in a successful obedience to social distancing measures? Why do you think groups of people are disobeying social distancing measures? What values are leading to their disobedience? What does freedom mean to you? What does responsibility mean to you? What consequences has social distancing had on your health, wellbeing, daily life, relationships, etc.?
- Inspired by the word cloud of values below, write down your 5 most important values.

Materials required

- https://montrealgazette.com/news/local-news/josh-freed-as-usual-canadians-excel-at-obedience-in-the-covid-19-era/
- Paper, pen or pencil, tablet or computer for internet access
- Image of the values word cloud







Information for parents

Students should

- Reflect on the consequences social distancing has had on their lives.
- Consider how societal values influence our willingness to abide by rules and regulations.
- Reflect on their own personal values

Parents could:

• Read the article and discuss it with your child.



Creating Canada – The British North America Act

The Constitution Act, 1867, originally known as the British North America Act (BNA Act), was the law passed by the British Parliament creating the Dominion of Canada. This document, written over 150 years ago, would become one of the building blocks of the Canada we know today.

Information for students

- Click on this link to bring you to an online version of your History textbook, *Reflections.qc.ca:* 1840 to Our Times: https://www.iplusinteractif.com/books/187/254/3804/67482/235996
- You can also use the print version.
- Read pages **51-53** to find out about the *BNA Act* of 1867. If you do not have access to either version of your textbook, consult the historical documents provided below.
- Now that you have learned about the BNA Act, do the following activities:
 - o **Identify differences** between the maps of Canada in 1867 and today.
 - o **Identify similarities** between the political structure during the period of responsible government and at Confederation.
 - Establish connections between different areas of responsibility and identify the jurisdiction each one fell under in 1867.

Materials required

Useful resources, depending on personal preferences and availability:

- Device with Internet access
- Writing materials (paper, pencil, etc.)

Information for parents

• Discuss the ideas presented and potential answers with your child.

History of Québec and Canada

- 1 Identify differences between the maps of Canada in 1867 and today.
 - To do this activity, you can either use the online maps to help you visualize the differences, or look at the two maps below. (If you use the online versions, select the maps for 1867 and Today.)

Map of Canada, 1867



Map of Canada, today



Source:

https://platform.cheneliere.ca/myapp/cartes/56a47a58a49a53a85a90a93/56a47a58a49a53a8

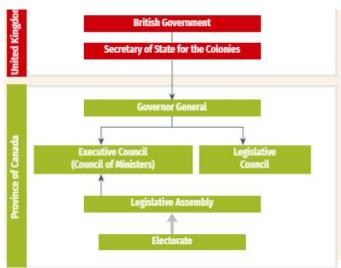
Differences:

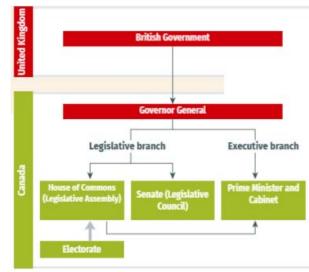
History of Québec and Canada

 Identify similarities between the political structure during the period of responsible government and at Confederation.

To do this activity, you can either use this <u>link</u> and go to slide 6 of 7 to help you visualize the similarities, or **look at** the two charts below:

History of Québec and Canada Political structure during responsible government, 1848 Political structure at





Confederation, 1867

<u>Source:</u>https://iplusinteractif.com/contenusstatiques/presentations/reflections4/3571_C1_org_1_05_BNAA_1867/index.html

Similarities:			





Establish connections between different areas of responsibility and identify the jurisdiction each one fell under in 1867

Place the following documents in the appropriate boxes.

Document 1

"Upon Confederation [religious] school systems were enshrined in the British North America Act (BNA), 1867. Both Quebec and Ontario were required by section 93 of the BNA Act to safeguard existing educational rights and privileges of the Protestant and Catholic minorities. Thus, separate Catholic schools and school boards were permitted in Ontario. However, neither province had a constitutional requirement to protect its French- or English-speaking minority."

Laurence K. Shook, 1971

Document 2

Document 3

Farm in New Brunswick, 1867



"The ... government's legislative responsibilities for Indians and Inuit derive from section 91(24) of the *Constitution Act, 1867* and responsibility was given to the Secretary of State for the Provinces Responsible for Indian Affairs."

Library and Archives Canada

Library and Archives Canada

Federal Jurisdiction	Provincial Jurisdiction	Shared Jurisdiction



Answer key:

1.

Differences:

- Québec and Ontario are larger today than they were in 1867.
- Prairie provinces like Alberta, Saskatchewan and Manitoba now exist where Rupert's Land once was.
- British Columbia, PEI and Newfoundland are now provinces of Canada instead of British colonies.
- There are now three Canadian territories on land that used to be the North-Western Territory and Rupert's Land.

*Other answers are possible.

2.

Similarities:

The British government still had ultimate power.

The Governor General of Canada was still appointed by the British.

The electorate (the people) still voted only for the Legislative Assembly.

*Other answers are possible.

3.

Federal Jurisdiction	Provincial Jurisdiction	Shared Jurisdiction
'	1	'
J		