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Writer's Notebook: Writing from Memory

Information for students

Published authors often write about their own memories or use them as inspiration for creating characters, coming up with ideas or invoking emotions in their work. Tap into your own memories to complete each of the tasks outlined below over the course of the week. Try to complete one task a day.

Instructions

On a new page of your notebook, write the title: **Writing Ideas Organizer**. Use this page to collect writing ideas as you explore the three ways of tapping into your memories (described below). Use a three-column chart to stay organized. See Appendix 1.

1. **Memories from a Room:** Each room in your home holds a huge collection of memories. On a blank page, sketch (a quick drawing with pencil) any room in your home that you spend a lot of time in (your bedroom or living room are good ideas). Try sketching from a "bird's eye view", meaning from above, as if you were looking down at the whole room. Label the areas in your sketch with memories you have from times that you were in that room. Some memories will make good writing ideas (usually the ones where something major happens or you felt a big emotion). For example: opening a special gift, a time you got hurt, an incident with a sibling or friend. Add your writing ideas to the ideas page in your notebook. Choose one of these ideas and quickwrite the story (writing as much as you can for about five minutes). See the examples in Appendix 2.
2. **Memories from a Photo:** Look through some photographs that have been taken over your lifetime. Think about the specific memories each photograph holds. Write down 3 or 4 writing topics and stories that jump out at you from your photos on the writing ideas page of your notebook. Choose one of these ideas and quickwrite the story. See the example in Appendix 3.
3. **Memories from an Object:** Do you collect special souvenirs? Do have a box where you store special items you want to treasure for years to come? Object can hold many memories for us. Look over some of the things you've acquired over your life and think of the memories associated with them. Write down 3 or 4 writing topics and stories that jump out at you on the writing ideas page of your notebook. Choose one of these ideas and quickwrite the story.

Remember, skillful writers are also skillful readers. Writers look to reading to inspire and guide them. Make sure you are reading for 30-45 minutes each day. The more you read, the better you get at both reading and writing!

Materials required

- A notebook, or lined paper
- A pen or pencil
- Family photos and household objects that hold memories

Information for parents

Children should:

- take 20-30 minutes each day to write in their writer's notebook

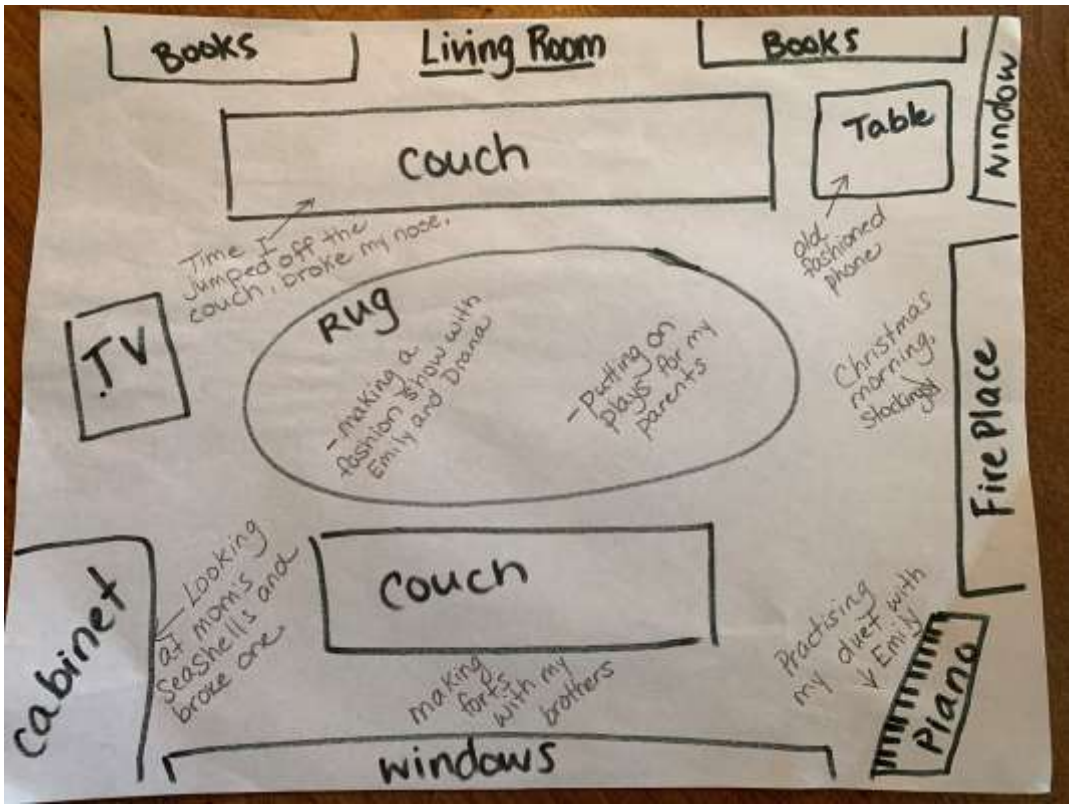
Parents could:

- read the instructions to your child if necessary
- ensure your child understands the task
- encourage your child to read and write daily

Appendix 1: Writing Ideas Organizer

Memories from a Room	Memories from a Picture	Memories from an Object
1) broken nose jumping from the couch 2) mom's seashells 3) Piano Duet with Emily 4) Building forts with my brothers	1) catching hail 2) new kitten Billy 3) falling in the mud 4) …	1) Grandma's false teeth 2) losing baby Mary doll at school 3) … 4) …

Appendix 2: Room Sketch



Quick Write: Mom's Seashells

I peer into the cabinet with the glass door. I can see my own reflection staring back at me and, just beyond that, memories of oceans from around the world. I know I'm not supposed to touch the precious collection. I know I will get in trouble if I'm found out. But…I can't help it. It is as though the huge conch shell, with its smooth shiny interior, is calling to me with its salty ocean voice. Gently, I put the cold metal knob and feast my eyes on the colourful collection. I reach in, gently picking up a shell shaped like a corkscrew. I imagine what kind of twisted creature used to live inside. Next, I lift a dried starfish, running my fingers over the bristly bottom.

Appendix 3: Memories from a Picture

Catching Hail

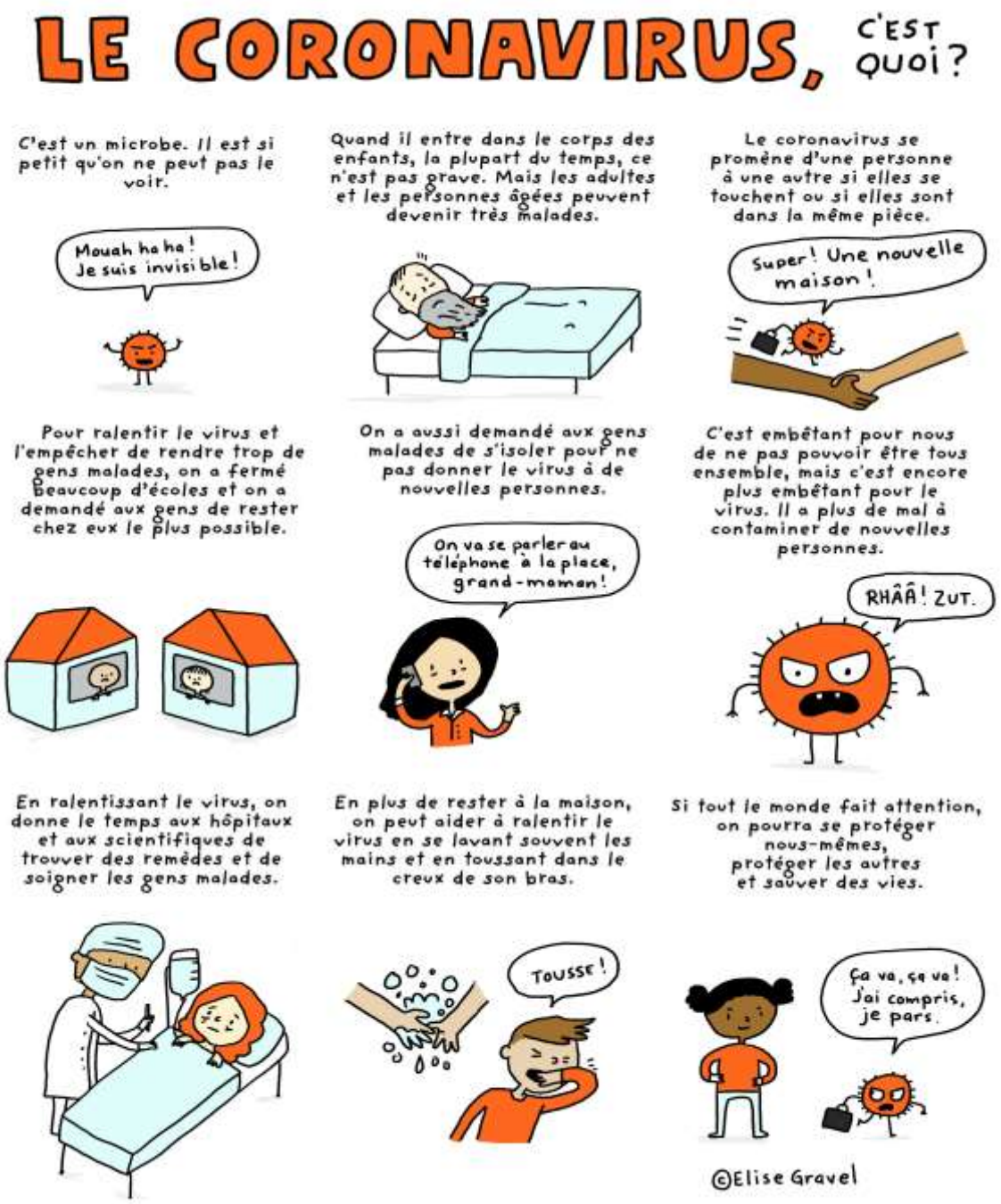
Plunk. Plink. Pang.

I could hear the tiny ice chunks hitting our aluminum window sill above the kitchen sink. My cat Solo prowled around the counter tops, circling nervously as he smelled the change in weather.

Le Coronavirus

Information for students

Lis le texte en forme de bande-dessinée créé par l'auteure-illustratrice québécoise Elise Gravel. Ensuite, réponds aux questions ci-dessous. Écris des phrases complètes dans tes réponses le plus possible.



1. Selon le texte, qu'est-ce que le coronavirus ? _____

_____

_____

2. Selon l'information du texte, comment se promène le microbe ? _____

_____

_____

3. Comment a-t-on réussi à ralentir la progression du virus ? _____

_____

_____

4. Pourquoi veut-on ralentir la progression du virus ? _____

_____

_____

5. En plus du confinement, identifie un deuxième moyen permettant de ralentir la progression du virus ?

_____

_____

6. Trouve dans le texte un verbe qui rime avec finir. _____

7. Cherche dans le texte 3 noms communs au singulier. _____

_____ _____

Materials required

- Du papier et un crayon
- Un dictionnaire bilingue
- Pour découvrir davantage à propos d'Elise Gravel, clique ici : http://elisegravel.com/

Information for parents

Parents should:

- read the instructions with their children, if necessary
- read the text with their children, if necessary
- discuss the questions with their children
- help their children find the answers
- help their children write complete sentences in French using known words

Coded Messages

Information for students

- This activity will focus your attention on your knowledge of the order of operations and your problem-solving abilities.
- Look for a pattern that exists from one answer to the next.
- Use the equation table and the substitution cypher (both provided in the Appendix) to write down your answers and identify the emerging pattern. The pattern will appear twice within the answers you get.
- The answers will lead you to identify the code that will allow you to solve the encrypted message. Continue the pattern for the letters that are not given an equation.
- Here is the encrypted message:

5335798201431779★017417★6674616122★
82300182★1056187★017417★8274105355627.★

Materials required

- The equations and the encrypted message
- The substitution cypher
- Writing materials, calculator (only to check your answers; do not use it to solve the equations – calculators make mistakes too!!), paper

Information for parents

About the activity

Children could:

- Ask for assistance whenever they get stuck.
- Use their calculator to check their answers (NOT to solve the equations)

Parents should:

- Read the instructions to their child, if necessary.
- Monitor their child's use of the calculator. Allow them to use the calculator only when they have finished performing the operations in each equation.
- Assist their child in reviewing the rules for the order in which arithmetic operations should be performed. Also, ask their child to explain what they are doing, as this will help the child make sense of things without the parent giving them the answer.
- The answers are provided in Appendix B, but should not be shared at the beginning for obvious reasons. Do this as a last resort or to complete the activity. Struggling to some degree is good and develops resilience. The satisfaction of "breaking the code" will be their reward!

Appendix A – Equation Table and Cypher

Information for students

- Did you know that cryptology – the science of writing messages in secret form - first appeared in Egypt in 1900 BCE. Even historical figures like Julius Caesar and Mary Queen of Scots used encrypted messages to communicate with their armies and allies. Today, this science also serves to protect digital data. To understand an encrypted message, you need to know how the message was encrypted. This can be done by mixing up or switching existing letters, which creates a cypher. The cypher is the "key" that helps you to understand the encrypted message. This activity will introduce you to a special type of encryption cypher: the substitution cypher.

Rules for the Order of Operations

- Some teachers use PEMDAS, while others use BEDMAS. They are essentially the same thing. The P in PEMDAS stands for Parentheses, while the B in BEDMAS stands for Brackets. Following BEDMAS, do the operations in the following order:
    1. Brackets – do all the operations in the brackets first
    2. Exponents – do the exponents
    3. Division and Multiplication – from left to right
    4. Addition and Subtraction – from left to right

Examples:

• 9 ÷ 3 x 2 + 4 - 2	• Divide 9 by 3	• (3+4) x (12÷3) ÷ 7 + 2^2	• Add 3 and 4, divide 12 by 3
• = 3 x 2 + 4 - 2	• Multiply 3 by 2	• = (7) x (4) ÷ 7 + 4	• Multiply 7 by 4
• = 6 + 4 - 2	• Add 6 and 4	• = 28 ÷ 7 + 4	• Divide 28 by 7
• = 10 – 2	• Subtract 2 from 10	• = 4 + 4	• Add 4 and 4
• = 8	•	• = 8.	•

Build Your Substitution Cypher

- The first thing to do is to find the answer to equation 1. What is a equal to? Write your answer in the result column on the right (where a= ?).
- Find the answer to equations 2 and 3, and write the answers in the column on the right (where b =? , c = ?).
- Do you see a pattern emerging? What can you say about the numbers that are appearing? How are they related? Are they increasing or decreasing in value? By how much? Write the differences between each answer in the circles to the right of the last column.
- What do you think the answer to equation 4 will be? Find the result. Were you right?
- Repeat for equation 5. Does your prediction still work? Confirm it with the answer to equation 6.

- If you don't see the relationship and have checked your calculations to make sure they are correct, focus on your answers and the differences between them.
- Once you have the pattern, you are ready to complete the substitution cypher from a to z. Start by writing the result for "a" under the "a", the result for "b" under the "b", and so on. Use the calculated answers and the pattern to complete the rest. Note that each letter is coded using at least two digits, meaning that any single digits are written as 01, 02, etc.
- You are now ready to substitute the letters for the encrypted message. The code was placed in a table to make it easier to decipher.

#	Equation	Result
1	$6 - 5 + 25 - 13 + 14 - 26 =$	a =
2	$26 + 8 - 15 + 35 - 62 + 12 =$	b =
3	$3 \times 3 \times 2 \div 6 \times 27 \div 9 =$	c =
4	$32 - 3 \times 4 + 36 \div 9 - 12 \div 4 - 7 =$	d =
5	$25 + (15 \div 5) \times (24 + 42) \div 11 - (6 \times 6) + 10 =$	e =
6	$(3^2 + 4^3 \times 2 - 12) \div (65 \div 13) - 3 =$	f =
7	$(42 \div 6) + (2^3 \times 10 - 17) \div 7 + 3^2 + 2 =$	g =
8	?	h =

Substitution Cypher

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				

Solve the Encrypted Message:

53	35	79	82	01	43	17	79	★	01	74	17	★	★
66	74	61	61	22	★	82	30	01	82	★	105	61	87
★	01	74	17	★	82	74	105	35	56	27	.	★	★

If you are up to it, here is another encrypted message using the same substitution cypher.

What are Dr. Seuss' words of wisdom?

82611401105★1056187★017417★8274871774★
82300156★82748717, 8230177417★3579★5661★
615617★0148359217★953061★3579★10561871774★
82300156★1056187.

Discussion

- What pattern did you observe? Can you write an equation for h? What other type of pattern could have been created? What does the star represent in the cypher? What could be done to make the cypher more complex? Can you create a code for your friends to break?

Interesting Resources

- The following are online resources that may be of interest to those who want to learn more about the order of operations or cryptology. They are also the source of some of the information provided above.

Order of Operations; Cryptology Timeline; The Secret Language; and Encryption System

Appendix B – Hints and Solutions

SPOILER ALERT: THE ANSWERS TO THE ACTIVITY FOLLOW

Hints and Solutions for Teachers or Parents

- The pattern to be identified: the answers increase by 3, then by 5 and then by 5 again.
  - If your child/student is struggling, ask them if the answers represent odd numbers? Even numbers? Multiples of two? Three? Help them focus on the **pattern that exists between the answers** to each equation.
  - Did they remember that a, b and c must be written as 01, 04 and 09? You may tell them that all letters are represented by a two-digit code, except for Y and Z, which are each represented by a three-digit code.

Substitution Cypher (Solution)

a	b	c	d	e	f
01	04	09	14	17	22
g	h	i	j	k	l
27	30	35	40	43	48
m	n	o	p	q	r
53	56	61	66	69	74
s	t	u	v	w	x
79	82	87	92	95	100
y	z				
105	108				

- The answer to the first encrypted message, and the only one that needs to be solved, is:
  - Mistakes are proof that you are trying.
- The answer to the second encrypted message provides some of Dr. Seuss' words of wisdom:

Today you are truer than true, there is no one alive who is youer than you.

Metabolism of Plants and Animals

Information for students

- First, watch these two videos:
  - Introduction to Metabolism1
  - Photosynthesis[2]
- Second, check your understanding using the questions in Appendix A.
- Now you are ready to play The Oxygenator Game and The Cellular Respiration Game!

Materials required

- Device with Internet access

Information for parents

About the activity

Children should:

- watch the two videos hyperlinked above
- complete Appendix A to check their understanding

[1] MooMooMath and Science, « Introduction to Metabolism : Biology Basics, » n.d., SafeYouTube, Video, 2:43, https://safeyoutube.net/w/U4ME
[2] « Photosynthesis – Video for Kids, » n.d., SafeYouTube, Video, 3:08, https://safeyoutube.net/w/5hNE

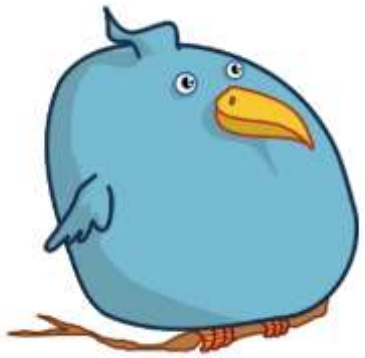
Appendix A – Check Your Understanding

Information for students

- Watch the video "Introduction to Metabolism[3]" and answer questions 1 to 5[4].
- Watch the video *"Photosynthesis – Video for Kids[5]" and answer questions 6 to 10.*

1. There are two main categories of metabolism: one for plants and one for animals. What is the one for animals called?

   _____



2. What is the definition of metabolism?

   _____

   _____

   _____

3. Not including energy, what are the inputs and outputs of cellular respiration?

   _____ + _____ → _____ + _____

4. What are the three main types of macromolecules that all organic matter is made of?

   A __ __ N __ __ C __ D

   C __ R __ __ H Y __ __ __ __ __

   L __ __ __ __

5. What is the purpose of an enzyme?

   _____

   _____

   _____

[3] MooMooMath and Science, "Introduction to Metabolism: Biology Basics," n.d., SafeYouTube, Video, 2:43, https://safeyoutube.net/w/U4ME

[4] OpenClipart, "Fat Bird Vector Clip Art," October 18, 2015, Free SVG, SVG, https://freesvg.org/fat-bird-vector-clip-art

[5] "Photosynthesis – Video for Kids," n.d., SafeYouTube, Video, 3:08, https://safeyoutube.net/w/5hNE

6. There are two types of tube-like structures that carry nutrients and water to the different parts of a plant. What are these structures called?

P __ L __ __ M

__ __ __ __ M

7. Leaves[6] breathe in something through small pores on their undersides. These pores are called 'stomata'. What is the gas called that enters these pores?

__ A R __ __ N

D __ __ X __ __ E

8. Not including energy, what are the inputs and outputs of photosynthesis?

_____ + _____ → _____ + _____

9. Given the chemical reaction that takes place during photosynthesis, what macromolecule do you think a piece of fruit is mostly composed of?

_____

_____

_____

10. The relationship that animals have with plants is very important. We could call it a mutually beneficial, or symbiotic, relationship. Explain.

_____

_____

_____

_____

[6] AnnaliseArt, "Potted Plant Gardening Nature Plant," April 21, 2020, Pixabay, PNG, https://pixabay.com/illustrations/potted-plant-gardening-nature-plant-5067645/

Means of Transport Across Space and Time[7]

Information for students

When learning about a territory, it is useful to understand the means of transport that allow for the movement of people, animals and goods from one location to another. The means of transport used in a territory are often related to territorial characteristics (such as the location of villages, the existence of roads or major waterways, or varying weather conditions). For example, airplanes are sometimes used to travel between villages that are isolated and have no roads connecting them.

Instructions:

- Consider the means of transport used on the territory of present-day Quebec. How might territorial characteristics affect the means of transport used? (For example, are certain means used more in winter than in summer? Are certain means used for travelling longer distances than for shorter distances? Do some regions use certain means of transport more than others? Why?) Discuss your ideas with a parent or a friend.
- Now take a historical perspective. Consider how means of transport have changed in Québec over time:
  - Using your available resources, complete the table in Appendix 1 to situate in time the emergence of different means of transport on the territory of present-day Quebec.
  - Choose a time period from the past and compare the means of transport used in two different societies. After consulting LEARN's "Societies and Territories" web page, compare the development of transportation in 1905 in Québec and in the Prairies. Complete the table in Appendix 2.
- It's your turn to use your creativity. View this video on the history of cars (1:15). How have cars changed over the years? What transportation needs might exist in 100 years? Draw or build a prototype of a futuristic car (or another mean of transport). Use materials of your choice.

Materials required

- Digital device with an Internet connection (optional)
- Writing and creative materials (paper, cardboard, pencils, mini building bricks, etc.)
- Printer

[7] This activity is an adapted translation of a lesson developed in collaboration with the GRUS.

Information for parents

Students could do research using books or the Internet to build their background knowledge on the topic.

Parents should read the instructions with their child and review with them how to complete the tables in the Appendix.

Appendix 1 – Situating Means of Transport in Time

Information for students

Using the table below, situate the following means of transport according to the time period when they began to be used in what is now Québec.

automobile - plane - steamboat - bicycle - horse-drawn carriage - canoe - horse - train - snowmobile - skateboard – kayak – electric car - snowshoes - helicopter - sailboat

Time period	Means of transport
Before 1500	
1500s	
1600s	
1700s	
1800s	
1900s	
2000s	

Appendix 2 – Comparing Means of Transport in Two Societies

Using the table below and LEARN's "Societies and Territories" web page, compare the means of transport used in Québec in 1905 with the means of transport used in the Prairies in the same time period.

Québec in 1905	Characteristics that describe the means of transport in both societies in 1905	The Prairies in 1905