



Table of Contents

| | |
|--|----|
| Imagine the World After COVID-19 | 2 |
| #Mission FLS – Les enfants de la télé..... | 3 |
| Take to the Links..... | 4 |
| Appendix A – Mini-Putt Course Information..... | 6 |
| Appendix B – Formula Sheet..... | 7 |
| Appendix C – Answer Key..... | 8 |
| Levitating a Plastic Bag..... | 10 |
| Appendix A – Levitating a Plastic Bag..... | 12 |
| Reflect on Beauty Standards, then Get Moving!..... | 15 |
| Design a Logo..... | 17 |
| All in This Together? | 18 |
| The First Phase of Industrialization | 20 |
| Appendix..... | 21 |
| Answers: | 24 |



Imagine the World After COVID-19

Information for students

Many events such as festivals, graduation ceremonies, sporting events, plays and live music have been postponed or cancelled. Some have been able to go online (workouts, benefit concerts, YouTube and Instagram events). Think about some of the new ways of doing things. How many of these temporary measures will still be in place in a post COVID-19 world?

Read the article "[When will sports come back?](#)" Choose one of the prompts listed below and write a journal entry of at least two pages in which you take a stance on the issue. You can also create a video where you present your ideas for a wider audience.

What do you miss most during this time of cancelled events? Do you think others do as well?

- Why do we attend events such as sports, concerts, festivals or plays communally? What purpose do these events serve? Are they important? Explain why.
- Is it fair for athletes to put themselves and their families at risk for the sake of the team owners? Explain your stance with references to the article.
- How do you think the world of sports and entertainment might change after COVID-19? What are the positive aspects? What are the more negative ones?

Materials required

- Computer with Internet access
- Writing implements and a journal

Information for parents

About the activity

Students should:

- Discuss their thoughts on the article with others.

Parents could:

- Help students develop their ideas and their stance on the issue by discussing the article with them.



#Mission FLS – Les enfants de la télé

Information for students

Cette activité t'aidera à accomplir la mission FLS suivante : « Je regarde une émission de télévision en français avec ma famille ou mes amis et je parle de cette émission de télévision ».

- Qu'est-ce que tu aimes regarder ? Des documentaires en ligne ? Des séries dramatiques ? Des comédies ? Des émissions de variétés ?
- Cette semaine, on te propose de découvrir la télévision francophone et de parler de tes découvertes autour de toi !

Voici comment tu peux le faire :

- **Informe-toi** : Parle aux gens autour de toi. Ils connaissent peut-être des chaînes de télévision ou de vidéo sur demande amusantes et intéressantes ;
- **Fais un choix** : Choisis une émission qui t'intéresse et regarde-la avec ta famille à la maison ou en ligne avec des amis ;
- **Parles-en** : Qu'est-ce que tu as aimé ? Qu'est-ce que tu as appris ? Regarderais-tu cette émission ou un autre épisode de cette émission ? Qui aimerait ce genre d'émission ?

Pour aller plus loin

- Partage tes coups de cœur vidéo (en ligne ou à la télévision) avec le mot-clic #MissionFLS.

Materials required

- L'application [Netflix party](#)
- [Mission FLS](#)

Information for parents

In this activity, children will practise:

- appreciating francophone cultural references
- listening in French

Parents can:

- share their favorite French television program or online francophone channel with their child
- watch the program with them and talk about it



Take to the Links

Information for students

- Mylène, Maura and Francesca decided to build a mini-putt course/garden to beautify their school's outdoor area. They drew up a design and now need to buy the materials. They have a budget of \$600. They need to buy the following items:
 - Green felt carpeting to cover the surface of the mini-putt course
 - Wood for the border of the course
 - Plastic barriers surrounding the triangular obstacles
 - Paint for the wooden border and plastic barriers
 - Dirt and flowers to be placed inside the obstacles
- They went to the store but when they arrived, they realized that the printer did not print out all the information on the blueprint. The original file is on the school computer, which they can't access because it's the weekend. They need to finish the project for Monday.
- They need to come up with the missing measurements to determine their costs. They have a certain amount of money, and they can't go over budget. They need to determine the following:
 - The area of the felt carpeting needed for the mini-putt course
 - The perimeter of the course
 - The length of the plastic used to surround the obstacles along the course
 - The area of the obstacles
 - The quantity of flowers they can afford and fit into the obstacles along the course.

Materials required

- Appendix A: Mini-Putt Course Information
- Appendix B: Formula Sheet
- Appendix C: Answer Sheet



Information for parents

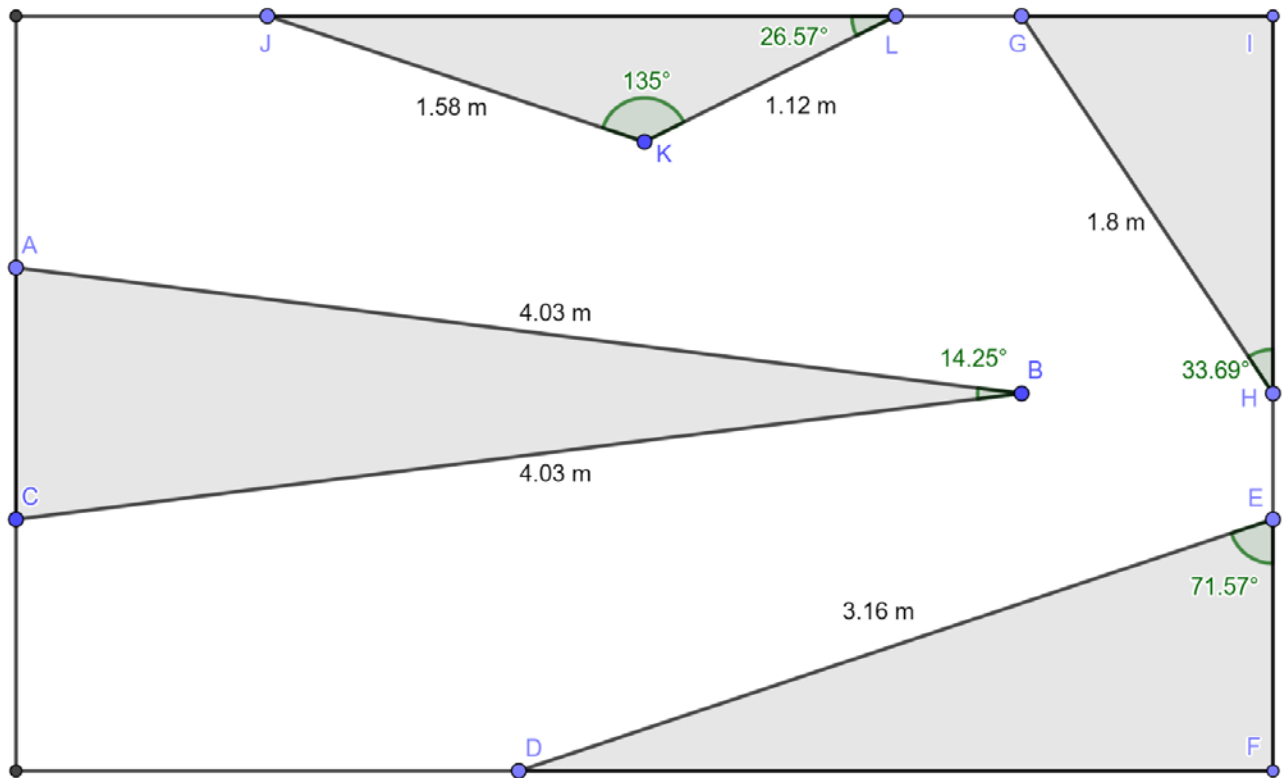
About the activity

- Read the instructions to your child, if necessary.
- Discuss the task together with your child, outlining what steps they need to carry out.
- Once the task is completed, you and your child can go over the task with the answer key provided (Appendix C).
- 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 – Mini-Putt Course Information

Information for students



| Measurements | Angles | Pricing Information |
|----------------------------|-------------------------------|--|
| • $\overline{AB} = 4.03$ m | • $\angle ABC = 14.25^\circ$ | • The green felt carpeting costs \$13.97 per m^2 . |
| • $\overline{BC} = 4.03$ m | • $\angle DEF = 71.57^\circ$ | • The wood costs \$1.45 per m. |
| • $\overline{DE} = 3.16$ m | • $\angle GHI = 33.69^\circ$ | • The barrier costs \$4.80 per m. |
| • $\overline{GH} = 1.80$ m | • $\angle JKL = 135.00^\circ$ | • A can of paint costs \$18.99 and covers 260 metres. |
| • $\overline{JK} = 1.58$ m | • $\angle KLJ = 26.57^\circ$ | • A bag of soil costs \$1.89 and covers $1 m^2$ of land. |
| • $\overline{KL} = 1.12$ m | | • Each basket of flowers costs \$5 and covers $0.05 m^2$. |

Additional Information

- Triangle ABC is an isosceles triangle.
- The obstacles are represented by triangles. The barriers surround their edges along the course.
- The hole will be cut into wood at the end of the course. There is no need to calculate its area.
- The interior and the exterior of the wooden border must be painted with two coats.
- The barriers must be painted on the outside and painted with two coats.



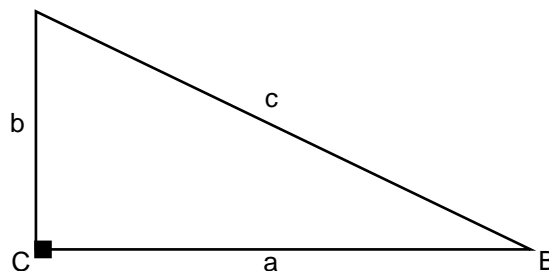
Appendix B – Formula Sheet

Trigonometric Ratios

$$\sin A = \frac{\text{length of the leg opposite } \angle A}{\text{length of the hypotenuse}}$$

$$\cos A = \frac{\text{length of the leg adjacent to } \angle A}{\text{length of the hypotenuse}}$$

$$\tan A = \frac{\text{length of the leg opposite } \angle A}{\text{length of the leg adjacent to } \angle A}$$



Sine Law

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

Hero's Formula

$$\text{Area} = \sqrt{p(p-a)(p-b)(p-c)}$$

Trigonometric Formula

$$\text{Area} = \frac{a \times b \times \sin C}{2}$$

Cosine Law

$$c^2 = a^2 + b^2 - 2ab(\cos C)$$



Appendix C – Answer Key

| Triangle ABC | | Triangle DEF | |
|--------------|---------------------|--------------|----------------------|
| Angle ABC | 14.25° | Angle DEF | 71.57° |
| Angle BCA | 82.875° | Angle EFD | 90° |
| Angle CAB | 82.875° | Angle FDE | 18.43° |
| Length AB | 4.03 m | Length DE | 3.16 m |
| Length BC | 4.03 m | Length EF | 1 m |
| Length CA | 1 | Length FD | 3 m |
| Area | 2 m ² | Area | 1.5 m ² |
| Triangle GHI | | Triangle JKL | |
| Angle GHI | 33.69° | Angle JKL | 135° |
| Angle HIG | 90° | Angle KLJ | 26.57° |
| Angle IGH | 56.31° | Angle LJK | 18.43° |
| Length GH | 1.8 m | Length JK | 1.58 m |
| Length HI | 1.5 m | Length KL | 1.12 m |
| Length IG | 1 m | Length LJ | 2.5 m |
| Area | 0.75 m ² | Area | 0.625 m ² |

Total area of the felt carpeting

- Area of the rectangle $5 \times 3 = 15 \text{ m}^2$
- Total area of the obstacles $2 + 1.5 + 0.75 + 0.625 = 4.875 \text{ m}^2$
- $\angle BCA = 78.69^\circ$ and $\angle EDC = 78.69^\circ$ (because $180 - 59.04 - 42.27 = 78.69$). Area of the barriers: $15 - 4.875 = 11.125 \text{ m}^2$

Cost of the felt carpeting

- $\angle JFG$ and $\angle KFG$ share the same angle $11.125 \times 13.97 = \$155.42$

Cost of the wood

- Perimeter of the course $5 + 3 + 5 + 3 = 16 \text{ m}$
- $16 \times 1.45 = \$23.20$

Cost of the barriers

- Length of side barriers (not against the wood)
 $4.03 + 4.03 + 3.16 + 1.8 + 1.58 + 1.12 = 15.72 \text{ m}$
- $15.72 \times 4.80 = \$75.46$



Cost of the paint

- Paint required $16 \times 4 + 15.72 \times 2 = 95.44 \text{ m}$
- Only one can of paint at \$18.99 is required

Cost of the soil

- $4.875 \rightarrow 5$ (you can't buy 4.875 bags of soil)
- $5 \times \$1.89 = \9.45

Total cost so far

- $\$155.42 + \$23.20 + \$75.46 + \$18.99 + \$9.45 = \282.52

Cost of flowers

- $\$600 - \$282.52 = \$317.48$ (rounded to \$315 so as not to go over budget)
- $315 \div 5 = 63$
- $63 \times 0.05 = 3.15 \text{ m}^2$
- The remaining budget allows for 63 baskets of flowers to be purchased, and they will all fit within the 4.875 m^2 of obstacle space.



Levitating a Plastic Bag

Information for students

The **triboelectric series** is a list that ranks materials according to their tendency to gain or lose electrons.

The process of electron transfer as a result of two objects coming into contact with one another and then separating is called **triboelectric** charging

Substances in the Triboelectric Series¹

| Tendency | Substance |
|---|--|
| High affinity for capturing electrons (tendency to acquire a negative charge) | Plastic Sulphur Gold Nickel, Copper Hard Rubber (Ebonite) Wood, Yellow Amber, Resin |
| Strong tendency to give up electrons (tendency to acquire a positive charge) | Cotton Paper Silk Lead Wool Glass |

The activity in Appendix A is an experiment related to the triboelectric series.

- If you have the required materials, please complete the experiment and answer the questions.
- If you do not have the required materials, you can watch the experiment [here](#). After viewing the video, please answer the experiment questions.
- If you do not have the required materials and you are unable to access the internet, you can use the instructions and images to answer the experiment questions.

¹ Marie-Danielle Cyr, Dominique Forget and Jean-Sébastien Verreault, Observatory: The Environment (Ville Saint-Laurent: ERPI Publications, 2009), 146.



Materials required

- Thin plastic bag (e.g. produce bag, pet “poop” bag)
- Scissors
- Balloon
- Cotton towel

Information for parents

About the activity

Children should:

- research the differences between charging by friction, conduction and induction
- identify which type of charging is utilized in this experiment

Parents can:

- read the instructions to their children, if necessary
- cut the plastic bag, if necessary



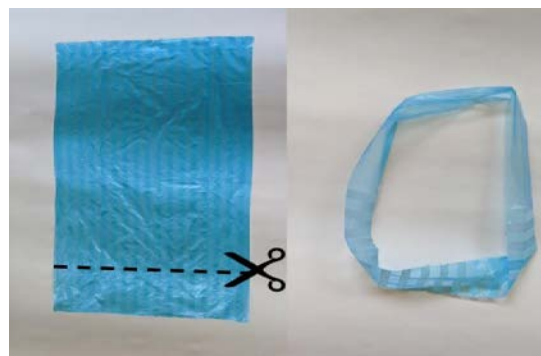
Appendix A – Levitating a Plastic Bag²

Information for students

This experiment uses the science of static electricity to levitate a plastic bag.

Experiment instructions³

1. Cut a 1.5 cm wide strip from the open end of the thin plastic bag. This will give you a plastic ring




2. Blow up a balloon and tie it off.



² Aaron Berenbach, "At Home Experiment 2: Static Levitation," Explosions Inc., October 9, 2014, <http://www.explosionsinc.com/blog/2014/10/09/at-home-experiment-2-static-levitation>

³ Images from: Zachariah Likely, *Levitating a Plastic Bag: Image Collection*, May 9, 2020, JPEG, New Carlisle.

- 
3. Lay the plastic ring flat and, using the piece of cotton material, rub the plastic in one direction 15 to 20 times.

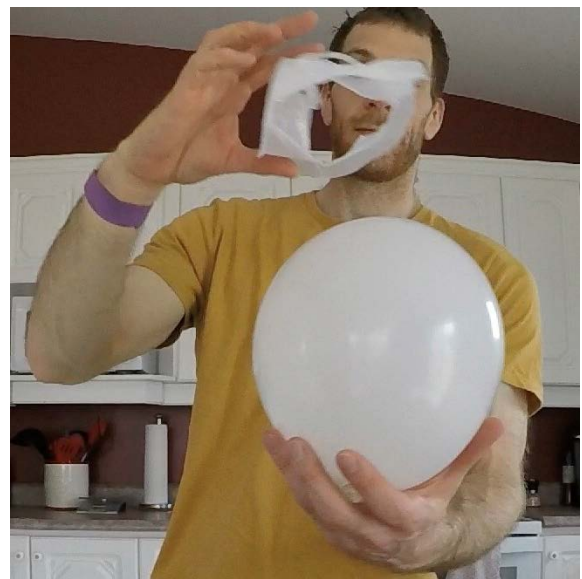


4. Rub the balloon with the cloth about the same number of times.



5. Before it can fall to the ground, bring the balloon under the plastic ring. The ring should be held in the air as long as the balloon is underneath it.

***** Be careful not to let the ring come into contact with a wall or another person or it will lose its ability to levitate. *****



6. This takes some practice so do not feel discouraged if at first the ring insists on sticking to the balloon. Recharge the ring and the balloon and try again.



Experiment questions

1. Why do you think the plastic band is « levitating? »
2. Using the triboelectric series on the first page, draw a diagram showing the electrical charge of the balloon and plastic band before and after both are rubbed with the cotton towel.
3. Design an experiment using other household materials to test your hypothesis. Include the household materials used in the experiment as well as the specific steps carried out.



Reflect on Beauty Standards, then Get Moving!

Information for Students :

Activity 1 : “I’ve had it with...”

- Watch [this video \(58 seconds\)](#). Note that it is a French video, but the message is equally as relevant in English.
- What are your thoughts after watching the video? What aspects of societal beauty standards frustrate you? What strategies do you use to navigate the messages that society and mass media often promote about physical appearance.
- Discuss with a friend or family member.

Activity 2 : High Intensity Interval Training (HIIT)

- What do you know about High Intensity Interval Training? [Watch this video](#) up until the 4 minute mark to learn more about HIIT and the proven benefits of this type of exercise.
- Depending on your current level of personal fitness, complete one of the following HIIT workouts:
 - [Beginner](#)
 - [Intermediate](#)
 - [Advanced](#)
 - [Remember](#) that technique comes before intensity – practice the movement first to make sure you can do them with the proper technique, and stop the repetitions if you feel that you’re too tired to complete the movements with proper technique.

If you would like to view these activities in a Google Slide format in French, consult the [Reste actif!](#) website.

Materials Required

- None



Information for parents

About the activity

Children will:

- Reflect on societal beauty standards.
- Learn about High Intensity Interval Training (HIIT) and complete a HIIT workout.

Parents could:

- Discuss stereotypes in sports with your child.
- Learn how to juggle alongside your child.



Design a Logo

Information for students

A logo is one of the tools used by companies to create a brand. Every day we are surrounded by countless logos. Can you think of some examples? The logo of your favourite brand, like Nike or Apple, was first drawn by an artist.

Your assignment is to create a logo for yourself! Think of what symbols might represent you, your likes and interests. Logos can be based on typography, be just an image or a combination of both. Think of how your logo would look on a business card, website or a sign.

Instructions

- First, using pencil and paper sketch up some ideas. This can include your initials, things you like to do, career path, etc. It doesn't need to be perfect, just make quick sketches.
- When you start to see an element you may want to use, do a clearer drawing on a separate piece of paper. Maybe use coloured pencils or markers to add to your design.
- If you have access to a computer, try to create your logo on the computer. Students who do not have access to a computer can still work on their logos by using several sheets until they come up with a design that suitably represents who they are.
- A finished logo should have the style that best represents you. Have fun and look around your home to see how many logos you can find: they're everywhere!

Materials required

- Pencils, paper to sketch, coloured pencils and markers, ruler for drawing (optional)

Information for parents

About the activity

Children should:

- Take time to look for logos within their homes.
- View the video on creating a logo. (<https://youtu.be/DHkxn1siy7k>)

Parents could:

- View the video and take part in searching out logos within their home. Everything has a logo!



All in This Together?

Information for students

- During the last months, as the whole world is paralyzed by a global pandemic, words of encouragement are being delivered by celebrities on television and on social media, reminding us that, “we’re all in this together.” Is that the case? It would be easier to believe the messages of hope, if they weren’t filmed in giant mansions with back yards that look like parks, cinema rooms & tennis courts – while some other people simply can’t afford to social distance and protect themselves.
- While some historians argue that disasters such as armed conflicts and pandemics usually cause social inequalities to decrease momentarily, others point out that right now, as the Coronavirus crisis continues, the vulnerable are hit the hardest. It’s hard to believe that the Covid-19 is a “great equalizer,” a term that has been used by certain anthropologists, and recycled by politicians and celebrities.
- Although it’s true that wealthy people could still die from the virus, it’s undeniable that celebrities can use strategies most can’t employ. Some of their quarantine posts are igniting debates online because they are using their privilege to their advantage and still documenting their every move on social media. Some examples include:
 - Wearing protecting equipment that even health workers can’t always access
 - Being tested for Covid-19 without showing symptoms, despite the shortages and the supposedly strict criteria
 - Travelling from growing hotspots to rural areas, in defiance of nonessential travel ban and at the risk of infecting more people
- Considering that many around the world, even in developed countries, don’t have access to reliable internet, clean water or sanitation, and that some famous & wealthy people have joked that being confined in their home and homeschooling their children was inhumane or felt like spending time in jail, what is your opinion on those disparities?
 - Do you see them as being disconnected from the reality and unable to see how privileged they are?
 - Do you think they are entitled to what they’ve earned and are allowed to struggle too during these unprecedented times?
- Famous artists, celebrities and influencers have kept in touch with their fans during the global crisis in a lot of different ways. While some are displaying their wealth and complaining about not being able to travel, some have been performing live for free, sending genuine words of encouragement, making donation to non-profit organization, etc.
 - If you follow celebrities online, or have seen what has been posted by some of them, do you remember cringing, rolling your eyes, feeling envious, inspired, moved? Why exactly? Explain. (If you don’t usually know what celebrities are up to, you can easily research online.)



Ethics and Religious Culture

- Do you think celebrities, because of their wealth, have an added responsibility during worldwide crisis like the ongoing pandemic? Share your opinion.
- Should they be held accountable because they are in the public eye – when most of them aren't nearly as wealthy as the world's top billionaires? Discuss.

Materials required

- Device with Internet access / Social Media
- Paper and writing materials

Information for parents

About the activity

Children could:

- Remember the goal is not to have the right answer but to reflect on the issues of fame, wealth and privilege.

Parents should:

- Discuss the questions with your child and share your thoughts with them. Perhaps encourage them to contact a classmate if they have more questions or want to chat and compare their findings.



The First Phase of Industrialization

Industrialization and growing transport networks throughout the 1800s went hand in hand in Canada. It was in this time period that the Great Lakes were connected to the St. Lawrence River and then to the Atlantic by rails and canals.

Information for students

- Click on this link to bring you to the online version of your *Reflections* History textbook: <https://www.iplusinteractif.com/books/187/254/3804/67482/235996>. **Pages 59-63** will teach you a little about the eastern continental transportation network, which came about as a result of industrialization.
- If you do not have access to the Internet, read pages 59-63 of your *Reflections* textbook. If you do not have your textbook, you can look at the historical documents below.
- Now that you have learned about the eastern continental transportation network, do the following activities:
 1. **Situate documents in time**, deciding if they represent the period before or after 1875.
 2. **Determine a consequence** of the construction of new railway lines.
 3. **Determine a continuity** in the Canadian economy throughout the 19th century.

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.



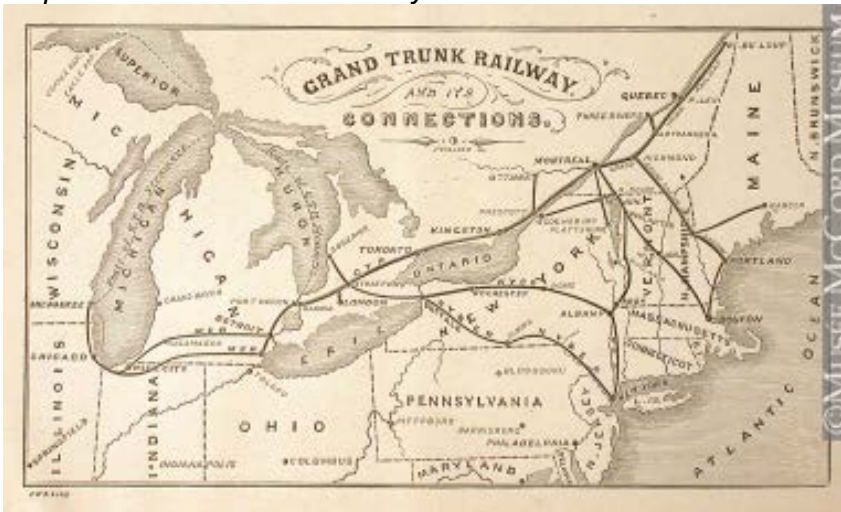
Appendix

1. Documents 1 and 2 refer to railway networks constructed during the second half of the 19th century.

Situate the documents in time by entering the numbers in the appropriate spaces below.

Document 1

Map of the Grand Trunk Railway



McCord Museum: <http://collections.musee-mccord.qc.ca/en/collection/artifacts/M930.50.1.72>

Document 2

Map of the Intercolonial Railway



Virtual Museum of Canada:

<http://www.museevirtuel.ca/edu/ViewLoitDa.do;jsessionid=65A742EFE1F8664A5A66AA99B2074848?method=preview&agora=1&id=19101&lessonId=758&lang=EN>



History of Québec and Canada

| Before | | After |
|--------|---------------|-------|
| | <h1>1875</h1> | |

- Railways opened up an entire realm of possibilities for the new country of Canada. Observe the map below and identify a consequence of the construction of new railway lines.

Document 3

Map of Canada, 1871



Library and Archives Canada

Answer:



History of Québec and Canada

3. Mechanization and the expansion of the rail network contributed to the development of the forest industry.

Read the documents below and **identify a continuity** in the Canadian economy throughout the 19th century.

Document 4

| 1800-1850 | 1850-1900 |
|---|---|
| <p>“The pattern of the lumber trade is hard to summarize, since international markets were widely separated. Beginning in the 1830s, increasing quantities of lumber were shipped from British North America to Britain, the US and the West Indies.”</p> | <p>“During the period of reciprocity with the US and the construction of railways and canals, the importance of the American market grew: 400 million board feet of British North American lumber passed through Oswego, NY, between 1864 and 1866, and wood exports to the US from the Province of Canada were worth almost \$7 million in 1866-67.”</p> |

The Canadian Encyclopedia

Answer:



Answers:

1.

| Before | | After |
|----------|-------------|----------|
| 1 | 1875 | 2 |

2.

British Columbia joined Canada as a province **OR** Colonization of new territories.

3.

The forest industry remained a driving force in the Canadian economy, both in the first and second halves of the 19th century.