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| Instructions for Using Remote Learning Projects |
| These materials were developed with the intention of easing the transition between in-class and temporary remote learning. Learning experiences are aligned with curricular outcomes and assessment tools have been included with each project.  **Note:**   * 1. The teacher either sends a link to the appropriate project or sends the document itself.   2. The teacher ensures that parents/caregivers receive any required school supplies (bin with pencils, markers, paper, etc.).   3. The teacher reassures parents/caregivers that communication will be maintained between home and school.   4. Parents/caregivers may access additional resources at:      + My Learning at Home ([www.edu.gov.mb.ca/k12/mylearning](http://www.edu.gov.mb.ca/k12/mylearning))      + My Child in School ([www.edu.gov.mb.ca/k12/mychild/index.html](http://www.edu.gov.mb.ca/k12/mychild/index.html)) |

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| PROJECT OVERVIEW | |
| Grade: | 6 |
| Main Subject: | Social Studies |
| Big Idea: | Shaping Contemporary Canada |
| Title: | IMPACT OF TECHNOLOGY AND INNOVATION ON LIFE IN CANADA |
| Cluster: | Shaping Contemporary Canada (1945 to Present) |
| Duration: | 4–6 weeks |
| Materials: | PowerPoint, BLMs, access to technology and internet to participate in activities and conduct research. Students may need poster paper for presentations and a journal to record their thinking. |
| Short Description: | Students will explore the impact of Canadian technology, innovation, and inventions on life in Canada through 4 activities: 1) examination and sorting of Indigenous technology, innovation, and inventions; 2) interviewing a family/ community member; 3) researching a contemporary Canadian technology, innovation, or invention; and, 4) creating their own technology, innovation, or invention through an inquiry-style process that culminates in writing a persuasive letter/email to a person of influence. This project is combination of synchronous and asynchronous activities. |

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| Learning Outcomes |
| Social Studies: www.edu.gov.mb.ca/k12/cur/socstud/index.html  6-KE-058, 6-KE-059, 6-VI-007A, 6-KI-021, 6-KG-047  English Language Arts: www.edu.gov.mb.ca/k12/cur/ela/index.html 6 to 8 Grade Band: Language as … Sense Making, … System, … Power and Agency, … Exploration and Design  Mathematics: www.edu.gov.mb.ca/k12/cur/math/index.html 6.N.5, 6.N.6, 6.SP.2, 6.SP.3  Arts Education: www.edu.gov.mb.ca/k12/cur/arts/index.html A-C1, A-C2, A-C3, DR-C1, DR-C2, DR-C3, M-Cl, M-C3, DA-C1, DA-C2, DA-C3 |

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| Assessment | | | | | | | | | | | | | |
| LANGUAGE ARTS | | | | | MATHEMATICS | | | SCIENCE | | | SOCIAL STUDIES | | |
| COMP.  Listening &  Viewing | COMP.  Reading | COMM. Speaking & Represent. | COMM. Writing | Critical Thinking | Knowledge  and  Understanding | Mental Math &  Estimation | Problem Solving | Knowledge  and Understanding | Scientific Inquiry Process | Design Process &  Problem Solving | Knowledge  and Understanding | Research  and Communication | Critical Thinking and  Citizenship |
| X | X | X | X | X | X |  | X |  |  |  | X | X | X |

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| Original concept created by: | K. Berezka, J. Fast, R. Rintoul, L. Connor, G. Bridgeman, V. Noseworthy |

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| Learning Experiences and Assessment |
| **Question: How have technology and innovation impacted life in Canada, particularly since 1945?** |
| **Teacher’s instructions:**  This project meets the GLOs of Identity, Culture and Community, The Land: Places and People, Historical Connections, and Economics and Resources. There are 4 activities that students explore to support their inquiry/learning about Canadian technology, innovation, and inventions and its impact on life in Canada:  1) examination and sort of Indigenous technology & innovation,  2) interview of family/community member,  3) researching a contemporary Canadian technology, innovation or inventions,  4) creation of their own technology, innovation, or invention.  Life and quality of life is reinforced throughout the project from a Sustainable Development lens by analyzing impact on life in 3 areas: human health and well-being, the environment, and the economy. (See MB ED Sustainable Development info for Grades 5–12: [Guide to Grades 5 to 12 Sustainability Poster:Layout 1.qxd (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/esd/pdfs/teachers_guide_poster.pdf)).  Follow the PowerPoint and notes on each slide for extra information, suggestions or alternate ideas, but adapt and rearrange the activities as makes sense for your context. Animations are embedded throughout the PowerPoint to support the pace of learning.  **Step-by-step instructions for students:**  Enjoy the learning by noticing, wondering, asking lots of questions, sharing your thinking during discussion times, and thinking about what technology, innovation, and/or inventions are of special interest to you. Follow teacher direction and the prompts in the PowerPoint. |

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| APPENDIX (Printable Support Materials Including Assessment) |
| Grade 6: Diverse Peoples—Aboriginal Contributions and Inventions (BLM)  Grade 6: Sorting Mat for Indigenous Technology, Innovations, and Inventions (BLM) (11 x 17) Grade 6: Centimetre Grid (BLM)  Grade 6: It’s Interview Time (BLM)  Grade 6: Why do We Invent (BLM)  Grade 6: Researching Canadian Inventors and Innovators (BLM)  Grade 6: Primary and Secondary Sources using Teacher Background Notes (BLM)  Grade 6: Citing Sources Teacher Background Notes (BLM)  Grade 6: Examples of Canadian Inventions and Technologies (BLM)  Grade 6: You are the Pollster (BLM)  Grade 6: Technology, Innovation or Invention Planning and Design (BLM) (11 x 17) |

**Diverse Peoples—Aboriginal Contributions and Inventions (BLM)**

|  |  |  |
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| **CANOES** –Canoes made of bark and pitch varied greatly in size, depending on what they were needed for. Today’s recreational canoe is fashioned after this Aboriginal invention, and it, along with the kayak, is unsurpassed throughout the world for travelling over shallow or difficult waterways. | **UPSET STOMACH REMEDIES** – A tea made with the entire blackberry plant was used for a number of sicknesses, including dysentery, cholera, and upset stomach. Eating the actual berry or drinking its juice was also an effective way to control diarrhea. | **CORN** – Corn is a staple food that was cultivated by Aboriginal people for thousands of years. Today, corn is a vital, hardy, and high-yielding plant that can grow practically everywhere in the world. |
| **DART GAME** – Some Aboriginal people created the game of lawn darts, using shucked new green corn with its kernels removed. Feathers were attached to the darts, which were tossed at targets on the ground. | **PETROLEUM JELLY** – Aboriginal people discovered petroleum jelly and used it to moisten and protect animal and human skin. It was also used to stimulate healing. This skin ointment is one of the most popular in the world today. | **LACROSSE** – Aboriginal people played hundreds of outdoor team sports. Lacrosse is a team sport invented by Aboriginal people, which many believe is the forerunner to hockey. |
| **SNOWSHOES** – Aboriginal people developed technology for travel over snow. Many kinds of snowshoes were developed by Aboriginal people. A very common style was made from spruce and rawhide thongs. | **WILD RICE** – Wild rice is actually a delicious and prized cereal grain. It was misnamed by European newcomers because of its rice-like appearance. Some Aboriginal people presented wild rice as treasured gifts to fur traders as a symbol of friendship. | **COUGH SYRUP** – Many Aboriginal people throughout Canada developed unique combinations of wild plants to relieve coughs due to colds. The same ingredients are found in many cough medicines sold today. The balsam of various pine trees, maple syrup, or honey, are mixed with teas made from healing plants to produce very effective cough medicines. |

scissors copy Source: [Social Studies | Manitoba Education (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr2/blms/index.html)

|  |  |  |
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| **SNOW GOGGLES** – Northern Aboriginal people developed bone, antler, and ivory goggles to prevent blinding snow glare while they hunted. | **CURE FOR SCURVY** – Aboriginal people shared their cure for scurvy with European newcomers. The bark and needles of an evergreen tree such as hemlock or pine were boiled to make a vitamin C-rich tonic, which scurvy sufferers drank. | **CHEWING GUM** – Aboriginal people discovered the first chewing gum, which was collected from spruce trees. In the 1800s, sugar was added, and chewing gum has since become popular throughout the world. |
| **PAIN RELIEF** – The active ingredient in today’s most commonly used pain reliever was known to Aboriginal people in North American for centuries. Pain relievers such as Aspirin™ use an acid, which is found in 15 to 20 different species of the willow tree, including the pussy willow. | **SUNFLOWERS** – Sunflowers are native to North America and were important sources of nutrition for the original inhabitants. Today, growers harvest sunflowers for their seeds in Canada, the United States, Europe, and parts of Asia and South America. Sunflower seeds are popular snacks today because they are tasty, healthy, and nutritious. | **TOBOGGAN** – The Mi’kmaq people of eastern Canada invented the toboggan, or *taba’gan* to use the Mi’kmaq word. Toboggans were first made of bark and animal skins. By the year 1600, Mi’kmaq toboggans were made of thin boards, curved at the front. They were ideal for hauling game out of the woods, moving camp, and for travel. Many winter sports have grown out of this original invention, including luge and bobsledding. |
| **KAYAK** – Kayaking started thousands of years ago in the Arctic regions of what we now call Greenland, Siberia, and North America. Inuit, the original people of the Canadian Far North, used the kayak to travel, to fish, and to hunt large sea mammals, seals, and even caribou. Today, the sport of kayaking is loved worldwide. |  |  |

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Reproduced with permission *from First Nations and Inuit Contributions and Inventions Colouring Book,* published under the authority of the Minister of Indian Affairs and Northern Development, Ottawa, 1998.

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| canoe | plant | corn |
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| snowshoes | wild%20rice | cough%20syrup |

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| pain%20relief | sunflowers | toboggan |
| kayak |  |  |

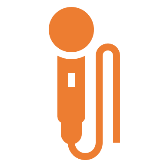
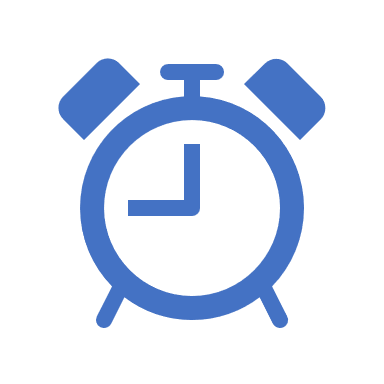
scissors copyReproduced with permission *from First Nations and Inuit Contributions and Inventions Colouring Book,* published under the authority of the Minister of Indian Affairs and Northern Development, Ottawa, 1998.

**Sorting Mat for Indigenous Technology, Innovations, and Inventions (BLM) (11 x 17)**

**Centimetre Grid (BLM)**

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Source: Source: BLM 5–8.9 [Mathematics | Manitoba (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/cur/math/support_gr5/blms/index.html)

**It’s Interview Time!!!**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Interviewer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Interviewee: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**What one technology, innovation or invention has had the greatest**

**impact on your life in Canada? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**How did it impact your health and well-being?**

**How did it impact the environment around you?**

**How did it impact the economy/goods & services around you?**

**How did it impact your family and/or friends?**

**Any other comments about this or other technology, innovation or inventions that impact life in Canada?**

**Why Do We Invent? (BLM)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name |  |  | Date |  |

Inventions, innovations, and discoveries have come about because of people’s need to change and improve their lives. List some inventions, name what they replace (predecessors), and describe in one or two sentences how they have improved our lives in the areas of health and well-being, the environment, and the economy. An example is provided below.

|  |  |  |
| --- | --- | --- |
| Invention | Predecessor | Improvement to Our Lives |
| Indoor plumbing | Outhouse | * Indoor plumbing is more convenient to use than an outhouse, especially in winter. * It is more sanitary. |
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Source: [IMYM 6—Inventions, Innovations and Discoveries (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/tech/imym/6/blm/index.html)

**Researching Canadian Inventors and Innovators (BLM)**

|  |  |
| --- | --- |
| Name of inventor or innovator | Date and place of birth, death |
| Educational background | Accomplishments |
| What is the most important invention, innovation, research, or technological achievement of this person? | An interesting fact about this person or about his or her work |
| Why is this invention, research, or technology important to modern society - health & well-being, the environment and/or the economy? | How has this person contributed to changing society – health & well-being, the environment and/or the economy? |
| List sources consulted | |

Adapted from BLM 6.3.3.c: [Social Studies | Manitoba Education (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr6/blms/index.html)

**Primary and Secondary Sources Using Teacher Background Notes (BLM)**

In their study of Canadian history in Grade 5, students have been introduced to the concept of primary and secondary sources and have used both types of sources in their research. Students will continue to consult primary and secondary sources in Grade 6 and will learn to distinguish between various examples of each. They will also enrich their interpretive skills and their critical thinking about both primary and secondary sources.

**A primary source is anything that has survived from events in the past, and that tells us something about those events.** Due to the fact that primary sources were created when the events were happening, or just afterward, they are usually more useful to historians than secondary sources.

Primary sources in electronic format are still primary sources. They record the words, images, or objects that were created by the people who were there.

**A secondary source** **is any image or description of an event or place that has been made at some time after the events**, usually by someone who was not there.

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Encourage students to think of a variety of types of sources of historical information when they are conducting historical research. Some examples of primary sources may include written materials such as letters, reports and books of that period, diaries and journals, government documents, cookbooks, literature, and poetry; visual media such as pictures, maps, photographs, art, and statues of that time; objects and artifacts of that time, including clothing, tools, household items, architecture, and other constructions; original stories from the oral tradition of that time; and songs, music, and dance from that time.

Some examples of secondary sources may include textbooks, encyclopedias, websites, pieces of art, literature, music, or dance created later to represent life in that time period.

Teachers may wish to caution students that, although primary sources may give a more complete picture of life in another historical period, they may also be subject to error or misinterpretation. Written accounts from primary sources often include opinions, attitudes, words, and values that reflect the biases of a particular group living in a particular time. Primary sources are not free of bias or errors. Encourage students to think critically about any source they consult in their historical inquiries.

Source: [Social Studies | Manitoba Education (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr6/blms/index.html)

**Citing Sources: Teacher Background Notes (BLM)**

There are many different styles for a resource list or bibliography. Most differences in style are questions of punctuation or the placement of the date. Teachers may choose to follow the model recommended by their division, school, or library. The most important rule to emphasize is *consistency.*

**General Rules**

* The purpose of a resource list is to include sufficient details to allow the reader to easily locate or retrieve the source.
* Sources are placed in alphabetical order by author’s last name, or by title if the author is unknown.
* If there are a number of sources, students may divide them into types: print, Internet, video.
* The most essential elements of citing a source are: author, title, date. Each element is separated by punctuation (usually a comma or a period).
* The publication date is generally placed at the end. In the author-date style, which appears frequently in history texts, the date is placed in parentheses immediately after the author’s name.
* Book titles, encyclopedia titles, and magazine titles are in italics. In a handwritten resource list, they may be underlined.
* Advise students that all direct quotations must be indicated as such by citing the reference directly in the text. This may be done by a footnote or a parenthetical reference**.** When citing a source directly in a piece of work, the essential elements are the author’s name and date, or the website URL <exact website>, and date consulted (B. Smith, 2001) or [www.metisresourcecentre.mb.ca/](http://www.metisresourcecentre.mb.ca/)   
  (4 April 2003). Students should also indicate the page number of the quotation if it is from a book or another longer published work.

**Recommendations**

* All reference details should be recorded at the time of the first consultation; this avoids having to find the source again later on.
* In some cases, all the necessary details are difficult to find or absent (e.g., websites, printed brochures). In this case, students should include all the details that will help in retrieving the source.
* Avoid errors by always using the cut-and-paste feature to reproduce a URL (Uniform Resource Locator) or Internet address. Students should also note the date they consulted the source, as sites are updated or change frequently. In the case of a very long URL, students should include the home address and specify the links they clicked or the search word they used to reach that page.

page 1 of 2

Source: [Social Studies | Manitoba Education (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr6/blms/index.html)

The following examples are included as suggestions only. Emphasize uniformity and simplicity in resource or reference lists.

**Book**

*Example*:

Colombo, J.R., *Famous Lasting Words: Great Canadian Quotations.* Vancouver, B.C.: Douglas and McIntyre, 2000.

**CD-ROM**

“Topic,” *Title in italics* [CD-ROM], publisher, date.

Note: Place the author at the beginning if indicated in the CD-ROM.

*Example*:

“Louis Riel,” *The Manitoba Legislative Building* [CD-ROM], Manitoba Education and Training, 1999.

**Website**

Include the exact page title, the name of the website (the date posted or last update at bottom of web page), and the date retrieved, followed by the URL.

*Example*:

“Manitoba,” Confederation for Kids, National Library of Canada (2001), 12 November 2003:   
[www.nlc-bnc.ca/confederation/kids/h2-1375-e.html](http://www.nlc-bnc.ca/confederation/kids/h2-1375-e.html)

**Newspaper Article**

*Example*:

Elliott, L. “Native leaders eyed for key cabinet post,” *Winnipeg Free Press*,

16 November 2003.

**Video**

*Example*:

*Canada: A People’s History*, Episode 10, “Taking the West,” CBC, 2001.

**TV Show**

*Example*:

*Fifth Estate,* CBC, 15 April 2004.

**Personal Interview:**

Include name, background, and interview date.

*Example*:

Smith, John Joseph. World War II veteran, personal interview, 10 November 2003.

page 2 of 2

**Examples of Canadian Inventions and Technologies (BLM)**

|  |  |
| --- | --- |
| **Name and approximate date** | **Invention or technology** |
| Inuit of the Eastern Arctic | Kayak |
| Alexander Graham Bell (1876) | Telephone |
| Sir Sandford Fleming (1878) | Railway engineering; Standard Time Zones |
| Guglielmo Marconi (1900) | Wireless telegraph |
| Charles Saunders (1903) | Marquis wheat |
| Harriet Brooks and Ernest Rutherford (1904) | Research pioneer in radioactivity and radon gas |
| Reginald Fessenden (1906) | Radio broadcasting device |
| William Gibson (1910) | First person to build and fly a plane in Canada |
| John and Allen McIntosh (1912) | McIntosh apple |
| Sir William Stephenson (1921) | Transmission of photographs by radio waves |
| Joseph-Armand Bombardier (1922) | Snowmobile |
| Frederick Banting, Charles Best (1923) | Insulin |
| John McLennan (1923) | Liquid helium |
| Wallace Turnbull (1927) | Aircraft designer |
| Dr. Norman Bethune (1930s) | Medical and surgical instruments |
| Thomas Carroll (1938) | Agricultural combine |
| Eli Burton and James Hillier (1937) | Electron microscope |
| Armand Frappier (1949) | Tuberculosis vaccine |
| Marshall McLuhan (1960s) | Theories about technology and the media |
| Tommy Douglas (1950s – 1960s) | Free medical care for all Canadians |
| William Shaw (1964) | Imax projector |
| B. Stefansson and R. Downey (1975) | Canola |
| Chris Haney, John Haney, Scott Abbott (1981) | Trivial Pursuit game  MCj02501450000[1] |
| National Research Centre of Canada (1985) | Canadarm |
| Dr. Roberta Bondar (1980s – 1990s) | Research on effects of  weightlessness |

Source: [Social Studies | Manitoba Education (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr6/blms/index.html)

**You Are the Pollster (BLM)**

Decide on a survey question about 5 or 6 problems or needs that Canadians have today. Word your question clearly so that no further explanation is required once it is asked. Poll several family and friends about which problem or need they think is the most important.

1. **Survey Question**

a) I chose this question because

b) I predict that the results of the survey will show that

because

1. **Data Collection**

|  |  |  |
| --- | --- | --- |
| **Number of People Interviewed** | **Age Range** | **Grade Range** |
|
|  |  |  |

Explain any challenges you had during the survey and collecting of your data and how you overcame the challenges.

3. Data Organization

Decide how you will organize and record the survey data. Will you tally the results, record data in a chart, or use some other organizer or technology? Explain.

*(continued)*

**You Are the Pollster (continued)**

4. Graph

a) Decide what type of graph (line graph, bar graph, circle or pie graph, created by hand or by computer) would best represent the data.

Type of graph

Created by

b) What is one disadvantage of the chosen method of representation?

Adapted from **BLM OLE.7#3**: [IMYM 6—Inventions, Innovations and Discoveries (gov.mb.ca)](https://www.edu.gov.mb.ca/k12/tech/imym/6/blm/index.html)

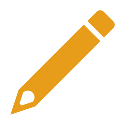
**Technology, Innovation, or Innovation Planning and Design (BLM) (11 x 17)**

Need or Problem:

Proposed Solution:

Name of Technology, Innovation or Invention:

Innovator or Inventor:

****

Resources I used:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade 6: Impact of Technology and Innovation on Life in Canada Inquiry Project Rubric** | | | | | |
| **Report Card Subject Category** | **Red Diamond**  Very good to excellent  **(4)** | **Diamond**  Good  **(3)** | **Gold**  Basic  **(2)** | **Silver**  Limited  **(1)** | **Bronze**  Not demonstrated  **(ND)** |
| **Social Studies—Knowledge and Understanding** | Student skillfully and objectively synthesizes, organizes, and represents the important and significant vocabulary and information about the impact of technology and innovation on life in Canada, making connections across historical, cultural, and geographical contexts. | Student accurately synthesizes, organizes, and represents important vocabulary and information about the impact of technology and innovation on life in Canada, making a few connections across historical, cultural, and geographical contexts. | Student requires occasional teacher or peer support to determine relevant information, accurately synthesize, organize and represent appropriate information, and make connections across historical, cultural, and geographical contexts about the impact of technology and innovation on life in Canada. | Student requires considerable, ongoing teacher support to determine relevant information, accurately synthesize, organize and represent appropriate information, and make connections across historical, cultural, and geographical contexts about the impact of technology and innovation on life in Canada. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Social Studies—Research and Communication** | Student generates clear thought-provoking questions, collects relevant and important information from various sources, accurately and comprehensively records, organizes and innovatively communicates information and ideas about the impact of technology and innovation on life in Canada. | Student generates relevant questions, collects relevant information from sources, accurately records, organizes and communicates information and ideas about the impact of technology and innovation on life in Canada. | Student requires occasional teacher or peer support to ask relevant questions, and/or collect, record and/or communicate relevant information about the impact of technology and innovation on life in Canada. | Student requires considerable, ongoing teacher support to ask relevant questions, and/or collect, record and/or communicate relevant information about the impact of technology and innovation on life in Canada. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Social Studies—Critical Thinking and Citizenship** | Student thoughtfully responds to, generates and expresses critical analysis and opinions about the impact of technology and innovation on human health and well-being, the environment, and the economy in Canada. | Student generates some opinions, recognizes and responds to critical analysis and opinions about the impact of technology and innovation on human health and well-being, the environment, and the economy in Canada. | Student requires occasional teacher or peer support to generate opinions, recognize and respond to critical analysis and opinions about the impact of technology and innovation on human health and well-being, the environment, and the economy in Canada. | Student requires considerable, ongoing teacher support to generate opinions, recognize and respond to critical analysis and opinions about the impact of technology and innovation on human health and well-being, the environment, and the economy in Canada. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Language Arts—COMP. Reading** | Student uses strategies and cues before, during and after reading to develop understanding of the impact of technology and innovation on life in Canada. | Student uses strategies and cues with some prompting before, during and after reading to develop understanding of the impact of technology and innovation on life in Canada. | Student requires occasional teacher or peer support or modelling to use strategies and cues before, during and after reading to develop understanding of the impact of technology and innovation on life in Canada. | Student requires considerable, ongoing teacher support to use strategies and cues before, during and after reading to develop understanding of the impact of technology and innovation on life in Canada. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Language Arts—COMP. Listening and Viewing** | Student uses strategies and cues before, during and after listening and viewing to develop understanding of the impact of technology and innovation on life in Canada. | Student uses strategies and cues with some prompting before, during and after listening and viewing to develop understanding of the impact of technology and innovation on life in Canada. | Student requires occasional teacher or peer support or modelling to use strategies and cues before, during and after listening and viewing to develop understanding of the impact of technology and innovation on life in Canada. | Student requires considerable, ongoing teacher support to use strategies and cues before, during and after listening and viewing to develop understanding of the impact of technology and innovation on life in Canada. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Language Arts—COMM. Writing** | Student uses strategies and cues to independently generate, communicate, revise, and **organize** thinking, **ideas, and information** about the impact of technology and innovation on life in Canada since 1945 with very few **convention** errors. | Student uses strategies and cues with occasional prompting to generate, communicate, revise, and **organize** thinking, **ideas, and information** about the impact of technology and innovation on life in Canada since 1945 with some **convention** errors. | Student requires occasional teacher or peer support to use strategies and cues to generate, communicate, revise, and **organize** thinking, **ideas, and information** about the impact of technology and innovation on life in Canada since 1945 and correct **convention** errors. | Student requires considerable, ongoing teacher support to use strategies and cues to generate, communicate, revise, and **organize** thinking, **ideas, and information** about the impact of technology and innovation on life in Canada since 1945 and correct **convention** errors. | Does not yet demonstrate the required understanding and application of concepts and skills. |

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| **Language Arts—COMM. Speaking and Representing** | Student uses strategies and cues to independently generate, revise, organize, and clearly and creatively communicate, thinking, ideas, and information when speaking and presenting about the impact of technology and innovation on life in Canada. | Student uses strategies and cues to generate, revise, organize, and communicate, thinking, ideas, and information when speaking and presenting about the impact of technology and innovation on life in Canada. | Student requires occasional teacher or peer support to use strategies and cues to generate, revise, organize, and communicate, thinking, ideas, and information when speaking and presenting about the impact of technology and innovation on life in Canada. | Student requires considerable, ongoing teacher support to use strategies and cues to generate, revise, organize, and communicate, thinking, ideas, and information when speaking and presenting about the impact of technology and innovation on life in Canada. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **\*Arts Education—MUSIC (for Song or Rap presentation option)** | Student creates an original, well-organized, pleasing to hear song or rap that includes several relevant facts about a Canadian or their own technology, innovation, or invention. | Student creates an original song or rap that includes several relevant facts about a Canadian or their own technology, innovation, or invention. | Student requires occasional teacher or peer support to create an original song or rap that includes several relevant facts about a Canadian or their own technology, innovation, or invention. | Student requires considerable, ongoing teacher support to create an original song or rap that includes several relevant facts about a Canadian or their own technology, innovation, or invention. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **\*Arts Education—DRAMA (for Role Play or Puppet Show presentation option)** | Student creates an original, well-organized, role play or puppet show that includes several relevant facts about a Canadian or their own technology, innovation, or invention, that is enhanced with appropriate choices regarding costumes, props, sets, or staging (e.g., lights, sound effects). | Student creates a role play or puppet show that includes relevant facts about a Canadian or their own technology, innovation, or invention, that is enhanced with some appropriate choices regarding costumes, props, sets, or staging (e.g., lights, sound effects). | Student requires occasional teacher or peer support to create a role play or puppet show that includes relevant facts about a Canadian or their own technology, innovation, or invention that is enhanced with some appropriate choices regarding costumes, props, sets, or staging (e.g., lights, sound effects). | Student requires considerable, ongoing teacher support to create a role play or puppet show that includes relevant facts about a Canadian or their own technology, innovation, or invention, that is enhanced with some appropriate choices regarding costumes, props, sets, or staging (e.g., lights, sound effects). | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **\*Arts Education—DANCE (for Dance presentation option)** | Student creates an original, well-organized, dance that represents several relevant facts about a Canadian or their own technology, innovation, or invention. | Student creates a dance that represents relevant facts about a Canadian or their own technology, innovation, or invention. | Student requires occasional teacher or peer support to create a dance that represents relevant facts about a Canadian or their own technology, innovation, or invention. | Student requires considerable, ongoing teacher support to create a dance that represents relevant facts about a Canadian or their own technology, innovation, or invention. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Mathematics— K and U—Ratios and Percent** | Student consistently represents ratios and percent of Indigenous items pictorially and symbolically. | Student with some guidance represents ratios and percent of Indigenous items pictorially and symbolically. | Student requires occasional teacher or peer support to represent ratios and percent of Indigenous items pictorially and symbolically. | Student requires considerable, ongoing teacher support to represent ratios and percent of Indigenous items pictorially and symbolically. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Mathematics— PS—Ratios and Percent** | Student initiates strategies, revises and analyzes to determine ratios and percent of Indigenous items and can explain choices with some minor errors. | Student initiates strategies to determine ratios and percent of Indigenous items with some minor errors and can explain choices with prompting. | Student requires occasional teacher or peer support to use and explain modelled strategies to determine ratios and percent of Indigenous items. | Student requires considerable, ongoing teacher support to use and explain modelled strategies to determine ratios and percent of Indigenous items. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Mathematics— K and U—Collecting Data and Graphing** | Student collects data to a question about needs/concerns and selects and creates appropriate type of graph to represent data. | Student with some guidance collects data to a question about needs/concerns and selects and creates appropriate type of graph to represent data. | Student requires occasional teacher or peer support to collect data to a question about needs/concerns and to select and create appropriate type of graph to represent data. | Student requires considerable, ongoing teacher support to collect data to a question about needs/concerns and to select and create appropriate type of graph to represent data. | Does not yet demonstrate the required understanding and application of concepts and skills. |
| **Mathematics— PS—Collecting Data and Graphing** | Student initiates strategies, revises and analyzes to generate a question about needs/concerns, collect and graph data, and can explain choices with some minor errors. | Student with some prompting initiates revises and analyzes to generate a question about needs/concerns, collect and graph data, and can explain choices with some minor errors. | Student requires occasional teacher or peer support to revise and analyze in generating a question about needs/ concerns, collecting and graphing data, and explaining choices to have fewer errors. | Student requires considerable, ongoing teacher support to revise and analyze in generating a question about needs/ concerns, collecting and graphing data, and explaining choices to have fewer errors. | Does not yet demonstrate the required understanding and application of concepts and skills. |