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)
 - My Child in School (www.edu.gov.mb.ca/k12/mychild/index.html)

PROJECT OVERV	IEW .
Grade:	Grade 6, Grade 7, Grade 8
Main Subject:	Social Studies
Big Idea:	Land-Based Education
Title:	LEARNING FROM THE LAND
Cluster:	Grade 6:Canada Today: Democracy, Diversity, and the Influence of the Past; Grade 7: Global Quality of Life, Human Impact in Europe or the Americas; Grade 8: Understanding Societies Past and Present
Duration:	2–6 weeks
Materials:	PowerPoint, BLMs, internet, paper, pencils, pencil crayons or markers, appropriate weather clothes and protection (bug spray, sunscreen) as required, optional: digital camera or smart phone (used with parent/caregiver permission and supervision).
Short Description:	Learning from the Land is about strengthening your relationship with the land. The inquiry-based learning experience is cross-curricular and incorporates Indigenous perspectives. Experiential learning consists of 25 land-based activities to choose from. Students are encouraged to take action and reflect on the whole learning experience. The unit was designed to be primarily teacher- or caregiver-led with some independent work completed by the student.

LEARNING OUTCOMES

Social Studies: www.edu.gov.mb.ca/k12/cur/socstud/index.html

Grade 6: 6-KL-026, 6-KL-026a, 6-VL-011, 6-VL-011A, 6-S-205

Grade 7: 7-VL-008, 7-KC-002, 7-KC-004, 7-VE-016, 7-VP-015, 7-KL-029, 7-VL-009, 7-S-205

Grade 8: 8-KI-005, 8-KI-006 (place), 8-VI-004, 8-VL-008, 8-S-205

Science: www.edu.gov.mb.ca/k12/cur/science/scicurr.html

Grade 6: 6-0-9e, 6-1-04, 6-1-08, 6-4-08

Grade 7: 7-0-2a, 7-1-01, 7-1-05, 7-1-06, 7-1-07, 7-4-09, 7-4-11

Grade 8: 8-0-2a, 8-1-02, 8-4-01, 8-4-17, 8-4-18

English Language Arts: www.edu.gov.mb.ca/k12/cur/ela/index.html

Grades 6 to 8 Band Practices, Elements and Descriptors: Language as: Sense Making, System, Power and

Agency, Exploration and Design

This project provides opportunity for rich learning experiences through the following lenses: personal and philosophical, social, cultural and historical, and environmental and technological.

Mathematics: www.edu.gov.mb.ca/k12/cur/math/index.html

(covered in activities #23 and #24)

Grade 6: 6.SS.1, 6.SS.3, 6.SS.4, 6.SS.5, 6.SP.2, 6.SP.3

Grade 7: 7.SS.1, 7.SS.2, 7.PR.1, 7.SP.3

Grade 8: 8.N.1, 8.SS.6, 8.SP.1

Visual Arts: www.edu.gov.mb.ca/k12/cur/arts/index.html

Grades 6 to 8: VA-CR1, VA-CR2, VA-CR3, VA-C3

Physical Education/Health Education: www.edu.gov.mb.ca/k12/cur/physhlth/curriculum.html

Grade 6: K.3.6.A.2, K.3.6.A.3, K.3.6.B.1, K.4.6.A.3, K.5.6.B.1, K.5.6.B.2

Grade 7: K.3.7.A.3, K.3.7.B.5a, K.4.7.B.3c, S.4.6.A.1

Grade 8: K.3.7.A.3, K.4.8.B.2b, K.4.8.C.4a, S.4.8.A.1, K.5.8.A.1, K.5.8.B.2

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
х	Х	Х	Х	Х	х			Х	Х		Х	Х	Х

Original concept created by: J. Fast and K. Berezka

LEARNING EXPERIENCES AND ASSESSMENT

Question: How do we relate to and with the land?

Teacher's instructions:

- Follow the PowerPoint and slide notes. The slide notes often contain important/extra information, links, suggestions, or alternate ideas.
- BLMs have been created for use with most of the learning activities and are indicated as, BLM #____,
 on the applicable PowerPoint slide. The <u>Learning from the Land outline is as follows</u>:
 - 1) Introduce the inquiry question "How do we relate to and with the land?" (Slides 1 and 2) (BLM #1)
 - 2) Relationships (Slides 3–5, 12–13) (BLM #2a, #2b, #2c, #6)
 - 3) Indigenous Perspectives (Slides 6–11) (BLM #3a, #3b, #4, #5)
 - 4) Land-based Activities (Slides 14–39) (BLM #7a, #7b)
 - 5) Take Action (Slide 40) (BLM #8)
 - 6) Reflection (Slide 41) (BLM #9)
- Social Studies, Science, ELA, Math, Health and Art learning outcomes are woven throughout this learning experience. Prior to engaging in the learning experience/activities, it is recommended that you read through the outcomes in the rubric that apply to your students' grade-level expectations to help guide the learning discussions, experiences, and assessment.
- The BLMs, rubrics, activities and learning experiences may be adapted, rearranged, or reduced to
 only a few of the activities as makes sense for your context. Expectations may be amended up or
 down depending on student interests, skills, and availability.

<u>PowerPoint Slide 6 Learning How to Care for Mother Earth Video Notes—to help guide post-viewing student reflection</u>

Learning how to care for Mother Earth with Elder Dave Courchene (3:31 min):

- Spend as much time as we can on the land.
- Out of the land, we get everything we need to live and to survive.
- How can we incorporate more Mother Earth into our lives?
- Mother Earth is the real teacher to understand life and, through nature (wind, birds, animals, trees), we hear the voice of that spirit.
- Make the effort to be with the land.
- Hug a tree, feel the life within that tree, begin to feel the life of all creation.
- Talk to the trees, talk to the water, talk to creation.
- What does creation say back? A voice of how much love Mother Earth wants to share with us.
- Key message of Mother Earth is "I bring you love."
- Our duty and responsibility are to reciprocate that love and give it back to Mother Earth by taking care of her, looking after her, respecting her.

- The voice is not heard in your head but heard from the heart itself.
- How do we offer love back to Mother Earth? To express love back to Mother Earth, never take more from the land than what you need in order to live.
- Offer words of gratitude to Mother Earth giving her thanks for all that she gives us in order to live and survive.
- It's all about values and teachings that returns that expression of love that comes from the earth itself.
- We all need to learn this simple truth—<u>THE EARTH IS A LIVING ENTITY</u>.
- Mother Earth is alive just like any other creation we see in the world.

Land-based Activity—SAFETY INSTRUCTIONS

- Remind students to always check with an adult before going outside and that <u>adult supervision is</u>
 <u>required</u> for nature walks/activities to enhance the learning experience and ensure the safety of
 students.
- Remind students to <u>dress appropriately</u> for the weather and to wear proper footwear for long walks.
 Cold weather—parka, ski pants, toque, mitts, scarf, boots, etc. Warm weather—hat, sunscreen, bug spray, etc. Wet weather—rain jacket, rubber boots, umbrella, etc.
- Remind students to <u>be safe</u> while participating in the land-based activities. Avoid areas that have poison ivy, ticks, pesticides, etc. Don't throw rocks or pick up branches that are too big, don't climb trees too high or higher than they are comfortable, be careful around water, etc.
- Ask students to <u>respect nature</u>. Students can use their senses to look up closely and touch nature, but don't hurt nature. Remind students if they are doing an activity where they are allowed to gather and collect pieces of nature, to only pick up the items that are already on the ground. Don't break or pull leaves or branches off of trees.

Land-based Activity Reflections

- Have students complete as many land-based activities as you want. Students do not have to do all 25, they can pick and choose, or you can ask them to do certain ones depending on curricular goals and student strengths.
- Black Line Masters #7a and #7b have been designed to support student reflection after the Choice Board activities. Students do not have to do a BLM after every activity, they can pick and choose or you can assign which activities you would like them to complete a reflection on.
- Black Line Master #7a is better suited for early and beginner learners.
- Black Line Master #7b is a more in-depth reflection.

Assessment:

- Rubrics are set up by subject, listing subject-specific outcomes by grade band.
- It is recommended that <u>criteria and guidelines are co-created with students for the individual activities</u> within the *Learning from the Land* experience, guided by the specific learning outcomes listed in the rubrics.
- The rubrics are designed to help you focus the learning experience, adapt, differentiate, assess, make notes, and/or report on students' understanding and application of the outcomes/descriptors/concepts/skills you've chosen for students to discover and explore.
- Choose the outcomes/descriptors on the left that you wish to focus learning on, and makes notes on student learning to the right under the appropriate achievement indicator.

The Learning from the Land activities are also an excellent segue into learning about, appreciating, and analyzing the geographical features, natural resources, and agriculture of Manitoba, Canada, and the world, and the impact of geographical features and natural resources on the past, present and future of Manitoba, Canada, and the world.

Benefits of Spending Time Outdoors

It is very important for children to experience nature for their health, well-being, and development. The following resources talk about the importance and benefits of outdoor play:

Active Outdoor Play Statement from the Council of Chief Medical Officers of Health—Pan-Canadian Public Health Network (phn-rsp.ca)

The Benefits of Outdoor Play Infographic (outdoorplaycanada.ca)

Outdoor Play Canada | This summer 2021, play is more important than ever

39 fun ways kids can play outside this spring—Active For Life

RESOURCES

<u>Videos—Indigenous Perspectives</u>

- Elder Dave Courchene: Learning how to care for Mother Earth (3:32 minutes)
- Elder Dave Courchene: Connecting to the Spirit in the Land Video (9:56 minutes)
- Wahkohtowin: Cree Natural Law—BearPaw Media and Education (23:47 minutes)
- Indigenous Knowledge and Western Science: Dr. Leroy Little Bear Talk (21:32 minutes)
- Big Thinking—Leroy Little Bear: Blackfoot metaphysics 'waiting in the wings' (1:03:09 minutes)
- Traditional Ecological Knowledge & Place-based Learning Communities (10:32 minutes)
- The Pimachiowin Aki Profile (1:54 minutes)
- Indigenous Hunter Keeps Traditions Alive in Boreal Forest (6:17 minutes)
- Water the Sacred Relationship (playlist)
- CBC Stories from the Land (video library)
- CBC Gem (video library)

Websites—Indigenous Perspectives

- Stories from the Land—Indigenous Place Names Map of Canada
- MFNERC (Traditional First Nation Community Names Map of Manitoba)
- Assembly of Manitoba Chiefs (AMC) Map of Manitoba
- Native Land (Traditional Territories Map of the World)
- Treaty Relations Commission of Manitoba
- Treaty One Nation
- Turtle Lodge (Sagkeeng First Nation)
- Pimachiowin Aki (World Heritage Site in the Boreal Forest)
- Learning the Land (Treaty Education Alliance, Saskatchewan)
- Walking Together: First Nations, Metis, and Inuit Perspectives in Curriculum (Alberta)
- Exploring Kainai Plants and Culture (Alberta)
- Indigenous Peoples Atlas of Canada (Canadian Geographic)
- Indigenous Peoples Atlas of Canada: Tiled Floor Map
- National Centre for Collaboration Indigenous Education (NCCIE)—search their lesson plans
- Minecraft Education Edition: Manito Ahbee Aki
- Sacred Land Film Project (Indigenous peoples' resistance to the destruction of their sacred sites)
- Water Teachings
- <u>Decolonizing Water</u>
- Indigenous Languages
 - o https://ojibwe.lib.umn.edu/
 - o https://fmp.cla.umn.edu/dakota/
 - o https://www.creedictionary.com/
 - o https://dictionary.michif.atlas-ling.ca/#!/help
- Google Earth
 - o Canada's Original Place Names
 - o Indigenous Cultural Heritage
 - o Celebrating Indigenous Languages

Websites—Environmental Learning

- Canadian Parks and Wilderness Society Manitoba Chapter (CPAWS)
- <u>David Suzuki Foundation</u>
- Jane Goodall Institute
- Outdoor Learning Store
- Take me Outside
- LandED Teacher Guides
- Outdoor Classroom Day (May 20)
- Green Action Centre
- Earth Day (April 22)
- Earth Day Canada (April 22)
- Nature United Canada
- Eco Schools Canada
- Water Rangers

- Learning for a Sustainable Future
- Get Outside and Play
- Green Teacher
- Resources For Rethinking
- Ontario Society for Environmental Education
- Manitoba Parks: Parks in the Classroom
- Field Guide: Trees of Manitoba
- FortWhyte Alive: Classroom Resources
- Oak Hammock Marsh
- Delta Marsh Bird Observatory
- Natural Curiosity 2nd Edition
- Climate Atlas of Canada
- Google Earth Climate Change's Impact
- Teachers—Earth Rangers

Documents

- Land Based Education Success Pathway Thompson Community Circle VOICE Pathways to Success
- Integrating Aboriginal Perspectives into Curricula
- Indigenous Land-based Learning—Elementary Teachers' Federation of Ontario

Podcasts

- <u>Disconnect: The Outdoor Education Podcast</u>
- Talking with Green Teachers
- The Forest School Podcast
- Unreserved CBC Podcast

Apps

- Whose Land on the App Store (apple.com) (also available in Google Play Store)
- Native-Land.ca | Our home on native land
- Earth Rangers: Where kids go to save animals!

Step-by-step instructions for students:

Throughout the learning experience, think about the inquiry question, "How do we relate to and with the land?" Follow the teacher instructions, PowerPoint, and Blackline Masters. Enjoy the land-based activities using all of your senses, skills, and curiosity.

APPENDIX (PRINTABLE SUPPORT MATERIALS INCLUDING ASSESSMENT)

Grades 6 to 8: Learning from the Land PowerPoint Presentation.pptx

Grades 6 to 8: Blackline Masters (Word)

Grades 6 to 8: Learning from the Land Kindergarten Outcomes Rubric.docx

Shade or	circle the one th	nat matches you	the best.
I love playing outside; I play outside all the time.	I mostly like spending time outside; I also like spending time inside.	I mostly like spending time inside; I also like spending time outside.	I prefer to play and spend time inside.
•	•	to do outside? C ur own ideas too	
☐ Play with frier		☐ Have a pi	
☐ Go on the pla		☐ Read a bo	ook
☐ Go on the plage ☐ Go for a walk	yground	•	ook nd
\Box Go on the pla	yground	Read a bo	ook nd ke

Friendships BLM #2a

What does it look like when someone is being a good friend?	What does it look like when someone isn't being a good friend?
How does it feel when	How does it feel when
someone is being	someone isn't being
a good friend?	a good friend?

Relationships BLM #2b

What does a healthy relationship look like?	What does an unhealthy relationship look like?
How does it feel to be in a	How does it feel to be in an
healthy relationship?	unhealthy relationship?

What can the land give you?	What can you give the land?
What can the land give you?	What can you give the land?
How does it feel when	How does it feel when
you give to the land?	the land gives to you?
How does the land	How can we take
take care of us?	care of the land?

1.	How is place alive?
2.	How is everything interconnected?
3.	How is all of life living and breathing together?

4. Watch the video with Elder Dave Courchane, *Learning How to Care for Mother Earth* (3.32 minutes), and complete the following:

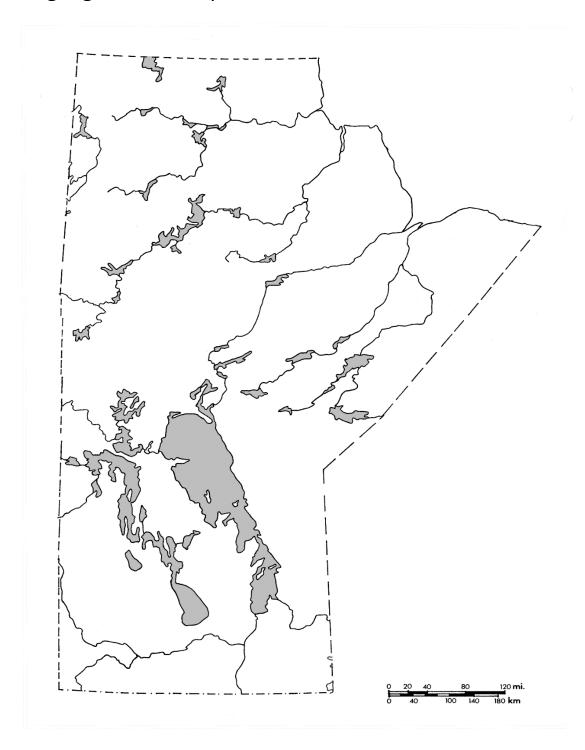
l see	I hear
I feel	I think

1.	What does the land teach us?
2.	How does the land teach us?
3.	How would you describe the land? What is all part of the land?
4.	Why is it important to give thanks to the land?
5.	What are you thankful for?

2. What are three Indigenous words that describe a place? Complete the table below.

Indigenous Language Group	Word n the Indigenous Language	Word in the English Language	Draw a Picture of the Word
Dakota	Mni	Water	

Locate at least 5 place names that have their roots in an Indigenous language on the map of Manitoba below.



(Source: Social Studies Grade 4, Manitoba Education, BLM 4-3-1)

•	Whose Traditional Territories are where you live?
	Which Treaties were negotiated where you live?
	How does it feel learning about Indigenous peoples and their Traditional Territories?
	What is an example of a land acknowledgement?
	Why is it important to give land acknowledgements?

1.	How is your identity (who you are) connected to where you live? How do you feel about the place where you live?
2.	What is your family's connection to the land? How does your family interact with the land?
3.	What is a nature-based place that is very special to you? What makes that place special?
4.	Draw a picture of a nature-based place that is special to you.

Land-based Activity	y Reflection
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BLM #7a

I participated in Activity #_____.

I saw...

I heard...

I felt...

1.	Which land-based activity did you participate in?
2.	How did the activity make you feel?
3.	What did you see? What did you do?
4.	What was your favourite part about the activity?
5.	What was your least favourite part about the activity?
6.	What did you learn from the activity?
7.	What do you wonder about/want to learn more about now?

Take Action BLM #8

What can you do with what you have learned?

1.	What can you do to help care for Mother Earth? Choose one or more ideas to try. Add your own ideas too.				
	RecyclePick up garbageCompost		Use less electricity Don't waste water		
2.	How can you continue to learn abo Choose one or more ideas to try. Ac				
	Observe natureRead a bookWatch a video	0	Research online Talk with people		
_	Create something to raise awarene	Chaose a tonic—it could be			
2.	about plants, animals, the land, tak Be sure to share your project with a Choose one idea to try. Add your ov	ing othe	care of Mother Earth, etc.		
2.	about plants, animals, the land, tak Be sure to share your project with o	ing othe	care of Mother Earth, etc.		
2.	about plants, animals, the land, tak Be sure to share your project with of Choose one idea to try. Add your ov	ing othe	care of Mother Earth, etc.		
	about plants, animals, the land, tak Be sure to share your project with of Choose one idea to try. Add your ove Topic: Poster Brochure Drawing or Painting	other on in	care of Mother Earth, etc. ers. dea if it is not on the list. Collage Song Poem ip with the land?		

1.	How do we relate to and with the land? How has your thinking changed about this question?
2.	Which senses do you use most naturally in your relationship with the land? Which senses would you like to develop to better interact with the land?
3.	What is something you learned that you didn't know before?
4.	What was your favourite thing that you learned about?
5.	What would you like to learn more about?

Learning from the Land 6–8 Outcomes Rubric—How do we relate to and with the land?

Academic Achievement SOCIAL STUDIES Outcomes by Grade	Very Good to Excellent Understanding and Application (4)	Good Understanding and Application (3)	Basic Understanding and Application (2)	Limited Understanding and Application (1)
Grade 6:				
6-KL-026 Describe the influence of the natural environment on life in Canada.				
6-KL-026A Describe the influence of the land on their First Nation, Inuit, or Métis identity. Examples: values, beliefs, traditions, customs, art, clothing				
6-VL-011 Value the natural environment.				
6-VL-011A Respect the spiritual dimension of nature.				
6-S-205 Construct maps that include a title, legend, compass rose, scale, and latitude and longitude. (Activity #8)				
Grade 7:				
7-VL-008 Appreciate the diversity of the global natural environment.				
7-KC-002 Describe the impact of various factors on quality of life in Canada and elsewhere in the world. Examples: access to shelter, food, water, health care, and education; globalization				
7-KC-004 Describe ways in which their personal actions may affect quality of life for people elsewhere in the world. Examples: consumer choices, conservation actions, sharing of resources, letters and petitions				
7-VE-016 Appreciate that quality of life is not solely determined by access to wealth, resources, and technologies.				
7-VI-007 Appreciate the importance of cultural and linguistic diversity in the world.				

7-VP-015 Demonstrate concern for the loss of indigenous ways of life. 7-KL-029 Give examples of the impact of human activity on the natural environment in a society of Europe or the Americas. Examples: endangered plant and animal species, reforestation, restoration of wetlands		
7-VL-009 Be willing to take actions to help sustain the natural environment in Canada and the world.		
7-S-205 Construct maps that include a title, legend, compass rose, scale, and latitude and longitude. (Activity #8)		
Grade 8:		
8-KI-005 Explain the concept of world view. (Indigenous, etc.)		
8-KI-006 Describe influences that create differences in world views. Examples: culture, time, place, cross-cultural interactions, media, governance		
8-VI-004 Be willing to consider differing world views.		
8-VL-008 Appreciate the importance of sustaining the natural environment for future societies.		
8-S-205 Construct maps that include a title, legend, compass rose, scale, and latitude and longitude. (Activity #8)		

Academic Achievement SCIENCE Outcomes by Grade	Very Good to Excellent Understanding and Application (4)	Good Understanding and Application (3)	Basic Understanding and Application (2)	Limited Understanding and Application (1)
Grade 6:				
6-0-9e Be sensitive to and develop a sense of responsibility for the welfare of other humans, other living things, and the environment.				
6-1-04 Identify living things using an existing classification key, and explain the rationale used. Examples: identification of birds, butterflies, animal tracks, winter twigs				
6-1-08 Observe and describe the diversity of living things within the local environment. Include: fungi, plants, animals.				
6-4-08 Recognize that the Sun is the centre of the solar system and it is the source of energy for all life on Earth.				
Grade 7:				
7-0-2a Access information using a variety of sources. Examples: libraries, magazines, community resources people, outdoor experiences, videos, internet				
7-1-01 Use appropriate vocabulary related to their investigations of interactions within ecosystems. Include: ecosystem, biosphere, abiotic, biotic, organisms, ecological succession, photosynthesis, cellular respiration, ecological pyramid, bioaccumulation, scavengers, decomposers, microorganisms.				
7-1-05 Identify and describe positive and negative examples of human interventions that have an impact on ecological succession or the makeup of ecosystems. Examples: positive—protecting habitats, reintroducing species; negative—preventing natural fires, introducing non-indigenous species, draining wetlands for agriculture or housing				

7-1-06 Identify environmental, social, and economic factors that should be		
considered in the management and preservation of ecosystems. Examples:		
habitat preservation, recreation, employment, industrial growth, resource		
development		
7-1-07 Propose a course of action to protect the habitat of a particular		
organism within an ecosystem. Examples: protect the nesting habitat of a given bird in a local wetland		
7-4-09 Recognize that soil is a natural resource and explain how the		
characteristics of soil determine its use.		
7-4-11 Identify environmental, social, and economic factors that should be		
considered in making informed decisions about land use.		
Grade 8:		
8-0-2a Access information using a variety of sources. Examples: libraries,		
magazines, community resources people, outdoor experiences, videos,		
internet		
8-1-02 Identify characteristics of living things and describe how different		
living things exhibit these characteristics. Include: composed of cells;		
reproduce; grow; repair themselves; require energy; respond to the		
environment; have a lifespan; produce wastes.		
8-4-01 Use appropriate vocabulary related to their investigations of water		
systems. Include: heat capacity, fresh water, salt water, convection, Coriolis		
effect, global water cycle, drainage system, watershed, continental divide,		
erosion, deposition, flow rate, tides, terms related to water treatment.		
8-4-17 Identify substances that may pollute water, related environmental and societal impacts of pollution, and ways to reduce or eliminate effects of		
pollution.		
8-4-18 Identify environmental, social, and economic factors that should be		
considered in the management of water resources. Examples: ecosystem		
preservation, employment, recreation, industrial growth, water quality		

INDEPENDENCE, BREADTH, DEPTH, and TRANSFORMATION Extending Expanding Expanding Emerging				
Academic Achievement ELA Grade Band Descriptors as they connect to the Learning from the Land experiences.	Very Good to Excellent Understanding and Application (4)	Good Understanding and Application (3)	Basic Understanding and Application (2)	Limited Understanding and Application (1)
 Grades 6–8: Learners are: monitoring, reflecting on, and discussing processes for making sense of and creating texts strategically selecting and applying strategies and processes for making sense of and creating different types of text for different purposes and audiences using their understanding of a range of text structures and features to understand and communicate clearly and effectively recognizing that one's identities are influenced by various factors and change over time and contexts exploring multiple perspectives, points of view, and interpretations exploring their own voices to transform their identities, tell their personal narratives, and critically view their own and others' texts tapping into and combining experiences with ideas, images, and sounds from various sources to create something new 				

Academic Achievement MATHEMATICS Outcomes by Grade	Very Good to Excellent Understanding and Application (4)	Good Understanding and Application (3)	Basic Understanding and Application (2)	Limited Understanding and Application (1)
Grade 6:				
6.SS.1 Demonstrate an understanding of angles by identifying examples of angles in the natural environment, classifying angles in nature according to their measure and/or determining angle measures of things in nature in degrees (Activity #23)				
6.SS.3 Determine perimeter of polygon or area of rectangle found in nature (Activity #23)				
6.SS.4 Compare triangles in nature (scalene, isosceles, equilateral, right, obtuse, acute) (Activity #23)				
6.SS.5 Describe sides and angles of regular and irregular polygons in nature (Activity #23)				
6.SP.2 Select and justify a method of collecting data on 2-D shapes & 3-D objects you found in nature (Activity #23)				
6.SP.3 Select, create, and justify the choice of graph of 2-D shapes & 3-D objects you found in nature (Activity #23)				

Grade 7:	
7.SS.1 Determine the sum of central angles of a circle found in nature (Activity #23)	
7.SS.2 Determine area of a triangle, parallelogram or circle found in nature (Activity #23)	
7.PR.1 Demonstrate an understanding of oral and written patterns and their corresponding relations by representing a pattern in the natural environment using a relation (spirals, ripples, branching, spots, stripes, cracks) (Activity #24)	
7.SP.3 Construct, label, and explain a circle graph representing the number of triangles, parallelograms and circles you found in nature (Activity #23)	
Grade 8:	
8.N.1 Demonstrate an understanding of perfect squares and square roots,	
concretely, pictorially, and symbolically (limited to whole numbers) *Fibonacci Sequence in Nature (2:28 min)—YouTube *Doodling in Math:	
Spirals, Fibonacci, and Being a Plant (5:54 min) [1 of 3]—YouTube	
(Activity #24)	
8.SS.6 Identify and describe tessellations in the natural environment	
*TESSELLATIONS: REAL LIFE EXAMPLES (1:08 min)—YouTube (Caution: The	
video uses the term "man-made." Manitoba curriculum uses the more inclusive term, "constructed." (Activity #24)	
8.SP.1 Critique ways in which data are presented by creating a graph about	
2-D shapes and 3-D objects found in nature, and/or types of real-life	
tessellations, natural and constructed, and explain and justify your choice of graph and data set representations (Activity #23 and #24)	

Academic Achievement VISUAL ARTS Outcomes by Grade	Very Good to Excellent Understanding and Application (4)	Good Understanding and Application (3)	Basic Understanding and Application (2)	Limited Understanding and Application (1)
Grades 6–8:				
VA-CR1 The learner generates ideas for creating art using a variety of				
sources.				
VA-CR2 The learner develops original artworks, integrating ideas and art elements, principles, and media.				
VA-CR3 The learner revises, refines, and shares ideas and original artworks.				
VA-C3 The learner demonstrates an understanding of the roles, purposes, and meanings of the visual arts in the lives of individuals and in communities.				

Academic Achievement HEATLH Outcomes by Grade	Very Good to Excellent Understanding and Application (4)	Good Understanding and Application (3)	Basic Understanding and Application (2)	Limited Understanding and Application (1)
Grade 6: K.3.6.A.2 Determine how environmental conditions can influence safety while exercising outdoors (e.g., effects of ultraviolet rays, hot sunny weather can lead to heat exhaustion and sunburn, cold weather and high wind-chill factors increase risk of hypothermia and frostbite). K.3.6.A.3 Recognize reasons (e.g., safety, personal hygiene, comfort, ease of movement) for appropriate dress for physical activities in different weather and environmental conditions (e.g., sunny, cold, windy, wet). K.3.6.B.1 Describe safe and unsafe situations at home, at school, and in the community while caring for self and others (i.e., playgrounds, babysitting, Internet use, shaken baby syndrome). K.4.6.A.3 Describe how personal factors (e.g., emotions, time, previous experience, prior knowledge, personal goals, abilities, religion) and social factors (e.g., peers, friends, trends, society, culture, media, advertising) influence making responsible and health-enhancing decisions (e.g., participating in daily physical activity). K.5.6.B.1 Recognize the physical benefits (e.g., reduced risk of heart disease, obesity, diabetes II, osteoporosis, colon cancer) and the socio-emotional benefits (e.g., reduced anxiety and stress, enhanced sense of belonging, positive use of leisure time, opportunity to meet people) of participating in daily physical activities. K.5.6.B.2 Identify responsible decisions (e.g., play outside rather than watch television or sit at a computer, invite friends to play, play safely, participate fully in physical education class, play community sports) that promote daily physical activity.				

Grade 7:	
K.3.7.A.3 Justify reasons (e.g., ease of movement; personal hygiene; prevention of injury, sunburn, frostbite, hyperthermia, hypothermia) for appropriate dress for selected physical activities.	
K.3.7.B.5a Describe scenarios that illustrate examples of physically, verbally, and emotionally abusive behaviours in different relationships (i.e., within families, between friends, among peers, with employers, groups, gangs, on sports teams, when babysitting).	
K.4.7.B.3c Review strategies (e.g., mediation, conflict resolution), possible outcomes (i.e., win/win, win/lose, lose/win, lose/lose), and behaviours (e.g., compromising, negotiating, accommodating, blaming, avoiding, collaborating, consensus building) for conflict resolution among friends and/or peers.	
S.4.6.A.1 Assess and revise personal health and academic goals (e.g., fitness goal, movement skill goal, nutrition goal, active living goal, personal health-practice goal, academic goal) to enhance health and well-being.	

Grade 8:	
K.3.7.A.3 Justify reasons (e.g., ease of movement; personal hygiene; prevention of injury, sunburn, frostbite, hyperthermia, hypothermia) for appropriate dress for selected physical activities.	
K.4.8.B.2b Identify roles and responsibilities (e.g., loyalty, commitment, support, respect, leadership) in developing positive relationships (e.g., between friends, within families, in a sports team, band/choir).	
K.4.8.C.4a List healthy strategies (e.g., seeking support from others and community resources, positive self- talk, physical exercise) and unhealthy strategies (e.g., smoking, alcohol misuse, isolation, fighting) for dealing with stress and/or anxiety.	
S.4.8.A.1 Develop, implement, self-monitor, and revise a plan using predetermined criteria for active healthy living to achieve a personal and/or group goal (e.g., participate in daily physical activity, a healthy lifestyle behaviour, a social behaviour, a specific academic goal).	
K.5.8.A.1 Examine positive and negative health habits of daily living for self and/or others (e.g., daily physical activity, skin care, hygiene, dental hygiene, rest, caring for others, handling/sharing of food/beverages, tobacco use).	
K.5.8.B.2 Investigate different ways to increase physical activity in daily living as it relates to sustainable development (e.g., using stairs, cycling/ walking to school to help the environment and to contribute to the health of society).	