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. The parents/caregivers may access additional resources at:
 - My Learning at Home (<u>www.edu.gov.mb.ca/k12/mylearning</u>)
 - My Child in School (<u>www.edu.gov.mb.ca/k12/mychild/index.html</u>)

PROJECT OVERVIEW							
Grade :	5						
Main Subject :	Science						
Big Idea :	Extreme Weather						
Title :	THE EXTREME WEATHER SHOW						
Cluster :	Weather						
Duration :	3 weeks						
Materials :	Various art supplies such as markers, pencil crayons, paper, etc.; containers available from around home such as boxes, bags, and plastic totes; ruler or measuring tape; <i>And Then the Sun/Rain Came Out</i> by Cresent Dragonwagon; device capable of recording video; various props						
Short description :	Students will explore extreme weather and emergency preparedness and will contribute to the creation of a video show about extreme weather. This learning experience also includes connections to measurement and representing numbers. This experience combines both synchronous and asynchronous instruction. Students will need access to a device that can record video to complete the final learning challenge.						

LEARNING OUTCOMES

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

5-4-01, 5-4-02, 5-4-04, 5-4-08, 5-4-09, 5-4-13, 5-4-17, 5-0-2a, 5-0-2b, 5-0-2c, 5-0-7f, 5-0-7g

Mathematics: www.edu.gov.mb.ca/k12/cur/essentials/docs/glance_kto9_math.pdf

5.N.1, 5.N.8, 5.N.10, 5.SS.2, 5.SS.3, 5.SS.4

English language arts: <u>www.edu.gov.mb.ca/k12/cur/ela/index.html</u>

Practices: Language as Sense Making, Language as System, Language as Power and Agency, Language as Exploration and Design

Lenses: Environmental and Technological; Social, Cultural, and Historical; Imaginative and Literary

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
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Original concept created by: <u>Charlene Helgeson and Denise Smith</u>

LEARNING EXPERIENCES AND ASSESSMENT

Question: How do we communicate ideas about the effects of weather and/or climate?

Teacher's instructions:

Day 1 (Introduction and On the Same Day in March)

Begin this learning experience with the critical thinking task on slide 4: Which weather conditions impact living things the most? Students can share their thinking on a copy of this slide in preparation for a synchronous discussion to share their ideas.

Asynchronously, students can then watch or view the book *On the Same Day in March* by Marilyn Singer (<u>www.youtube.com/watch?v=HxyOARxq-vs</u>) and complete the research task on slide 6.

Day 2 (On the Same Day in March)

Synchronous lesson: Share a copy of slides 7–11 with students. This is intended to be a set of interactive slides so that students can complete the interactive slide activity indicated on slide 6. Students would edit a textbox on each of the slides to add their research information and then place their box on the line. (See example in image below.) You may choose to have breakout groups do the ordering for a specific set of data. Once the data is organized, the groups could then discuss what they notice and wonder about the data set. Groups would share their thoughts with the whole class and discuss the questions on slide 12.

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Sydney 8 km/h W	C London, UK 12.8 km/h V	Vinnipeg 17 Km/h s	ie				
Least	Instructi and toda number	ions: Choose a t ay's wind speed line.	oox at the top. T . Move your box	ype the name of so it is in the co	f your chosen lo orrect order on t	cation the	Greatest

Day 3 (Weather Reports from around the World)

Asynchronously, have students view the weather reports from 3 different locations around the world:

- Winnipeg: <u>https://winnipeg.ctvnews.ca/video?binId=1.1814091</u> (you will have to find a weather clip usually there is one in the first couple of minutes of the show)
- England: https://news.sky.com/weather
- Florida: <u>https://wsvn.com/weather/</u>

Synchronously, have a class discussion using slide 13. Also, ask students to identify how the weather reports are the same/different from around the world.

Days 4 and 5 (What Is a Blizzard?)

Asynchronously, have students view the video *What is a Blizzard* (<u>www.youtube.com/watch?v=WU_Nd-olb6M</u>). Students can be provided with a copy of slide 14 to answer the questions. Students can then complete the task on slide 15 independently.

Day 6 (Disasters in Canada by the Numbers)

Asynchronously, assign students to the task on slide 16.

Day 7 (Disasters in Canada by the Numbers)

Synchronously, have students share their findings from the previous day. Discuss different ways to represent numbers or data. Be sure to encourage students to think of other ideas besides graphing representations. Some examples can be found here:

https://flowingdata.com/2009/04/14/demographics-in-world-of-100/ https://visme.co/blog/what-is-an-infographic/

Asynchronously, students can complete the task on slide 17.

Day 8 (Disasters in Canada by the Numbers and Preparing for Emergencies)

Synchronously, facilitate a gallery walk of students' representations of Disasters in Canada by the Numbers. You might have students enter breakout rooms for small group discussion of their noticings and wonderings. When they return to the whole group follow up with discussion about some of their wonderings.

Asynchronously, have students brainstorm a list of items that they would include in an emergency preparedness kit (slide 18) and complete the critical thinking exercise on slide 19.

Day 9 (Preparing for Emergencies)

Students can complete slides 20–24 asynchronously. Video link: www.getprepared.gc.ca/cnt/rsrcs/vds/prprng-kt-en.aspx

Day 10 (And Then the Sun Came Out...)

In a synchronous session, read aloud *And Then the Sun/Rain Came Out* by Cresent Dragonwagon and facilitate a discussion using the prompt on slide 25 and 26. Assign the task on slide 26 to be completed asynchronously.

It would be highly recommended that teachers and students co-construct criteria for this task. Slide 27 has been provided for this purpose. The Task Checklist and Excellence Criteria should be co-constructed together. This could be done after introducing the task.

Day 11 (And Then the Sun Came Out...)

Students continue to work on their task from the previous day. Individual or small group meetings could be held today to facilitate students reflecting on their work and providing teacher feedback on their progress with the task. The Self-Reflection and Teacher Guidance columns on slide 27 can be used to guide these conversations.

Consider how you might have students share their stories with each other. Will students post their work where they can view each other stories? Can you have a synchronous meeting and have students share their stories in breakout rooms? You may want to add a day here to facilitate the sharing of their stories.

Day 12 (Final Learning Challenge)

Synchronously meet with students to introduce the final challenge (slides 28-29). You might consider brainstorming and sharing ideas that students might have. Set expectations for timelines and submitting their products. After the meeting, students should begin working on their challenge.

Days 13 and 14 (Final Learning Challenge)

Students will work asynchronously on their challenges. Small group or individual check-ins with students should be scheduled. You may want to consider doing these by the type of product that students are creating, as different show segments will have different criteria. Each group would co-construct a Task Checklist and Excellence Criteria (slide 30). Self-reflection and teacher guidance (see slide 30) can be facilitated in additional meetings as needed.

Day 15 (Final Learning Challenge and Reflection)

Celebrate and reflection. In a synchronous session, the students' segments can be viewed as a complete weather show. Afterwards, students can celebrate their learning and successful completion of the Extreme Weather Show. Slides 31–34 can be used to assist students with reflecting on their learning in this experience about extreme weather.

How to Use the Assessment Rubric

- The rubric is to be used throughout the learning experiences. There is no need for individual criteria or rubrics for each task. Students will use each task to further their understanding of the essential understandings. Students will be demonstrating this through a variety of modalities.
- 2. As you collect evidence of students' level of understanding, highlight or check off their progress on the rubric. You should notice your students move across the rows as their understanding develops throughout the experiences. Do not average your check marks or highlights. Students obtain their highest level of understanding. It does not matter where they start.

Step-by-step instructions for students:

See The Extreme Weather Show PowerPoint Presentation.

APPENDIX (PRINTABLE SUPPORT MATERIALS INCLUDING ASSESSMENT)

Grade 5: The Extreme Weather Show.pptx Grade 5: Assessment Rubric.docx

Assessment Rubric

	Essential Understanding	Limited	Basic	Good	Very Good to Excellent
Mathematics Knowledge and Understanding	Numbers are used to communicate ideas about the world around us.	Identifies ideas that are communicated through numbers.	Summarizes how numbers are used to communicate ideas.	Constructs a representation of an idea through the use of numbers.	Evaluates usefulness and clarity of a representation to communicate ideas about the world through the use of numbers.
	Familiarity with units of measure supports meaningful understanding of measurements.	Describes various units of measurement.	Differentiates between types of units of measurements.	Chooses appropriate measurements for specific purposes.	Connects measurements with their meaning and impact on understanding the world around us.
Science Knowledge and Understanding	Weather conditions (including extreme weather) affect us every day.	Identifies weather conditions in the local environment.	Describes observable features of extreme weather conditions and how these affect living things.	Ranks the effects weather conditions on living things.	Designs an emergency preparedness kit or plan to ensure personal safety during a severe weather event.
	Extreme global weather conditions are impacted by the movement of air masses.	Names examples of extreme weather conditions around the world.	Describes the conditions of an extreme weather event.	Explains how extreme weather conditions are created.	Discriminates between extreme weather condition, their causes, and where they occur.
Science Design Process and Problem Solving	Scientific knowledge can be used to solve practical problems.	Identifies knowledge about weather that is needed to solve a design problem.	Selects features of a design using knowledge about weather.	Recommends features of a design based on knowledge about weather.	Integrates features in design that personal safety due to extreme weather.
ELA—COMMUNICATION Speaking & Representing and/or Writing	What we hear, read, and view contributes to our development of texts for specific audiences.	Notes the sources of information.	Summarizes information from a variety of sources.	Selects information from a variety of sources to support text development.	Integrates information from a variety of sources to support text development for a specific audience.
ELA—COMPREHENSION Listening & Viewing and/or Reading CRITICAL THINKING	What we hear, read, and view contributes to our understanding about extreme weather	Identifies sources of information.	Makes sense of texts about weather.	Compares information from a variety of sources about weather.	Interprets information from a variety of resources to determine the validity and usefulness of the information related to extreme weather.