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

PROJECT OVERVIEW

Grade:	2
Main Subject:	Science
Big Idea:	While exploring the world of endangered animals, students will discover how animals grow and change and identify at which stage in their life cycles they are most at risk.
Title:	ENDANGERED ANIMALS
Cluster:	Growth and Changes in Animals
Duration:	3+ weeks

Materials:	• Student Slides (digital or printed copy)
	 • Google Slides available here: Endangered Animals
	 • Animal research books: (students without online access)
	     o Life Cycles
	     o Habitats
	     o Endangered animals
	     o Natural Disasters
	     o Human Made disasters
	 • 2 pocket folder or duo tang
	 Student Handouts (Thoughtbook & Project—digital or printed copy to go into duotang) *Student Handouts Endangered Animals*.

Short Description:	This learning experience can be an independent student learning experience or can be led by a teacher through synchronous learning (In-class or online). Information is provided for the student to read and view about how animals grow and change and the habitats they live in. Students compare babies with their parents and explain similarities and differences.

LEARNING OUTCOMES

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

2-0-1a, 2-0-2a, 2-0-2b, 2-0-3a, 2-0-3b, 2-0-7b, 2-1-01, 2-1-09, 2-1-14, 2-1-15, 2-1-17, 2-4-04, 2-4-11

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

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

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			

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LEARNING EXPERIENCES AND ASSESSMENT

Overall

Teacher's instructions:

- Virtual: (Asynchronous)
  - Provide a copy of the PowerPoint (digital or print) for each students (PPT or google slides)
  - Meet with students regularly to discuss where they are at within their learning and what they will complete next.
  - Younger students should be meeting with their teacher daily to check-in on their progress and keep them on track.
  - Meetings with caregivers would prove beneficial as well.
  - Provide support to students as they work through the lesson.
  - Provide time for discussion and collaborative thinking.
- Virtual (Synchronous)
  - Provide a copy (digital or print) of the PowerPoint for each students (PPT or google slides)
  - Meet with the students daily and work through each section of the lesson as a whole group.
  - Provide support to students as they work through the lesson.
  - Provide time for discussion and collaborative thinking.
- In-Class:
  - Provide a copy of the PowerPoint (digital or print) for each students (PPT or google slides)
  - Meet with the students daily and work through each section of the lesson as a whole group.
  - Provide support to students as they work through the lesson.
  - Provide time for discussion and collaborative thinking.

Note: For all students requiring only printed materials please provide the actual links to the videos and provide resource books for the students to use as an alternative to the online resources

Question: Why are some animals in Manitoba at risk and how can we help?

Lesson Instructions:

- Slide 1—Title Page
- Slide 2—Provide students with a duo tang or 2 pocket folder with some empty sheets of paper where they can store their ideas and thoughts as they learn and grow through this lesson.
    - This could also be a digital Thoughtbook such as:
        - Tablets/Smartphones
        - SeeSaw
        - OneNote
        - Google Docs/Slides
        - Padlet
    - Thoughtbooks promote reflective learning space that creates a continual interplay between existing and new learning and allows for the timely use of assessment (peer, self and teacher) as students engage with the empty space inherent in a rich challenge.
    - There are specific slides/pages that are indicated as Thoughtbook entries. These can be printed off for students and added into their Thoughtbooks.
    - There are also times indicated in the teacher notes to encourage students to add to their Thoughtbooks through their learning journey and as they work towards completing the learning challenge.
    - If time allows students to create a cover page for their Thoughtbook to make it more personal.
- Slide 3—Print of this page for each student to include in their though books. (This is included in the student handouts as well for easy printing) They will revisit this page often in this learning experience
    - This is a tool to help teachers and students reflect on their learning; see where they started and where they end up.
- Slide 4—(Student Handout) Ask students to write this guiding question in their Thoughtbooks
    - Encourage students to write down some initial ideas based on what they think they know about endangered animals.
- Slide 5—This slide/page could also be included in the students Thoughtbooks
    - Encourage students to think about what they need to think about and do in order to complete the learning challenge.
    - Ask students to jot down their ideas before they begin learning and encourage students to add to this as they work through the learning experience.
- Slide 6—This page is linked to the different sections on the learning experience.
    - Click on the link and follow it to your current slide or PPT press ctrl + click on the link.
- Slide 8—Discuss with students the different levels of risk that plants and animals could be in.
    - Ask students if they have heard the word extinct and if they know what this word means *(all of the species is gone forever)*
    - Ask students if they can think of a plant or animal that is extinct.
    - Look over the list of plants and animals and ask students why it would matter if plants are threatened?
    - Discuss and view a few of the animals that are at risk in Manitoba and ask students to each choose one to research.
    - Inform students they will be working on creating a plan to save this animal.

- Slide 9—(Student Handout) This is the first part of their final learning challenge.
  - The students will be adding to their final plan after each learning section.
  - The Learning Challenge pages are all blue
  - This is where students are given the opportunity to apply what they have been learning.
  - These slides can be printed off and put into the students Thoughtbooks at the back.
  - Inform students that when they are learning and creating something like this project its okay to make mistakes, change your thinking, add/extend to your thinking and even be a little messy.
- Slide 10—Ask students to return to their first Thoughtbook and write down any new information that they have learned.
  - Ask students to review the information that "thought they knew" and ask if anything has changed.
  - Ask students if they have any new wonderings or if they have answered any of their previous wonderings.
  - Move the new thinking to the "Misconceptions" column.
- Slide 11—(Assessment) Ask the students to review the work they are about to submit.
  - Ask them to check to make sure they have included everything in their checklist.
  - Review criteria for excellence with the students and ask them to fill out the self reflection section on the work they have completed thus far.
    - Ask the students what did they feel went well during this section, what did they learn and what did they do well?
    - Ask the students what they feel was the most challenging in this section and what changes they feel they could make?
    - Ask the students where they would like to go next in their learning, what next steps would help them reach their learning goal and complete the challenge?
  - Once you have received their work for this section affirm and revise the work and conference with the students to compare their self reflection with the teachers' guidance/feedback.
- Slide 12—(Student Handout) Provide students with this thinking dashboard. This page will go into their thought books.
  - Ask students to draw or input an arrow on the dashboard to indicate their initial thinking.
  - Ask them to complete the sentence in the "before learning" section.
  - Inform students that at the end of this learning task, they will review their thinking and justify why they agreed/disagreed with their initial thoughts.
  - Reassure students that it is okay to change our thinking as we learn new things and our minds grow. Promote the idea of growth mindset and model this thinking to your students so they can see it is okay to change their minds.
- Slide 13—(Student Handout) Print off this slide for students to fill in during (and after) they watch the habitat video on the next slide.
  - Ask students to do some thinking after the video about what could happen to the animals if the plants died? Why could this be bad? What could cause this?
- Slide 14—The video link: https://www.youtube.com/watch?v=Xj1ASC-TlsI
- Slide 16—This slide can be printed off or students can work on it digitally. To provide a copy for each student you can press ctrl D and the slide would be duplicated. Assign a slide number to each student and ask them to type their name in the top right corner in the empty text box.
  - The chart on the animal habitat video is the key.

- Slide 17—This could be an independent research opportunity or a group assignment.
  - Use articles and/or videos to compile a list of all the ways a habitat can be destroyed.
  - Ask students if this happens to a habitat:
    - What happens to the baby animals?
    - What happens to the adult animals?
    - What happens to the animals that are having babies?
    - Why could this be bad?
  - Independent:
    - Ask students to go to https://kids.kiddle.co/—Search "how are habitats destroyed"
  - Whole Class:
    - Other links:
      - https://kids.kiddle.co/Habitat_destruction#:~:text=Habitat%20destruction%20is%20when%20a,happens%2C%20the%20organisms%20could%20die.&text=Habitat%20loss%20can%20also%20be,can%20no%20longer%20live%20there.
      - https://kids.nationalgeographic.com/explore/science/habitat-destruction/
- Slide 18—Review all the ways that habitats can be destroyed or disrupted (previous slide)
  - Ask and discuss with the students,
    - How can we, as humans, help so that babies and growing animals are not at risk?
    - What causes could we prevent from happening?
    - What causes could we not prevent? What could we do if one of those happens?
- Slide 19—(Project Page)—Print this page off and put it with the other project page.
  - Encourage students to review the animal they chose and ask if they still would like to research that animal.
  - Ask students to go to www.kiddle.co and research the habitat their animal is from and the different ways their animals life cycles can be disrupted.
  - Tell them they could use the lists from Slide 16 to help them decide if the problems caused are natural or man-made
  - Inform students they can use slide 17 to help them with ideas on ways to help their animal. If they think of new ideas, they could also add these to slide 17 to help out their classmates.
- Slide 20—See Slide 10 Instructions
- Slide 21—See Slide 11 Instructions
- Slide 23—Provide students with this page and discuss the examples under each heading.
  - Have the students think of, and write their own examples under each heading.
  - You can do this as a class or have students complete this individually. Or a combination of the two.
- Slide 24, 26, 28, 30—Insert text boxes to describe the similarities and differences between baby animals and their adult caregivers.
- Slides 25, 27, 29, 31—Ask students to do the following:
  - Fill in the thermometer with their initial thinking.
  - Watch the videos
  - Discuss the life cycle stages.
  - Review the thermometer and either affirm their initial thoughts or revise their thinking
  - Ask the students if their thinking changed and how. This can be a great class discussion

- Slide 32—(Project Page) See Slide 19 instructions and have students decide at what stage their animal is most at risk *(There could be more than one stage)* for example
  - Monarchs are most at risk at chrysalis stage because they can turn black and not become butterflies, also at egg and larvae stages because farmers are spraying pesticides on the plants they eat.
- Slide 33—See slide 10 instructions
- Slide 34—See slide 11 instructions
- Slide 36—This page is where students can organize their thinking from the last couple project pages as well as find any other pieces of information about their animal.
- Slide 37—(Project Page) See slide 19 instructions and Encourage students to review everything they have learned about their animals so far.
  - Ask students to use what they have learned and all the ideas they have thought about to help save their animal and write out a detailed plan.
  - This should be done in full sentences and paragraph form. The students will use this information to inform their community in the next section.
- Slide 39—(Project Page) See slide 19 instructions and Inform students that they will take their plan and find a way to tell everyone in their community about this animal and encourage others to help save them.
- Slide 40—See slide 10 instructions
- Slide 41—See slide 11 instructions

APPENDIX (PRINTABLE SUPPORT MATERIALS INCLUDING ASSESSMENT)

Grade 2: Endangered Animals PowerPoint
Grade 2: ELA Assessment Tool: Evidence of Student Learning
Grade 2: Learning Challenge Checklists

Grade 2 English Language Arts Assessment Tool: Evidence of Student Learning

The following chart is one way to record your body of evidence of student learning. It is important to consider the identified grade band descriptors in relation to the practices and elements as you look through the body of evidence. You are describing the extent to which students enacted the descriptors. Transfer this information into the appropriate reporting categories.

Evidence of Learning in English Language Arts: https://app.mapleforem.ca/en/groups/229/wiki/pages/1622#3to5overview		Interrelated Dimensions of Learning Growth (IDOL-G): https://app.mapleforem.ca/en/groups/229/wiki/pages/2205			
4 ELA Practices & Elements	*Grade Band Descriptors Identified*	**Independence:** Emerging Expanding Extending	**Depth:** Emerging Expanding Extending	**Breadth:** Emerging Expanding Extending	**Transformation:** Emerging Expanding Extending
Power Agency • Recognize and analyze inequities, viewpoints, and bias in texts and ideas • Investigate complex moral and ethical issues • Contemplate the actions that can be taken, consider alternative viewpoints, and contribute other perspectives	Learners are recognizing that texts have different audiences, purposes, agendas, and points of view.	Example: Expanding: Student researched tiger and was able to find the answers to each question.			
Exploration and Design • Research and study topics and ideas • Interpret and integrate information and ideas from multiple texts and sources • Manage information and ideas • Invent, take risks, and reflect to create possibilities	Learners are using different sources to explore ideas and to deepen and extend thinking.				
Sense Making • Access, use, build, and refine schema • Select from and use a variety of strategies • Be aware of and articulate the ways that one engages with text.	Learners are using what they know about text to understand and create new texts.				

System	Learners are experimenting with, using, and adjusting conventions of familiar print, oral, and visual texts to enhance communication.				
• Recognize, apply, and adapt rules and conventions • Identify, analyze, and apply understandings of whole-part-whole relationships					

Learning Challenge Part 1 Checklist (What do I need to do?)	Self Reflection (What did I do well? What could I improve on?)	Excellence Criteria (What do I need to do to do it well?)
❏ Schema Board ❏ Animal Name. ❏ Risk Status. ❏ 1 question about your animal. ❏ 1 image of your animal. 　❏ Internet 　❏ Drawn	*Affirm*—What went well? What did I learn about? What did I do well? ● ● ● *Revise*—What was challenging in this section? What changes could I make? ● ● *Aspire*—Where would I like to go next? What would I like to learn more about? ●	★ I can ask questions that are thoughtful and lead to the investigation of saving animals at risk. ★ All my ideas are clear, understandable and contributes to explaining how animals can become endangered. ★ I can use words and phrases used connect to animals at risk. ★ My image clearly shows the animal I am researching.

Teacher Guidance
(What is going well? What might need to be changed?)

Affirm—What is going well?

-
-
-

Revise—What changes could be considered?

-
-
-

Learning Challenge Part 2 Checklist (What do I need to do?)	Self Reflection (What did I do well? What could I improve on?)	Excellence Criteria (What do I need to do to do it well?)
❏ Schema Board ❏ Natural habitat changes ❏ Human habitat changes	*Affirm*—What went well? What did I learn about? What did I do well? ● ● ● *Revise*—What was challenging in this section? What changes could I make? ● ● *Aspire*—Where would I like to go next? What would I like to learn more about? ●	★ I can describe the habitat changes that occur naturally and how they affect animals at different life stages. ★ I can describe the habitat changes that are caused by humans and how they affect animals at different life stages. ★ I can list actionable ways to help save my animal.

Peer #1 Feedback

(What is going well? What might need to be changed?)

Affirm—What is going well?

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-
-

Revise—What changes could be considered?

-
-
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Learning Challenge Part 3 Checklist (What do I need to do?)	Self Reflection (What did I do well? What could I improve on?)	Excellence Criteria (What do I need to do to do it well?)

❏ Schema Board
 	
❏ Life Cycle Diagram
 	
  ❏ Internet or
 	
  ❏ Drawn
 	
❏ Life Cycle Stage(s) most at risk
	Affirm—What went well? What did I learn about? What did I do well?
	●
	
	●
	
	●
	
	Revise—What was challenging in this section? What changes could I make?
	●
	
	●
	
	Aspire—Where would I like to go next? What would I like to learn more about?
	●
		★ I can describe changes in the appearance of various animals as they go through a complete life cycle.
		
		★ I can create an accurate life cycle of my animal
		
		★ I can make connections to habitat disruptions at different stages in the life cycle of my animal.

Peer #2 Feedback
(What is going well? What might need to be changed?)

Affirm—What is going well?

-
-
-

Revise—What changes could be considered?

-
-
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Learning Challenge Part 4 and 5 Checklist (What do I need to do?)	Teacher and Peer Feedback (What did I do well? What could I improve on?)	Excellence Criteria (What do I need to do to do it well?)
❑ Schema Board ❑ Campaign to save the animal includes information learned throughout all parts of the learning challenge.	*Affirm*—What went well? What did I learn about? What did I do well? ● ● ● *Revise*—What was challenging in this section? What changes could I make? ● ● *Aspire*—Where would I like to go next? What would I like to learn more about? ●	★ My campaign ideas are clear and accurate ★ My campaign informs the community about my animal, the problem and how to save it. ★ My campaign is well organized and creative. ★ I used the correct format to match the style I chose. ★ My campaign is persuasive and provides a way for people to take action.