

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 OVERVIEW

Grade:	Kindergarten
Main Subject:	Mathematics
Big Ideas:	<ul style="list-style-type: none">• Patterns can be represented in a variety of ways.• Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways.• Quantities can be represented concretely, pictorially, and symbolically.• There are different but equivalent representations of numbers.• Counting tells how many or how much.• Numbers are related to each other through a variety of number relationships.• It is necessary to understand the attributes of the object before anything can be measured.• Measurement involves a selected attribute of an object (length, area, mass, volume, capacity) and a comparison of the object being measured against non-standard units of the same attribute.• Two- and three-dimensional objects can be described, classified, and analyzed by their attributes.
Title:	MATH IS ALL AROUND US
Strand:	Number, Patterns and Relationships, Shape and Space
Duration:	Several weeks
Materials:	See slides
Short Description:	This is a collection of synchronous and asynchronous activities to support the development of foundational mathematical understanding in Kindergarten.

LEARNING OUTCOMES

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

K.N.1, K.N.2, K.N.3, K.N.4, K.N.5, K.N.6, K.PR.1, K.SS.1, K.SS.2, K.SS.3

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						

Original concept created by: Lisa Page and Deidre Sagert

LEARNING EXPERIENCES AND ASSESSMENT

Question: Overall

Teacher's instructions

This collection of tasks is designed around learning outcomes found in the Number Strand, Patterns and Relations Strand and Shape and Space Strand of the curriculum. The collection of tasks does include other learning experiences such as positional language. The slides are designed around a different concept each week. The first slide in each section outlines the concept, essential learning and essential questions, and can be used as either a set of synchronous lessons for a remote learning teachers or asynchronous activities if being delivered by a caregiver.

Each section provides a different way of engaging with the concept and includes real-life experiences, games, puzzles, and extensions for learning..

Step-by-step instructions for students:

These will need to be provided by the teacher in terms of what parts will be student led and those that will be teacher led. More detailed instructions for each learning experience are included in the NOTES section under each slide.

APPENDIX (PRINTABLE SUPPORT MATERIALS INCLUDING ASSESSMENT)

Kindergarten: Math Is All Around Us.pptx

Kindergarten: Math Is All Around Us Rubric.docx

Math Is All Around Us Rubric

Student:	<i>Basic descriptors to help guide your formative assessments.</i>			
Full details of the student achievement profiles can be found here: Mental Math and Estimation Knowledge and Understanding Problem Solving	Requires considerable ongoing teacher support.	Requires occasional teacher or peer support.	Accurate, clear, and uses appropriate strategies and procedures. Requires occasional prompting for clarification.	Accurate, clear, flexible, consistent, and efficient. Justifies and explains reasoning clearly and completely using accurate math vocabulary.
	Limited	Basic	Good	Very Good/Excellent
<i>Tracking student data throughout these learning experiences allows the teacher to make an informed assessment about a student's level of achievement of these outcomes.</i>				
Knowledge and Understanding				
Number: K.N.1. Say the number sequence by 1s, starting anywhere from 1 to 30 and from 10 to 1.				
K.N.2. Subitize and name familiar arrangements of 1 to 6 dots (or objects).				
K.N.3. Relate a numeral, 1 to 10, to its respective quantity.				
K.N.4. Represent and describe numbers 2 to 10 in two parts, concretely and pictorially.				
K.N.5. Demonstrate an understanding of counting to 10 by <ul style="list-style-type: none"> indicating that the last number said identifies "how many" showing that any set has only one count 				
K.N.6. Compare quantities, 1 to 10, <ul style="list-style-type: none"> using one-to-one correspondence by ordering numbers representing different quantities 				
Patterns and Relations: K.PR.1. Demonstrate an understanding of repeating patterns (two or three elements) by <ul style="list-style-type: none"> Identifying reproducing extending creating patterns using manipulatives, sounds, and actions.				

Shape and Space: K.SS.1. Use direct comparison to compare two objects based on a single attribute, such as length (height), mass (weight), and volume (capacity).				
K.SS.2. Sort 3-D objects using a single attribute.				
K.SS.3. Build and describe 3-D objects.				
Positional Language: How can objects be described? Where are objects/people located in relation to other objects/people?				

Suggested Codes for daily record keeping purposes:

- I – Knowledge has been demonstrated individually
- H – Used when knowledge has been demonstrated individually, but with help from the teacher or a peer
- G – Used when knowledge has been demonstrated within a group
- X – Used when a question has been attempted but answered incorrectly
- N – Used when a question has not been attempted

Adapted from: Liljedahl, P. (2021). *Building thinking classrooms in mathematics, grades K-12: 14 teaching practices for enhancing learning*. Thousand Oaks, CA: Corwin Press Inc.