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 (<u>www.edu.gov.mb.ca/k12/mychild/index.html</u>)

PROJECT OVERVIEW								
Grade:	Kindergarten							
Main Subject:	Science							
Big Idea:	Problem Solving, Critical Thinking, Play-Based Learning, 3D Shapes- Attributes, Measurement and Comparing, Design Process, Scientific Inquiry, Speaking Skills							
Title:	TOWER BUILDING							
Cluster:	Inquiry and Design Process							
Duration:	15–60 minutes							
Materials:	Household Items							
Short Description:	This is a STEAM (Science, Technology, Engineering, Arts, and Mathematics) project that can be adapted for both synchronous and asynchronous time. Students will experiment with household items and apply critical thinking strategies while participating in this play-based activity.							

LEARNING OUTCOMES

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

K-0-1b, K-0-1c, K-0-2b, K-0-3c, K-0-4a, K-0-4b, K-0-4c, K-0-5a, K-0-6c, K-0-7a, K-0-7b, K-0-8a, K-0-9a, K-0-9b, K-0-9c

Mathematics: www.edu.gov.mb.ca/k12/cur/essentials/docs/glance kto9 math.pdf

K.SS.1, K.SS.2

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

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

Agency

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				

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LEARNING EXPERIENCES AND ASSESSMENT

Questions: Can you build a tower that is taller than you are without it falling over?

Teacher's instructions:

This is a STEAM activity focused on problem solving and building. Students will be given instructions and left to experiment with supervision by parents/caregivers. A teacher example can be provided to help get students started (see below).



Assessment: Observations are recorded about students' abilities to apply problem-solving techniques and self-reflect on their challenges, successes, and how they were able to make improvements to their original design.

Step-by-step instructions for students:

Have you ever seen a tower? Today, your job is to build the tallest tower you can using household materials! You can use whatever you want to build it (with your parents/caregivers' permission). Some examples could be books, cereal boxes, toilet paper rolls, folded paper, blocks from your toy box, recyclables, or anything else you want to try! Can you make it as tall as you (or even taller than you) without it falling over?

- 1. Look at the pictures of these towers. What do you notice? What do you wonder?
- 2. With adult supervision, use your creative mind to find materials around your house to build!
- 3. Make sure you have some clear, open space for your building project so you can build your tower in a safe place. Please be careful not to hurt yourself or anyone else and not to break anything while you build.
- 4. Create your tower. As it gets taller, it might be wobbly. If it falls over, try again. Think about what changes you might need to make to your tower to help it balance. If it falls over again, keep trying!
- 5. Once you are done, please take a photo of yourself standing beside it.
- 6. Draw a picture of your tower. Write your name and any other words you might like to include on your picture.
- 7. Get ready to tell your teacher about what you did, using the student self-reflection questions.

APPENDIX (PRINTABLE SUPPORT MATERIALS INCLUDING ASSESSMENT)

Kindergarten: Student Self-Assessment.docx

Student Self-Assessment



My Tower and Me

• Draw Your Tower Here

My name is ______