

Bachelor of Education (Elementary) & Bachelor of Education (Secondary) STEM Unit Plan Template

Unit Title: Measurement Number of Lessons 4 Time (in weeks): 1 Week
 Name: Breckin D Erichuk Subject(s): Math Grade(s): 1

Rationale

This measurement unit is designed to build a foundational understanding of measurement by engaging students in hands-on, exploratory learning aligned with the BC Mathematics curriculum. Through sorting, comparing, and measuring using direct comparison and non-standard units, students develop essential concepts of size, length, and consistency while strengthening their mathematical vocabulary. The unit emphasizes conceptual understanding over procedural skills, allowing students to make sense of measurement in meaningful, real-world contexts and communicate their thinking using appropriate language. This aligns with the learning goals set for the grade 1 standard and prepares students for more advanced lessons on measurement in grade 2.

Overview:

This Grade 1 measurement unit is designed as a clear developmental progression that builds students' understanding from informal comparison to more structured measurement practices. In Lesson 1, students begin by sorting and classifying objects based on size, using simple language such as big, small, long, and short. This provides a foundational, hands-on experience where students visually recognize differences without the use of tools. In Lesson 2, students build on this understanding by engaging in direct comparison, placing objects side-by-side and using more precise vocabulary such as longer, shorter, and taller. This introduces the concept of fair comparison and strengthens both their reasoning and communication skills. In Lesson 3, students transition to using a consistent non-standard tool, such as a piece of string, to measure and compare objects and body parts. This marks an important shift from informal comparison to structured measurement, helping students understand the importance of consistency with a measurement tool. Finally, in Lesson 4, students measure using repeatable non-standard units like cubes or paper clips, counting units to determine length and comparing results. This introduces the concept of using equal units and reinforces measurement accuracy. Overall, the unit moves from recognizing differences, to comparing, to measuring with tools, and finally to measuring with repeatable units, supporting a strong conceptual foundation in early measurement that meets the BC Curriculum Grade 1 Mathematics learning standards.

CORE COMPETENCIES

Communication	Thinking	Personal & Social
<p>Communicating:</p> <p>Students share their thinking using words, pictures, and actions (e.g., explaining which object is longer or shorter).</p>	<ul style="list-style-type: none"> ● Critical thinking <p>Students use reasoning to compare, sort, and solve simple measurement problems (by ordering objects by size).</p> <ul style="list-style-type: none"> ● Creative thinking <p>Students explore different ways to measure, compare, and solve problems, using materials in flexible and imaginative ways.</p>	<ul style="list-style-type: none"> ● Positive personal and cultural identity <p>Students build confidence in their learning abilities and make connections between measurement and their everyday lives and experiences.</p> <ul style="list-style-type: none"> ● Personal awareness and responsibility <p>Students work with others, take turns, and build confidence as they explore and make decisions during</p>

		hands-on activities that relate to measurement.
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BIG IDEAS

(multiple subject areas for integrated unit)

Subject Name	Subject Name	Subject Name
Objects and shapes have attributes that can be described, measured, and compared. <ul style="list-style-type: none"> Geometry and Measurement: We can describe, measure, and compare spatial relationships. 	Concrete graphs help us to compare and interpret data and show one-to-one correspondence. <ul style="list-style-type: none"> Analyzing data based on measurements to compare and interpret real-world scenarios. 	Numbers to 20 represent quantities that can be decomposed into 10s and 1s. <ul style="list-style-type: none"> Numbers related to measurement represent and describe quantity.

LEARNING STANDARDS

Curricular Competencies	Content
Students will...	Students will learn...
Students will compare objects directly and describe differences (longer, shorter, taller).	<ul style="list-style-type: none"> Measurement concepts (length, height, size).
Students will order objects based on measurable attributes such as length or size.	<ul style="list-style-type: none"> Compare objects and Body Parts (side-by-side measuring) directly hands-on.
Students will use reasoning and communication skills to explain how they sorted or compared objects.	<ul style="list-style-type: none"> Measurement vocabulary (longer, shorter, taller, smaller, bigger).
Students will use materials and tools to explore measurement (String, Cubes).	<ul style="list-style-type: none"> Measurement using non-standard units (cubes, paper clips).

Prerequisite Concepts and Skills:

<p>Based on the BC Curriculum, Mathematics GK</p> <p>Students should already be able to...</p> <ul style="list-style-type: none"> Recognize and describe basic attributes (big/small, long/short). Use basic counting skills (counting objects accurately). Follow simple instructions and participate in hands-on activities. Compare two objects informally (noticing which is bigger without measuring). Sort objects based on simple characteristics (colour, shape, size)

Teacher Preparation Required:

Lesson #	Teacher Preparation Required (See Unit Plan Sample)
Lesson 1	<ul style="list-style-type: none"> Pencils

	<ul style="list-style-type: none"> ● Photocopy Ordering by Size Worksheet (Largest to Smallest) (Number of students + Teacher Copy) ● Prepare a Variety Tray of classroom objects (Small and Big blocks/books) (1 Per Table) ● Whiteboard Pens ● White Board ● Set up Jack Hartman ³Tall and Short.' https://www.youtube.com/watch?v=JjKhSvUVFBI
Lesson 2	<ul style="list-style-type: none"> ● Classroom objects (pencils, books, string, markers) are used to directly compare objects for the classroom scavenger hunt. ● Prepare Wordwall based on student vocabulary from the previous lesson (longer, shorter, taller, smaller, bigger) ● Photocopy the Direct Comparison worksheets (Number of students + Teacher Copy) ● Whiteboard ● Pencils ● Access to “Biggest and Smallest Mud Hop”, “ Reordering Objects”, and “Ordering Lengths and Heights” Games on the Computer https://www.education.com/resources/grade-k-2/games/math/measurement/
Lesson 3	<ul style="list-style-type: none"> ● Pre-cut pieces of string (10-20-30 cm, same length for all students) ● Find different colours of string ● Classroom objects (books, desks, pencils, bins) ● Photocopy Recording sheet for string body parts activity (Number of students + Teacher Copy) ● Chart (Steps for measuring body parts with a string) ● Whiteboard ● Pencils ● Acquie Book: “A Treasure of Measures” by Mike Downs
Lesson 4	<ul style="list-style-type: none"> ● Acquire Book: “Inch by Inch” by Leo Lionni ● Acquire Linking cubes, paper clips, or small blocks ● Classroom objects (books, pencils, desks) ● Photocopy Recording “My Measurement” sheet (“The ___ is ___ cubes long”) (Number of students + Teacher Copy) ● Visual Chart (steps for measuring with units) ● Whiteboard ● Use “Feet Findings worksheet” for final activity (1)
Lesson 5	
Lesson 6	
Lesson 7	
Lesson 8	
Lesson 9	
Lesson 10	

Cross-Curricular Connections:

Science:

- Students explore properties of objects (size, length, height) and practice observing, comparing, and classifying materials.

Social Studies:

- Students connect measurement to real-world contexts (comparing objects in their home, classroom, or community).

English Language Arts:

- Students develop oral language by describing and comparing objects using measurement vocabulary (longer, shorter) and explaining their thinking.

Aboriginal Connections/ First Peoples Principles of Learning:

Learning involves patience and time

- Students are given time to explore, test, and revisit measurement ideas through inquiry rather than rushing to correct answers.

Learning involves generational roles and responsibilities

- Students work collaboratively, helping one another measure and compare, reflecting shared learning and community responsibility.

Learning is holistic, experiential, and relational

- Students engage in hands-on measurement activities using natural and classroom materials, learning through doing and connecting to the environment.

These approaches ensure the unit respects and incorporates Indigenous perspectives while supporting meaningful, place-based learning.

Universal Design for Learning (UDL)

This unit provides multiple means of engagement, representation, and expression so all learners can access and demonstrate understanding of measurement concepts while also encouraging students to use a positive mathematical mindset.

How students are motivated:

- Provided choice in activities (what objects to measure or compare).
- Use hands-on materials (blocks, string, natural objects) to hold their interest.

How content is presented:

- Use visual supports (anchor charts, pictures, demonstrations).
- Provided clear, simple instructions with examples (Real objects and physical examples).

How students show learning:

- Allow students to demonstrate learning in different ways (oral explanation, showing, drawing).
- Use sentence prompts to support communication.
- Offer hands-on tasks instead of only paper-based work.

Differentiated Instructions (DI)

This unit supports diverse learners by adapting content, process, and the products based on students' readiness, interests, and learning needs.

- Use simplified vocabulary and visuals for students needing support
- Provided extensions for students who may finish early (comparing more than two objects, introducing estimation).
- Adjusted expectations (fewer objects, larger differences, guided comparison).
- Use flexible grouping (pairs, small groups, teacher-guided groups).

- Allow extra time and repeated practice when needed.
- Students who may struggle when starting sentences will be provided with sentence starter prompts.

Different problems or situations can happen during all three phases of lessons. It is important as a teacher to keep a positive mathematical mindset with the students and be prepared for anything that may occur. Having good high/low activities within each lesson incase different supports are needed.

Overview of Lessons:

Lesson 1

Name & Time (Minutes Allotted):	Sorting & Classifying/ Ordering by Size (40 mins)
Learning Standards: Curricular Competencies	Students will... <ul style="list-style-type: none"> ● Compare objects based on size (big/small, tall/short) ● Order objects using measurable attributes ● Use reasoning to sort and classify objects
Learning Standards: Content	Students will learn... <ul style="list-style-type: none"> ● Measurement concepts: size, length, height ● Comparing objects based on attributes (big/small, long/short, tall/short) ● Sorting and ordering objects using measurable attributes
Instructional Objectives	By the end of the lesson, students will be able to: <ul style="list-style-type: none"> ● Sort objects into groups based on size or length (big/small, long/short). ● Order several different objects from smallest to largest or shortest to tallest. ● Use measurement vocabulary (big, small, long, short, tall, short) to describe objects. ● Explain their reasoning for how they sorted or ordered objects.
Assessment:	Formative Assessment: Observation checklist: <ul style="list-style-type: none"> ● Correctly sorts objects on the worksheet ● Orders objects correctly ● Uses measurement vocabulary appropriately ● Explains reasoning
Teaching Strategies:	Hands-On Learning <ul style="list-style-type: none"> ● Use real objects (blocks, pencils, books) for sorting and ordering. ● Let students manipulate items to explore size differences directly. Modeling & Think-Alouds <ul style="list-style-type: none"> ● Demonstrate how to sort and order objects.

	<p>Guided Discovery</p> <ul style="list-style-type: none"> ● Pose open-ended questions: “Which one is bigger? How do you know?” ● Encourage students to explore multiple ways to sort or order objects.
Materials:	<ul style="list-style-type: none"> ● Pencils ● Ordering by Size Worksheet (Largest to Smallest) ● Variety Tray of classroom objects (Small and Big blocks/books) (1 Per Table) ● Whiteboard Pens ● White Board ● Jack Hartman “Tall and Short” video https://www.youtube.com/watch?v=JjKhSyUVFBI
Lesson Activities:	
Introduction/Hook:	<ul style="list-style-type: none"> ● Go over classroom expectations to establish how the teacher would like students to behave and work. Ask questions like “What do you do when others are talking?” and “How do you think our work time should look and sound like?” <p>Introduction: 5 Min</p> <p>Hook:</p> <ul style="list-style-type: none"> ● Show two classroom objects (a small book and a large book) ● Ask students: “Which is bigger? Which is smaller?” ● Ask students about other differences they notice and introduce vocabulary: (big, small, tall, short, long) ● Write down the words the students have chosen and create a word wall of these words that I will hang up before each lesson to ensure the students can remember the vocabulary we discussed. ● Introduce the Jack Hartman “Tall and Short” video https://www.youtube.com/watch?v=JjKhSyUVFBI <ul style="list-style-type: none"> - Sing-along show engagement with students. - Reinforce the vocabulary we just heard in the song with the class. ● After modelling the activity with the class, explain thinking aloud: “This one is bigger because, this one is smaller because...”.
Body:	<p>Exploration (15 min)</p> <ul style="list-style-type: none"> ● Students will be preassigned to their table groups with preplaced 5–7 objects for each group. <p>Students will then be instructed in “Task 1.”</p> <ul style="list-style-type: none"> ● Task 1: Sort objects into two groups (big/small, long/short)

	<p>Once given some time to collaborate and discuss reasoning with the teacher and peers, they will be given Task 2.</p> <ul style="list-style-type: none"> ● Task 2: Order the objects from smallest to biggest or shortest to tallest. ● Encourage students to talk through their reasoning with partners: <ul style="list-style-type: none"> ● “I put the block here because it is longer than this one.” ● The teacher circulates to observe, guide, and ask probing questions. <p>Guided Practice (10/15 min)</p> <ul style="list-style-type: none"> ● Give students directions on the Ordering by Size Worksheet. ● The teacher will guide the first question on the whiteboard with the class. ● Have students number from biggest to smallest (1 being largest, 2 being in the middle, and 3 being smallest) ● Ask: “How did we decide which one comes first? Which is the tallest? Which is the shortest?” ● After the guided practice, students will work individually to fill in their worksheet. <p>High/Low Extensions:</p> <ul style="list-style-type: none"> ● If students finish early, they can do it in reverse order and write out the items they are comparing. ● If students are struggling, they can star the questions they are confused about, and a teacher can come over and support.
Closure:	<p>Closure / Reflection (5 min)</p> <ul style="list-style-type: none"> ● Once they have had time to finish their worksheets, begin the closing activity. ● Whole-class activity: have students line themselves up by height or objects by size. ● Once completed, discuss the order as a class and reinforce vocabulary. ● Reinforce the idea that there are different ways to sort and compare objects.

Lesson 2

Name & Time (Minutes Allotted):	Developing Vocabulary on Measurement/ Direct Comparison
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Learning Standards: Curricular Competencies	<p>Students will...</p> <ul style="list-style-type: none"> ● Compare two objects directly (side-by-side) ● Use appropriate measurement vocabulary (longer, shorter, taller) ● Communicate mathematical thinking through discussion
Learning Standards: Content	<p>Students will learn...</p> <ul style="list-style-type: none"> ● Direct comparison of objects (side-by-side) ● Measurement vocabulary (longer, shorter, taller, smaller, bigger) ● Describing differences between objects
Instructional Objectives	<p>By the end of the lesson, students will be able to:</p> <ul style="list-style-type: none"> ● Compare two objects directly using side-by-side alignment ● Use measurement vocabulary (longer, shorter, taller) accurately ● Explain how they know which object is longer/shorter
Assessment:	<p>Formative Assessment</p> <ul style="list-style-type: none"> ● Observation checklist: ● Aligns objects correctly ● Accurately identifies longer/shorter ● Uses measurement vocabulary ● Explains thinking <p>Product:</p> <ul style="list-style-type: none"> ● Simple recording sheet: draw two objects and label which is longer/shorter
Teaching Strategies:	<ul style="list-style-type: none"> ● Modelling with Think-Alouds Demonstrate how to line up objects side-by-side and verbally explain your thinking (“This one is longer because it extends past the other one”). This helps students understand both the process and the language. ● Structured Partner Talk Have students work in pairs using sentence stems like “The ... is longer than the...” This supports language development and gives students practice communicating their thinking. ● Use of Visual Supports Refer to it throughout the lesson to reinforce understanding and support all learners.
Materials:	<ul style="list-style-type: none"> ● Classroom objects (pencils, books, string, markers) ● Word wall with vocabulary (longer, shorter, taller, smaller, bigger) ● Direct Comparison worksheets ● Whiteboard

	<ul style="list-style-type: none"> ● Access to “Biggest and Smallest Mud Hop”, “ Reordering Objects”, and “Ordering Lengths and Heights” Games off the white board as a class. https://www.education.com/resources/grade-k-2/games/math/measurement/ ● Computer https://www.education.com/game/movie-night-measurement/
Lesson Activities:	
Introduction/Hook:	<p>Introduction: (5-10mins) Hook:</p> <ul style="list-style-type: none"> ● Introduce the word wall that we created together in the lesson to reinforce some of the language we discussed. ● Have students use estimation and reasoning to determine their thoughts. ● Introduce/review vocabulary: Height, longer, shorter, taller. ● Play “Biggest and Smallest Mud Hop”, “ Reordering Objects”, and “Ordering Lengths and Heights” Games off the white board as a class. https://www.education.com/resources/grade-k-2/games/math/measurement/
Body:	<p>Explicit Teaching/Modelling: (5- 10 mins)</p> <ul style="list-style-type: none"> ● Demonstrate correct comparison: ● Model placing classroom objects side-by-side and aligning edges shows how to directly measure. <p>(This will help guide students for their worksheet task after modelling)</p> <ul style="list-style-type: none"> ● Line objects up at the same starting point ● Visually check which extends further ● Think-aloud: “This pencil is longer because it goes past the other one.” ● Show an incorrect example (not lined up) and discuss why it’s not accurate <p>Exploration: (15 Mins)</p> <ul style="list-style-type: none"> ● The teacher will now go over instructions for the students' worksheet. ● Students will use a predetermined object to directly compare the two and mark down on their sheet if it is larger, smaller or the same. ● Students will explore the classroom, finding items to directly compare. <p>Students practice using sentence prompts:</p> <ul style="list-style-type: none"> ● “The ___ is longer than the ___.” ● “The ___ is shorter than the ___.” ● Teacher circulates, asking guiding questions and supporting vocabulary use <p>High/Low Extensions:</p> <ul style="list-style-type: none"> ● If students finish early, allow them to find more to directly compare.

	<ul style="list-style-type: none"> ● If students struggle with the written portion of the worksheet, allow them to draw a quick picture of the item they are directly comparing.
Closure:	<p>Closure/Reflection: (5 Mins)</p> <ul style="list-style-type: none"> ● Ask: “Why is it important to line objects up when comparing?” ● Invite a few students to share their comparisons using full sentences. ● Reinforce key idea: Direct comparison must be fair and aligned.

Lesson 3

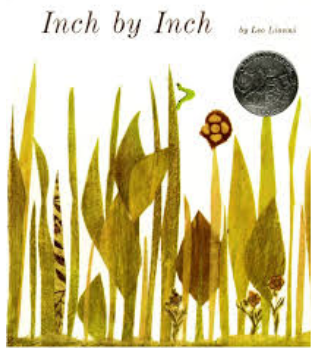
Name & Time (Minutes Allotted):	Measurement Using a String (Objects and Body Parts)
Learning Standards: Curricular Competencies	<p>Students will...</p> <ul style="list-style-type: none"> ● Use materials and tools (string) to measure objects ● Compare measurements using a consistent tool ● Use reasoning to explain comparisons
Learning Standards: Content	<p>Students will learn...</p> <ul style="list-style-type: none"> ● Measuring length using a non-standard tool (string) ● Comparing objects using a consistent measuring tool ● Understanding the importance of consistency in measurement
Instructional Objectives	<p>By the end of the lesson, students will be able to:</p> <ul style="list-style-type: none"> ● Use a piece of string to measure the length of an object ● Compare two or more objects using the same string ● Explain why using the same measuring tool is important
Assessment:	<p>Formative Assessment</p> <ul style="list-style-type: none"> ● Observation checklist: ● Uses string appropriately ● Keeps measurement consistent ● Accurately compares objects ● Explains reasoning <p>Product:</p> <ul style="list-style-type: none"> ● Completed recording sheet
Teaching Strategies:	<ul style="list-style-type: none"> ● Explicit Modeling & Demonstration: Clearly show how to use the string to measure an object, including lining it up and keeping it consistent. Model both correct and incorrect examples so students understand what accurate measuring looks like.

	<ul style="list-style-type: none"> ● Hands-On Exploration: Allow students to actively measure real classroom objects and body parts using a string. This approach helps students build understanding through doing and experimenting. ● Guided Questioning: Ask questions to deepen thinking, such as: “How do you know which is longer?” or “Why do we use the same string each time?”
Materials:	<ul style="list-style-type: none"> ● Pre-cut pieces of string (10-20-30 cm, same length for all students) ● Each piece of string will be a different colour to help with management (students can easily match colour to size) ● Classroom objects (books, desks, pencils, bins) ● Recording sheet (optional: draw or label objects) ● Chart (Steps for measuring body parts with a string) ● Whiteboard ● Story Book: “A Treasure of Measures” by Mike Downs ● White Board
Lesson Activities:	
Introduction/Hook: 	Introduction: (10-15 mins) Hook <ul style="list-style-type: none"> ● Read the class “ A Treasure of Measures” by Mike Downs ● Ask Students, “What types of items do we use to measure things?” ● Brainstorm items on the board. ● Ask: “How can we measure something if we don’t have a ruler?” (Reinforce some of the topics and language discussed in prior lessons) ● Show a piece of string and ask students how it could be used. ● Introduce the idea of using one tool to compare length.
Body:	Explicit Teaching/Modelling (5 mins) Demonstrate how to measure using a string on body parts: <ul style="list-style-type: none"> ● Place a string along a body part. ● Mark or hold the endpoint. ● Compare the string length to another body part. ● Model both correct and incorrect use (moving the string, not aligning properly). ● Think-aloud: “I am using the same string, so my measurement is fair.” Exploration Task: (15-20mins) <ul style="list-style-type: none"> ● The teacher introduces the Recording sheet task for students that uses a string to measure body parts. Task: <ul style="list-style-type: none"> ● Students work in pre-determined pairs. (Ensure partners are acting respectfully with their partners. NO inappropriate touching.) ● Use a string to measure different body parts on their partner (Head, Neck, Waist, Arm, Leg, Ankle). ● Use one of the sizes of string to measure a specific part of the body and ensure students use reasoning to decide on what size they used. ● Compare body part sizes on their worksheet (“Which is the longest string? “Which is the shortest string based on the body part?”).

	<ul style="list-style-type: none"> ● Encourage students to use vocabulary and discuss findings. ● The teacher circulates, asking questions like: <ul style="list-style-type: none"> ● “How do you know which is longer?” ● “Did you use the same string each time?” <p>High/Low Extensions</p> <ul style="list-style-type: none"> ● If students finish early, allow them to draw one part of the body and show how they measured it. ● If students struggle with recording their findings, have them verbally explain their measurements and fill in 3-4 measurements.
Closure:	<p>Closure/Reflection (5 mins)</p> <ul style="list-style-type: none"> ● Bring the class together and compare students' findings. ● Ask: “Why is it important to use the same string each time?” ● Reinforce key idea: Using the same tool makes comparisons fair

Lesson 4

Name & Time (Minutes Allotted):	Nonstandard Units
Learning Standards: Curricular Competencies	<p>Students will...</p> <ul style="list-style-type: none"> ● Measure objects using non-standard units (cubes, paper clips) ● Use reasoning to understand why consistent units matter ● Communicate findings (“The book is 6 cubes long”)
Learning Standards: Content	<p>Students will learn...</p> <ul style="list-style-type: none"> ● Measuring length using non-standard units (cubes, paper clips) ● Counting units to describe length ● Understanding why consistent units are important
Instructional Objectives	<p>By the end of the lesson, students will be able to:</p> <ul style="list-style-type: none"> ● Measure objects using non-standard units (cubes, paper clips) ● Count and record how many units long an object is ● Explain why using the same unit gives more accurate results
Assessment:	<p>Formative Assessment</p> <ul style="list-style-type: none"> ● Observation checklist: ● Places units correctly (no gaps/overlaps)

	<ul style="list-style-type: none"> ● Counts units accurately ● Uses consistent units ● Explains reasoning <p>Product</p> <ul style="list-style-type: none"> ● Recording sheet with measurements (drawings +total number)
Teaching Strategies:	<ul style="list-style-type: none"> ● Concrete Hands-On Learning Students use physical objects (cubes, paper clips) to measure, helping build understanding through direct experience. ● Modelling with Error Analysis Demonstrate both correct and incorrect measuring (gaps, overlaps) so students can identify and fix mistakes. ● Collaborative Learning & Discussion Students work in pairs to measure and compare results, encouraging communication, reasoning, and shared problem-solving.
Materials:	<ul style="list-style-type: none"> ● Linking unifix cubes, paper clips, or small blocks ● Classroom objects (books, pencils, desks) ● Recording sheet “My measurement” (“The ___ is ___ cubes long”) ● Chart (steps for measuring with units) ● Whiteboard
Lesson Activities:	
<p>Introduction/Hook:</p> 	<p>Introduction: (5-10min)</p> <p>Hook:</p> <ul style="list-style-type: none"> ● Read a short story for the class, “Inch by Inch” by Leo Lionni ● Briefly discuss the book and how it relates to nonstandard units of measurement. ● Show a book and measure it using cubes in front of the class ● Ask: “How many cubes long is this book?” ● Count together as a class
Body:	<p>Explicit Teaching/Modelling (5-10 Min)</p> <ul style="list-style-type: none"> ● Demonstrate how to measure with non-standard units: ● Place units end-to-end with no gaps or overlaps ● Count each unit carefully ● Show incorrect examples (gaps or overlapping units) ● Think-aloud: “I am using the same size cubes, so my measurement is fair.” <p>Exploration:</p> <ul style="list-style-type: none"> ● Introduction task and recording sheet.

	<ul style="list-style-type: none"> • Students work in pairs <p>Task:</p> <ul style="list-style-type: none"> • Measure classroom objects using cubes first, and if finished early, introduce paper clips • Record how many units long each object is • Encourage use of vocabulary: longer, shorter, more, less • Students fill in their sheet (“The book is 10 cubes long and 5 cubes wide”) • The teacher circulates and asks guiding questions <p>High/Low Extensions</p> <ul style="list-style-type: none"> • High: Have students use a different object (Paperclips) using the same premise as with the blocks, but only with the paperclips • Low: Allow students to focus on just height for their objects, and when done, try to do width with their objects using the unifix cubes.
Closure:	<p>Discussion/Reflection (5-10)</p> <ul style="list-style-type: none"> • Compare results as a class • Ask: “Why might one group get a different answer?” • (Reinforce) The idea of consistent units • Ask: “What did you learn about measuring with cubes?” • “Feet Findings” The teacher will introduce a final activity with the class, where they will count the teacher's steps from the area of the classroom to the teacher's desk. <ul style="list-style-type: none"> - Encourage students to count along and observe - The teacher will count with the students - Once the class counts the teacher's steps, ask, “Can we use our feet as a way to measure things?” • Reinforce: Units must be the same size and placed carefully to obtain precise measurements.

Resources:

<ul style="list-style-type: none"> • https://www.youtube.com/watch?v=JjKhSyUVFBI (Jack Hartman Video) • Book: “Inch by Inch” by Leo Lionni • Book: “A Treasure of Measures” by Mike Downs
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- “Biggest and Smallest Mud Hop”, “Reordering Objects”, and “Ordering Lengths and Heights” Games off the white board as a class.
<https://www.education.com/resources/grade-k-2/games/math/measurement/>
- Word Wall Poster (Using student responses, the teacher will create after the first lesson”
- Classroom objects and tools for measurement activities
- Worksheets (Separate Document)

These are extra resources for the teacher who feels a lesson is going too fast or if it needs more interaction.

- Movie Night Measurement Super Floyd Activity/Game on the Computer
<https://www.education.com/game/movie-night-measurement/>
- Unicycle Race Measurement <https://www.education.com/game/unicycle-race-measurement/>
- The Measurement Song: We can measure it! By Family Math
https://www.youtube.com/watch?v=67NW3EisYww&list=RD67NW3EisYww&start_radio=1

Extensions to Unit:

Lesson 1: Sorting & Classifying / Ordering by Size

- Have students create their own set of objects (draw or build with blocks) and challenge a partner to sort or order them.
- Ask students to identify an object that could fit between two others in a size order and explain why it belongs there.

Lesson 2: Developing Vocabulary / Direct Comparison

- Have students find objects around the classroom to compare and present their findings to the class using measurement vocabulary.
- Challenge students to spot and fix incorrect comparisons (objects not lined up properly) and explain what needs to change.

Lesson 3: Measurement Using a String

- Ask students to measure and rank multiple objects from shortest to longest using the same string.
- Introduce different string lengths and have students discuss how this changes results and why consistency matters.

Lesson 4: Non-Standard Units

- Have students measure the same object using different units (cubes vs. paper clips) and explain why results differ.
- Challenge students to estimate first, then measure and compare their estimate to the actual result.

Reflections and Revisions

I believe this measurement unit is effective in building a strong conceptual foundation for Grade 1 students by progressing from simple comparisons to more structured measurement strategies. The hands-on, inquiry-based approach supported student engagement and allows learners to develop understanding through exploration and discussion. The main goal for students is to show their growth in their ability to use appropriate measurement vocabulary and explain their thinking, particularly during partner and group activities. The use of non-standard units and consistent tools helped reinforce the importance of fairness and accuracy in measurement.

I think one of the harder parts when making this unit was understanding what grade 1s will actually know. I don't have a lot of experience with the grade, and I feel like some of the lessons could be adjusted if needed, but I believe these lessons support their growth, and if changes are needed, I can make them before, during, or after each lesson. One area for improvement would be to incorporate more opportunities for ongoing assessment throughout each lesson to better track individual student progress. Additionally, providing more visual supports and scaffolds for students who require extra support could further enhance this unit. I can make these changes as I start to understand the students more. In future implementations, I would also integrate more real-world connections or outdoor measurement activities to deepen engagement. Overall, I think the unit successfully aligns with the BC curriculum and supports diverse learners in developing foundational measurement skills.