Curriculum Sample Template

Max. 8 Pages

Grade Level	2nd Grade	**Content Area**	Math
Course Title (grades 9-12 Only)	Mathematics 2		
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	• Students understand how to work in precision partnerships effectively. • Students know how to use their math journals effectively. • Students are familiar with, and have used, the 8 CCSS mathematical practices. • Students understand how to measure objects using a ruler in both inches and centimeters.		
Alignment to Program of Instruction *Briefly outline methods of instruction found in this sequence of lessons that align to the Program of Instruction described in A.3.*	This unit is built on the framework of the SIOP Model and incorporates all 8 of the SIOP Model components. Sentence framing and precision partnering are instructional strategies which promote the use and mastery of academic language. Instructional technology is incorporated by teacher and students. The core curriculum is implemented with fidelity. All teachers also actively engage in rigorous questioning that uses the answer as the starting point, requiring students to use evidence and reasoning to justify how they found their answers and why they believe they are correct. A wide variety of algorithms and methods are honored, and process is highly valued. All math instruction grades K-8 explicitly teaches, models, and honors the 8 CCSS mathematical practices: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning		
Standard Number and Description *List the Number* and the full description for the Required Standard or Science Performance Objective listed in section A.6.*	Domain: Measurement & Data Cluster: Measure and estimate lengths in standard units Standard: #2: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.		

Materials/Resources Needed	• Group buckets containing various items of varying size (ex. book, pencil, sticky note, glue stick, etc.) • Rulers with inches and centimeters • Math journals

- ***Standard Number****: For English Language Arts (Reading and Writing), use Grade, Strand, Standard (e.g., 3.RI.2). For K-8 Math, use Grade, Domain, Standard (e.g., 6.EE.7). For HS Math, use Conceptual Category-Domain, Standard (e.g., A-REI.6). For Science, use Grade, Strand, Concept, PO (e.g., 4.1.3.1).*

Lesson (add as needed)	**Instructional Strategies**	**Student Activities**
1	1. Teacher will display two items of differing sizes and ask students to make observations about them with a small group. Teacher will ask students to share their observations with the whole class. 2. Teacher will focus on the varying sizes of the two objects and ask students how they could determine the difference in the two. 3. Teacher will distribute rulers to students and ask them to recall how to measure using inches. 4. Teacher will inform students that they will break into groups where they will work together to measure various items that they will find in their bucket using inches and record their findings in the math journals.	1. Students will brainstorm what they notice about the two objects in a small group of 3 or 4. Students will volunteer to share observations with the class. 2. Students will share various methods for determining the size difference of the two objects. 3. Students will look at rulers and share what they know about using rulers to measure inches. 4. Students will work in small groups to measure each object using inches and will record their findings in their math journals.
2	1. Teacher will stimulate prior knowledge by displaying the group bucket and asking students to remember the activity from the previous day. 2. Teacher will remind students that there are various units that can be used to measure an object. Teacher will ask students to name a few. 3. Teacher will distribute rulers and prompt students to look at the other side of the ruler (not the inch side) and ask them what unit of measurement they will be using today. 4. Teacher will break the class into the same groups from day one of the unit to measure the same items in their bucket	1. Students will share what they remember from day one of the unit. 2. Students will suggest different materials that can be used to measure objects. 3. Students will recall what they have previously learned about measuring with centimeters. 4. Students will work in small groups to measure each object using centimeters and will record their findings in their math journals.

	but this time students will use centimeters to measure instead of inches.	
3	1. Teacher will ask students to look at their math journals from the past two days and see what they notice. Teacher will ask students to discuss their findings with a partner and then share with the class. 2. Teacher will lead the discussion on how the measurements of the same object can be different based on the unit of measurement that is used. 3. Teacher will ask students to provide a written explanation for how two measurements relate to the size of the unit chosen in their math journals.	1. Students will compare their data from the two days and discuss with their partner any patterns that they notice. Volunteers will share with the class. 2. Students will participate and give input in the discussion on how measurements vary depending on the size of the object used to measure. 3. Students will write their explanation for how two measurements relate to the size of the unit chosen in their math journals.
4	1. Teacher will ask students to recall what they have been investigating with measurements this week. Teacher will accept student responses and provide praise for ideas. 2. Teacher will explain that students will demonstrate their new knowledge of comparing measurements. Teacher will distribute the assessment to students and monitor independent completion.	1. Students will volunteer explanations for what they have been working on with measurements for the week. 2. Students will complete the assessment to compare measurements using two different units of varying length and explain the differences independently.

Summative Assessment Items: *Attach here.* For each summative assessment item, include an answer key or scoring rubric describing how points are to be awarded.

Comparing Measurement Units Assessment

Strand: Measurement & Data
Cluster: Measure and estimate lengths in standard units
Standard: #2 – Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

Essential Student Question: Can you measure the length of an object twice using units of different lengths and describe how the measurements relate to the size of the measurement unit used?

*Each student will be provided with a ruler that clearly marks ***both*** inches and centimeters to complete the assessment.

1. How long is the ladybug?

inches = _____

centimeters = _____

Circle one: same or different

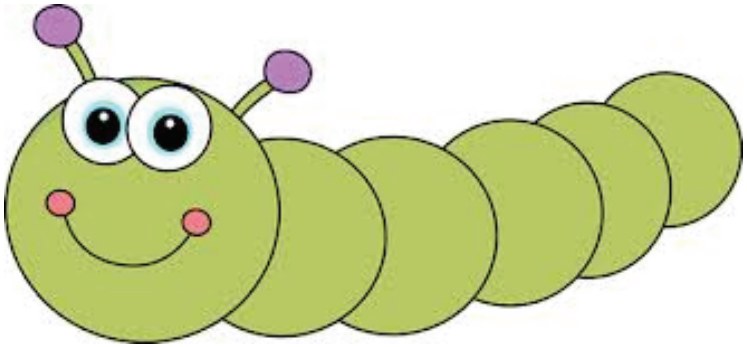
2. How long is the bee?

inches = _____

centimeters = _____

Circle one: same or different

3. How long is the caterpillar?



inches = _____

centimeters = _____

Circle one: same or different

4. Why are the measurements different?

a. Inches and centimeters are the same size.

b. Inches and centimeters are different sizes.

c. I messed up.

Comparing Measurement Units Assessment

1. inches = 2 (1 point)

   centimeters = 4 (1 point)

   different (1 point)

2. . inches = 1 (1 point)

   centimeters = 2 (1 point)

   different (1 point)

3. . inches = 3 (1 point)

   centimeters = 6 (1 point)

   different (1 point)

4. b (1 point)

Comparing Measurement Scoring Guide

Raw score_____ x10_____/100 points

The 100 points possible assessment will reflect the school's grading scale:
90 -100 = A – Mastery
80 – 89 = B - Mastery
70 – 79 = C – Needs Screening for Remediation
60 – 69 = D – Needs Remediation
0 – 59 = F – Needs Intensive Remediation