Curriculum Sample Template
Max. 8 Pages

Grade Level	Kindergarten	**Content Area**	Math
Course Title (grades 9-12 Only)			
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	At this time of the year kindergartners can count to 100, by 1, 2, 5, and 10's. Write numbers up to twenty. They know the terms, longer, taller, shorter, more and less when comparing objects. They are able to distinguish "more" and "less" in terms of comparing numbers and identify a numeral to the appropriate quantity. The scholars can read cvc words and follow along as the teacher reads directions. The scholars can also copy words and construct basic sentences with four or five words.		
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 aligns to the Core Knowledge Sequence for Math, 2010 AZ Math Standards. The domain of Measurement and Data will be taught at the Kindergarten grade level. The skill of measuring and comparing data is revisited at increasingly higher levels of rigor as set forth in the ADE 2010 Mathematics Standards (CCSS). The content knowledge of measurement and data is spiraled throughout the Core Knowledge Sequence from Kindergarten to 6th grade. As described in the Program of Instruction, direct- instruction in small groups and cooperative learning will take place throughout this unit. Each lesson includes a combination of teacher-led instruction, small group interaction, independent practice; The small groups will be determined by RTI model, teacher discretion for scholars needing more instruction or peer tutor groups and ongoing assessment.		
Standard Number and Description *List the Number* and the full description for the Required Standard or Science Performance Objective listed in section A.6.*	**K.MD.2.** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.		
Materials/Resources Needed	White board, scholar white board, document camera, tablets, a variety of objects to sort and compare using measurements of length, mass, liquid and height. Beakers, balance scale, blocks, colored paper		

* ***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	**Anticipatory Set:** Display a picture of two students in a picture. Ask the scholars to describe what they see. **Guided Practice:** Ask scholars to move to the stations. At each table is a basket of objects. Direct the scholars to work with the objects and determine which object is longer, taller or heavier. Allow them to use discovery skills to manipulate the objects. In the small groups the teacher will move to the learning tables and instruct the scholars how to make comparisons. When making direct comparisons for length, students must attend to the "starting point" of each object. For example, the ends need to be lined up at the same point, or students need to compensate when the starting points are not lined up (conservation of length includes understanding that if an object is moved, its length does not change; an important concept when comparing the lengths of two objects). Modeling: Use the scholar white board and draw a line at the bottom to give the scholars a "starting point" to compare their objects. Demonstrate how to place the objects on the line and then describe which in longer. **Independent Practice**: Instruct the scholars to select three sets of 2 objects from the basket and determine which object is longer. As they complete this task ask them to raise their hand and the teacher will come to them and check for understanding. **Assessment Item 1**: After each scholar has practiced measuring the items the teacher will present the assessment. Pass out the assessment to each scholar. The scholars will answer the questions and turn it in the assessment. **Closure:** Ask each scholar how they determined which object was longer.	1. Scholars will listen, observe and describe images presented by the teacher on the document camera. 2. Move into learning groups and rotate throughout the stations. 3. Scholars will use skills of discovery to sort and compare objects with measurable attributes. 4. Listen to the teacher provide direct instruction on comparing length in the small groups. 5. Scholars will practice measuring items and comparing two objects in terms of length. They will use their white board to draw a line as a starting point to measure items 6. Practice comparing items and having the teacher check their work for understanding. 7. Scholars will take the assessment item 1. They will answer each question individually and follow along as the teacher reads the question. 8. Participate in a class question/answer strategy by stating which item in the display is longer.

2	**Anticipatory Set**. Draw two rectangles on the white board and ask the scholars to determine which is longer. They will show thumbs up if longer and thumbs down if not as the teacher points to each shape. **Lesson**: Language plays an important role in this standard as students describe the similarities and differences of measurable attributes of objects (e.g., shorter than, taller than, lighter than, the same as, etc.). Teach scholars vocabulary "shorter than / taller than, lighter than / heavier than, longer / shorter, liquid use more / less) **Guided Practice**: Instruct scholars how to compare lengths, liquids and mass using proper vocabulary. Ask scholars to work at the learning stations set up: Table 1 length, table 2 liquid, table 3 mass. The will experiment with the objects at each table to compare the objects. The teacher will provide instruction to each group at their designated table. **Independent Practice:** Scholars will continue to work at the stations experimenting with the liquid beakers, scale and blocks. The teacher will ask the scholars to work with a partner and compare measures of five different objects. **Assessment Item 2**: Teacher will present the assessment item 2	1. Scholars will observe, listen and show thumbs up or down based on examples presented by the teacher. 2. Get into small learning groups. 3. Participate in small group direct instruction. Learning groups based on results of assessment item 1. 4. Scholars will practice comparing items of measurable attributes in length, mass, liquid and height. 5. Scholars will learn and practice comparing items with more, less or equal amounts. 6. Scholars will independently work at the stations practicing comparing items with a partner. Items of mass will be placed on a balance scale and scholars will determine more or less weight depending how the scales move. 7. Scholars will take the assessment item 2. They will take the assessment individually and listen to the teacher read the direction and they will follow along.
3	**Lesson:** Teach the scholars "equal to". **Anticipatory Set**: Show the scholar two beakers of colored liquid with the small amount of liquid and ask which has more. **Guided Practice**: Pass out colored paper squares with a =, + and -. Instruct the scholar that + mean more, - means less and = means equal. Hold up two objects and have the scholars hold up the card to match the item on display. **Independent Practice**: The scholars will complete a short worksheet with the various units of measure to compare. They will circle the appropriate illustration to match the question. **Closure**: Review the concepts of measuring with the appropriate vocabulary.	1. Scholars will observe and listen to the teacher compare display liquid in beakers. The "equal" term will be instructed to the scholars. 2. Scholars will observe the listen to the teacher hold up measurable items and indicate if the objects are more, less or equal measures. 3. Work independently and complete a worksheet discovering the answers by using objects in the classroom. 4. Participate in the unit review.

4	Unit Assessment	Scholars will take the unit assessment.

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

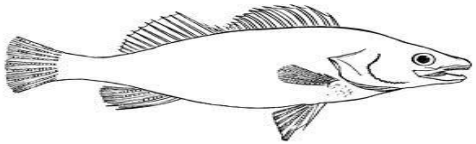
Unit Assessment 1: This assessment is designed to assess the scholar's ability to compare two objects with measurable attributes and determine the difference. The first assessment is basic understanding of comparing items for length and height with the same starting point. Questions 4 and 5 demonstrate a deeper level of understanding with the scholar illustrating the written text and writing a sentence.
Scoring: The assessment is worth 20 points. The scholars will earn 4 points for each correct answer.
20 points = 100% 18 = 90% 16 = 80% Mastery 14 = 70% 12 = 60%
Mastery: A score of 16 points / 80% will determine mastery. 80% mastery aligns with the Program of Instruction.

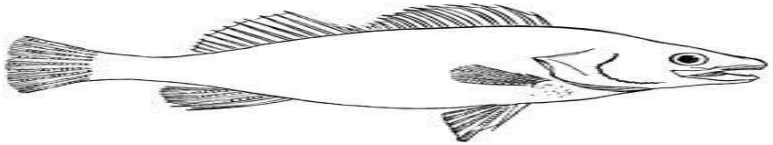
First Grade Assessment Item 1

Name_____

Directions:

1. **Which fish is longer** **A** **B**





2. **Which is longer** **Top (green paper)** **Bottom (yellow paper)**

3. **Which crayon is longer Top Bottom**

4. **Draw a picture to illustrate the red line is longer than the blue line.**

5. **Write a sentence that tells about the cat and the dog.**

_____.

Rubric:

1. **B**
2. **Bottom**
3. **Bottom**
4. **Scholars must draw a red line that is longer than a blue crayon line**
5. **The cat is smaller or shorter than the dog.**

Assessment 2:
This assessment is designed assess the ability of the scholars to compare two objects with a measurable attribute and determine which object is more, less or equal. The scholars answer each question independently as the teacher reads the question aloud. The assessment consists of five questions where the scholar will choose which object is longer or taller and write a sentence to demonstrate a deeper level of comprehension of the standard.
Scoring: The assessment is worth 20 points. Scholars will earn 4 points for every correct answer.

20 points = 100% 18 = 90% 16 = 80% mastery 14 = 70% 12 = 60%

Mastery: A score of 16 points / 80% is deemed mastery and aligns with the Program of Instruction

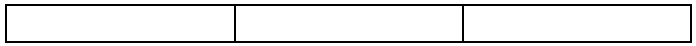
Kindergarten Unit Assessment 2

Name_____

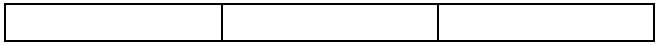
Directions: Answer each question and follow along as your teacher reads the problem.

1. Is Rod A **longer** **shorter** **equal** to rod B

A



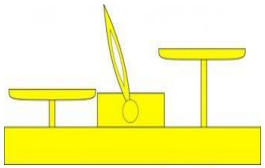
B



2. Circle the stack of books that has more books. A B C

3. Circle the correct word. The girl is **shorter** or **taller** than the boy.

4. Which plate is heavier? A B



A. B

5. Is the beaker with blue liquid **More** **Less** **or** **Equal** to the beaker with red liquid? Circle the answer.

Rubric:
1. B
2. A
3. shorter
4. A
5. equal

Assessment Item 3:
This assessment is designed to assess the scholar's ability to mastery the standard:

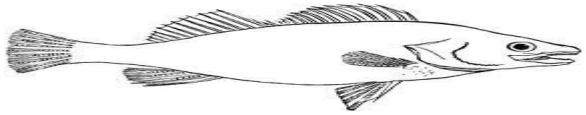
K.MD.2. Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference

The assessment consists of five questions where the scholars are expected to choose A or B, write a sentence to illustrate a picture or write a sentence to explain their answer. The assessment demonstrates rigor and depth in understanding in question 4 and 5 where an explanation is required.
Scoring: The assessment is worth 100 points. 20 points will be earned for each correct answer.
100 = 100% 90 = 90% 80 = 80% mastery 70 = 70% 60 = 60%
Mastery: A score of 80 / 80% is deemed mastery and aligns with the Program of Instruction

Kindergarten Unit Assessment

Name_____

1. Which object is longer? The ladybug The fish



2. Write a sentence to describe the weight of the white and red ball

3. Which container has more water A B

A B

4. Rod A is **longer, shorter** or **equal** to rod B.

A

B.

5. Explain why

Rubric:

1. Ladybug
2. Both ball are equal weight
3. A
4. Equal
5. They are the same length and did not start at the same point.