Curriculum Sample Template
Max. 8 Pages

Grade Level	Fourth Grade	**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.*	Scholars will understand and comprehend measurement and data in comparing objects of like measure, converting measurements for comparison, solving real world problems using metric measurements. Scholars will know and be able to demonstrate single digit multiplication facts with automaticity. Scholars will understand the concept of place value to the thousandths. Scholars will be able to add and subtract numbers within 1000 with mastery. Students will be able to express ideas and thoughts in complete sentences		
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.*	Method of Instruction: Small group instruction, learning groups based on the RTI model or teacher selected groups based on level of mastery from unit assessment. Scholars will work in partners and independently. This unit aligns to the Core Knowledge Sequence for Math, to the sequence for Saxon Math, and to the 2010 AZ Math Standards. The domain of Measurement will be taught at the Fourth Grade level. The skill of measurement and data is revisited at increasingly higher levels of rigor as set forth in the ADE 2010 Mathematics Standards (CCSS). The content knowledge of measurement is spiraled throughout the Core Knowledge Sequence from Kindergarten to 6th Grade. Cooperative learning will take place throughout this unit. Each lesson includes a combination of teacher-led instruction, small group interaction, independent practice, and ongoing assessment. Scholars will also use technology to present a presentation.		
Standard Number and Description *List the Number* and the full description for the Required Standard or Science Performance Objective listed in section A.6.*	**4.MD.2.** Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.		
Materials/Resources Needed	Math journal, white board, document camera, colored markers, tablets, and colored notecards with real-world problems. Face clock, colored pencils, scholar white boards.		

* ***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:** Pass around the basket and ask each scholar to select a colored notecard with a scenario word problem. **Lesson**: The teacher will instruct the scholar that in this unit all concepts previous learned about measurement and data will be applied as scholars work to solve real world problems using addition / subtraction, multiplication / division. This lesson will focus on solving elapsed time scenarios using addition and subtraction operations and conversion problems multiplication and division. **Guided Practice:** The teacher will instruct scholars to record the following steps in their math journal: • Determine what the problem is asking you to solve • Draw a diagram to visualize the problem • Input the numbers from the problem in the diagrams • Solve the problem • Record the answer in terms of the units of measure in the problem. The steps will be written on the white board for use during the lesson. Teacher will instruct scholars to get into the learning groups. The learning groups will be based on the color of notecard the scholar selected at the beginning of the unit. Blue cards- lapsed time and green cards – conversion cards. In the small groups the teacher will instruct scholars to use the steps above to solve each problem. **Lapsed time**: Sara walked her pet for 30 min. on Monday, 25 min. on Tuesday and 1 hour and 20 minutes on Wed. What was the total number of minutes Sara walked her dog. Each scholar will review and follow the steps to solve the problem with the teacher. The teacher will select a scholar to read their card and solve a second problem together. **Independent Practice**: The teacher will ask the scholars to work in pairs and solve the scenarios on the colored cards. Lapsed time can be solved using a face clock or a two column organizer in which interval of time is recorded for each day or	1. Scholars will select a colored notecard with a real world scenario to solve. 2. Scholars are listening and observing the teacher explain the skills necessary to have for this lesson. Scholars will add, subtract, multiply and divide. 3. Scholars will record problem solving steps in math journal 4. Listen and observe the teacher model solving problems of lapsed time. Scholars will use a number line to track minutes or hours of time in the questions 5. Scholars will get into their learning groups and work collaboratively and in partners to solve time-lapsed question. 6. Scholars will also use journal from prior lessons to assist in data conversions. 7. In the small group the scholars will work through time-lapsed problems with the teacher and peers. 8. The scholars will work in pairs and solve the scenario problems on the colored notecards. They will sue a number line or face clock to illustrate the problem at hand. Scholars will use colored pencils and scholar

	activity listed. **Conversion**: Scholars will write in their journal: Larger units to smaller units—divide Smaller units to larger units – multiply. The teacher will read a problem and work through it with the group using the steps outlined. After all scholars have completed the scenarios on their cards they will rotate to the next table to complete the opposite color cards. **Independent Practice**: Scholars will work in pairs to read, interpret and solve scenarios not used during the guided practice. The teacher will continue to work individually with scholars to set up their problems. **Closure:** Ask scholar pairs to solve their problem on the white board explaining each step used. Based on accurateness of the problems the teacher will adjust the next lesson based on scholar's demonstration of solving problems.	whiteboards to illustrate the data when solving the problems. 9. Scholars will write steps and conversion notes in their math journal. 10. Teacher will model solving problems with the scholars in small groups. The problems will consist of unit conversions, multiply and divide to solve problems. 11. Scholars will work in pairs to solve real world problems during the independent practice. 12. Scholars who comprehend solving will begin move forward and use data to create problems. This differentiated instruction aligns with the Program of Instruction. 13. Scholars will solve or create problems using their white board and explain the steps and answer to the teacher.
2	Lesson: Use multiple strategies to multiply whole numbers • two-digit by two-digit and • multi-digit by one-digit. (Includes multiplication of whole numbers) Use multiple strategies to divide whole numbers. (Includes division of whole numbers) **Anticipatory Set**: Write a word question on the board for each scholar to solve independently. **Guided Practice**: The teacher will instruct the scholars to get into the learning groups and work as a collaborative group to solve the problem. The teacher will begin with the Tier 2 and 3 scholars to model solving the problem. This group may need additional support and modeling from the teacher. • Use division to equally divide a larger amount of an item to equal smaller amounts. • Use whole numbers or fractions. • Subtractions with decimals and money • Calculating change back **Independent Practice**: Scholars will solve multiplication problems using multiple digit numbers. Basic concepts of multiplication would	1. Scholars will copy the world problem down into their math journal. 2. Scholars will move into the learning groups and work collaboratively to solve the problem. 3. Tier 2 and 3 scholars will practice solving problems with whole numbers. Tier 1 will use fractions based on scholar ability to learn new concepts and needing less support from the teacher. 4. One scholar stations will be "store". Scholars will practice purchasing items, paying and giving change back. 5. Scholars will return to their seats and prepare for the

	apply and scholars will use prior knowledge to solve. Teacher will rotate to the groups and stations to individually teach scholars. Ask scholars to return to their desks for the assessment. **Assessment Item 1**: The teacher will pass out the assessment item1 **Closure**: Collect all assessments. Ask scholars for a show of hands on how many scholars are comfortable with solving real-world problems or need extra practice. The teacher will score the assessments and determine if additional lessons are needed.	assessment. 6. Scholars will individually take the assessment 7. Turn the assessment into the teacher 8. Scholars will show hands if they are comfortable with solving word problems.
3	**Anticipatory Set:** Each scholar will pick up rulers and return to their desks. **Lesson**: Teacher will instruct scholars in small groups on using number line diagrams that feature a measurement scale that can represent measurement quantities. Examples include: ruler, diagram marking off distance along a road with cities at various points, a timetable showing hours throughout the day, or a volume measure on the side of a container. **Guided Practice**: Teacher will model to the scholars how to use the tools to measure distances from point to point. The teacher will explain the stations and instruct scholars the procedure for rotating. **Independent Practice**: Scholars will access Google Maps and enter their address and the school address to visualize a route to school. The scholars will mark the distance from their house to intersections and record the distance to school. Scholars will practice measuring from point to point and adding the number to find a sum. **Closure**: Teacher will review each type of problem completed in the lesson.	1. Pick up supplies needed for lesson 2. Scholars will get into their small groups 3. Scholars will listen, observe and participate in direct small group instruction on using rulers and diagrams to display distance. 4. In the learning groups, the scholars will use their tablets to access Google Maps to get direction from their house to school. They will also use various road maps to measure and mark distance between streets, towns or landmarks. 5. Scholars will continue to use steps and procedures to solve read world problems, applying skills and mechanics from prior knowledge. 6. Scholars will return to their desks 7. Listen, observe and participate in whole group review of problem types learned in the lesson.
4	**Assessment Item 2:** The teacher will present and explain the assessment 2 to the whole class. Scholars will independently take the assessment and turn into the teacher. **Anticipatory Set:** Teacher will collect all assessment and explain to the scholars the learning centers. **Independent Practice**: The teacher will direct scholars to work with a partner and solve problems at each station. Store (money—adding and subtracting decimals, Travel Agents- measuring distances from point to point and lapsed time, and Craft shop – multiplying, dividing and conversions. Scholars will practice solving story problems. As	1. Scholars will take the assessment item 2 at the beginning of the class block. 2. Scholars will work in small groups and rotate through the stations working in partners to solve problems at each station. 3. Lesson will be differentiated. Excelling scholars will create problems based on given data and illustrate the data. 4. Scholars will continue to work independently in the stations asking the teacher for assistance as needed.

	the scholars are working in the centers, the teacher will score and record assessment grades. **Guided Practice**: The teacher will meet individually with each scholar to review their assessment and solve all incorrect problems. **Closure**: The teacher will announce the unit assessment for the next lesson.	5. Each scholar will meet individually with the teacher to review their graded assessment and the teacher will reteach any concept needed. 6. Listen, observe and participate in the whole group review.
5	Unit Assessment: The teacher will read and explain the unit summative assessment to all scholars.	Scholars will independently take the unit assessment and turn it into the teacher.

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

Assessment Item 1

This assessment is designed to assess the scholar's ability to solve time lapsed problems. The assessment consists of five problems where each scholar will read the problem and solve it. Points will be earned for each correct answer.

Scoring: The assessment is worth a total of 20 points. 4 points will be earned for each correct answer.

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

Mastery: A score of 16 / 80 % will be deemed mastery

Fourth Grade Assessment Item 1

Name_____

Directions: Read each question and choose the correct answer.

1. Faith starts to read at 11:05. She reads until 11:56. How many minutes did Faith read?

2. Tommy started his homework at 8:03. He works really hard at it and doesn't finish until 8:47.
How long did he work on his homework?

3. Brad has dance from a quarter after seven until eight o'clock. How many minutes does he dance?

4. Jorge starts playing basketball at half past six. He finishes playing at 7:08. How long did he play basketball?

5. If Jorge plays basketball 25 nights in a month how many minutes does he play in a month?

Rubric:

1. **51 minutes**
2. **44 minutes**
3. **45 minutes**
4. **38 minutes**
5. **950 minutes**

Assessment Item 2

This item is designed to assess the scholar's ability to solve real world problems. The assessment consists of five problems in which the scholar will read and solve. Points will be earned for every correct problem where the steps are shown.

Scoring: The assessment is worth a total of 20 points. 4 points will be earned for every correct answer.

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

Mastery: A score of 16 / 80% will be deemed mastery.

Fourth Grade Assessment Item 2

Name_____

Directions: Read each problem and solve it using the skills as strategies learned in this unit. Make sure to show your work!!

1. Zeke is laying his model cars end to end. Each car is 1/2 foot long. If Zeke lays down 10 cars, how many inches long is his line of cars?
2. Mary is measuring the perimeter of her desk. The length is 60 centimeters and the width is 45 centimeters. What is the perimeter of her desk?
3. A box of 4 books weighs 8 kilograms. If all of the books are the same size, how much does 1/4 of the box weigh?
4. I have two liters of water in a jug. I accidentally spill 896 milliliters on the table. I add 345 milliliters to the jug to refill. How many milliliters do I have now?
5. The Brown family has a sandbox with an area of 21 square feet. What is the length and width of the sandbox? (Note: all the sides are bigger than one foot)

Rubric:

1. 60 inches
2. 210 centimeters
3. 2,000 g. or 2 kg
4. 1,449 mL
5. 7 ft. X 3 ft.

Assessment Item 3:

This assessment is designed to assess the scholar's ability to master the standard. The assessment consists of solving multiple choice and situation problems where the scholar will apply the skills and strategies learned throughout this unit.

Scoring: The assessment is worth 100 points. Each question will be worth 20 for a correct and complete answer. The points will be converted to a percentage and mastery will be determined by a score of 80 points or 80% as outlined it the program of instruction.

Mastery: 80 points / 80%

Fourth Grade Unit Assessment

Name_____

1. 2. A penny weighs 2 grams, a nickel weighs 5 grams, and a dime weighs 1 gram. How many grams would you have if you had 5 pennies, 6 nickels, and 7 dimes?

   A. 40 g. . B. 8 g. C. 47 g. D. 30 g**.**
2. I have a bucket that I need to fill with one liter of water for a science experiment. The bucket is too big to fit under the sink. I have a 150 mL cup that I can use to fill it. How many times will I have to fill up my cup?
3. Jim has $100.00 that he received for his birthday. He made a list of what he wanted to buy and how much each was. Write down the item and the exact dollar amount he would spend. What items can he buy?

Skateboard	½ his money	Movie	1/10 of his money
Video game	3/6 of his money	Candy Bar	1/100 of his money
Roller blades	40/ 100 of his money	Books	3/10 of his money

4. I have two liters of water in a jug. I accidentally spill 896 milliliters on the table. I add 345 milliliters to the jug to refill. How many milliliters do I have now?
5. Mackenzie and Ethan are filling up water balloons for a water balloon fight. Each balloon holds 350 mL. How many mL are there in 9 balloons? A.. 350 mL B. 3,150 mL C. 5,310 mL D. 9 mL

Rubirc

1. C
2. 7 times
3. Items must be listed and exact dollars spent for each item and all purchased items added up. Total must not exceed $100.00
4. 1,449 mL
5. B