Curriculum Sample Template
Max. 8 Pages

Grade Level	Grade 2	**Content Area**	Math
Course Title (grades 9-12 Only)			
Length of Unit	One week (4days)	**Time of Year**	1st quarter
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	This lesson is designed to build on the 1st grade place value standards. While the students were in 1st grade they worked on 10 being thought of as a bundle of ten ones—called a —ten. Students learned that adding a two-digit number and a multiple of 10. Students also have a background of using concrete models or drawings and strategies based on place value. Students are able to mentally find 10 more or 10 less than a given two-digit number, without having to count and explain the reasoning used. Students understand how to subtract multiples of 10 in the range 10-90 from multiples of 10 (10-90), using concrete models or drawings and strategies based on place value. They relate the strategy to a written method and explain the reasoning used. Students can count to 100 fluently.		
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.*	To begin this lesson the students will review how to use the place value chart. Students will practice addition and subtraction. Students will work on fact families to help review addition, subtraction, and place value. To help further their understanding of place value to 100 students will work in groups to demonstrate their understanding of the place holders.		
Standard Number and Description *List the Number* and full description for the required Standard.*	2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.		
Summative Assessment *Describe a cumulative and comprehensive activity, clearly separate from instruction and guided or independent practice, which allows each student to individually demonstrate mastery of the required Standard. A copy of the summative assessment must be attached to the curriculum sample.*	The summative assessment will consist of five questions in which the scholar will solve addition and subtraction problems using strategies of place value and properties of operations using the relationship between addition and subtraction. The assessment will consist of multiple choice, short answer and written explanations to allow each scholar to fully demonstrate the mastery of depth for the standard. The assessment will be worth 100 points, 20 points for each correct question. 80 points is mastery.		

Scoring Scale and Mastery Level *Explain how the assessment is scored, to include points per question, how points are awarded, total points possible, criteria necessary to demonstrate mastery, and grading scale. A copy of the answer key and scoring rubric (whichever applicable) must be attached to the curriculum sample.*	The summative assessment is worth 100 points. The scholar will earn 20 points for each correct answer. A score of 80 indicates mastery.
Materials/Resources Needed	Teacher: White board and dry erase markers Numbered cards Base ten blocks Students: White boards and dry erase makers Place value chart Pencil Base ten blocks (place value blocks)

* ***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)	**Instruction**	**Student Activities**
Day 1	**Anticipatory Set**: Ask each student to write one example of Associative, Commutative and Zero Property of addition and subtraction. Review each property **Lesson:** Teach students to use the strategy of place value to add and subtract numbers without regrouping. Ask students to get into their learning groups. Each group will have one addition problem. Each group will have a question on a notecard to discuss the answer. The questions are: • What is addition? How can manipulatives be used to solve addition problems? • What is subtraction? How can manipulatives be used to solve subtraction problems? • What are strategies? How can we use strategies to solve the sum or difference? Questions will be assigned to Tier I, 2 and 3, with the strategy question for the excelling students. After a discussion teach each group how to add using the place value strategy. Addition based on place value: 48 +37 = • Adding by place value: 40 + 30 = 70 and 8 + 7 = 15 and 70 + 15 = 85. • Incremental adding (breaking one number into tens and ones); 48 + 10 = 58, 58 + 10 = 68, 68 + 10 = 78, 78 + 7 = 85 • Compensation (making a friendly number): 48 + 2 = 50, 37 – 2 = 35, 50 + 35 = 85 Each group will complete the practice sheet with addition problems. They may use manipulatives, base ten blocks, place value charts or drawings.	• Scholars will write in their journal an example of associative, commutative and zero property of addition. • Participate in the review of each property • In learning groups, scholars will participate in answering questions asked by the teacher. (Answers to the questions will provide the teacher with data to further direct the lesson to meet the scholars needs) • Scholars will work in their learning groups as the teacher rotates and teaches strategies for adding two digit numbers. Scholars will practice adding using place value strategy. Scholars must understand they are adding the tens place first and then the ones. Clear up any misunderstandings about adding 4 +3 in the problem 48 +37 = • Incremental adding. This may take longer for scholars to master and may need to adjust the future lessons to allow more time to practice this strategy. • Compensation will be the final strategy to practice.

	After each group has been instructed the teacher will ask student to get out their personal white board. The teacher will write a problem on the board and the scholars will solve the problem on their whiteboards and raise their hand with the correct answer. The student will come to the whiteboard, solve the problem using place value and explain their process used. The remaining class will use "thumbs up" or "thumbs down" if they agree or disagree. **Closure:** Each student will make a journal entry about one strategy they learned in class.	Make a journal entry about a favorite strategy learned.
Day 2	**Anticipatory Set:** The teacher will write a two digit addition problem on the whiteboard and solve it. Each student is to analyze the problem and make corrections if necessary. Teacher will call on a student to evaluate the problem and explain the mistake **Lesson Teach** Review any addition strategies from the previous lesson that scholars may have questions on. Students to solve subtraction problems using place value strategy. Ask scholars to get into their groups. The teacher will present the lesson to each group. Tier three groups will need more practice on adding and the teacher will re-teach this group. Subtraction based on place value: Subtraction strategies based on place value for 81 – 37 may include: • Adding up (from smaller number to larger number): 37 + 3 = 40, 40 + 40 = 80, 80 + 1 = 81, and 3 + 40 + 1 = 44. • Incremental subtracting: 81 -10 = 71, 71 – 10 = 61, 61 – 10 = 51, 51 – 7 = 44 • Subtracting by place value: 81 – 30 = 51, 51 – 7 = 44	• Read the whiteboard, correct the problem and make a journal entry about what strategy was use. • Participate in the review session from previous lessons • Get into learning groups. Teacher will instruct the lesson to each group and allow time for the scholars to practice each strategy using manipulatives, base ten blocks.

	In the learning groups, students will each have a problem to solve. They will pick a card 1 -3 to indicate which strategy from above they will use. Each scholar completes the problem and explains the process to their group. Every member of the group will solve problems until they have used all three strategies. **Closure:** Teacher will ask each student to explain which strategy works best for them and why.	• Participate in an activity of picking a card with a problem on it and solving it. The scholar must explain the process used to solving the problem and explaining the strategy used. • Choose a subtraction strategy that is a favorite and explain why.
Day 3	**Anticipatory Set:** Write one addition and one subtraction problem on the board. Have each scholar solve the problems and explain the process as a math journal entry. **Lesson:** Instruct students on the vertical and horizontal structure. Each scholar should have experiences solving problems written both horizontally and vertically. They need to communicate their thinking and be able to justify their strategies both verbally and with paper and pencil. Ask scholars to get into their learning groups. Practice solving vertical and horizontal problems using the individual white boards and checking each other. Ask one spokesperson from each group to explain how the problem was solved and the strategy that was used. When the teacher is confident most students understand the standard play a game with all of the groups to get additional practice. After each lesson, each group will have four groups of notecards on their desk with addition problems. Each color represents a degree of difficulty. Green: Solve a simple equation; Yellow: solve a word problem; Red: Write a real world problem to match the equation. Purple: Solve the equation and explain the process. The card will have points for each correct answer from 1 – 4. As the group solves the problem they will be awarded points. Each	• Make a math journal entry. Solve an addition and subtraction problem from the whiteboard and explain the strategy used. • Scholars will solve a variety of vertical and horizontal structured problems of addition and subtraction. Each of the strategies will be practiced in the small group with peer tutoring and learning. • Scholars will practice explaining the process of solving the problem step by step using mathematical vocabulary • In the learning groups the scholars will participate in a group activity and competition to become fluent in solving addition and subtraction problems. It is important for all scholars to explain the process of solving the problem and recognizing the strategy used.

	student will draw a card and solve the equation.	
Day 4	**Anticipatory Set:** Review the place value strategy for addition and subtraction. Ask if anyone has any questions. **Lesson:** The teacher will administer the assessment	Scholars will independently take the assessment.

Paste Summative Assessment Here:

2nd Grade Math Assessment

1 **What is the answer to this addition problem? 46 + 28 = _____**

   a. **64**
   b. **22**
   c. **74**
   d. **62**

2. **Dillan had 34 matchbox cars and his friend Jack had 67 cars. How many cars did the boys have altogether? Solve the problem using place value strategy.**

3. **Solve using place value strategy**

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   87
 - 56
 ____
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4. **Which problem did the student solve?**

   I started by adding 13 to 50 and got 63. Then I added 63 to 6 and my answer was 69.

a. 13 + 50 = _____
b. 13 + 56 = _____
c. 50 + 13 = _____
d. 19 + 13 = _____

5. **Solve the problem 87 – 34 = _____ Show your work.**

Paste Summative Assessment Rubric Here:

2nd Grade Math Assessment Rubric

100 points: Each correct question earns 20 points

1. **What is the answer to this addition problem? 46 + 28 = _____**
   a. **64**
   b. **22**
   c. **74**
   d. **62**

2. **Dillan had 34 matchbox cars and his friend Jack had 67 cars. How many cars did the boys have altogether? Solve the problem using place value strategy. 30 + 60 = 90; 4 + 7 = 11; 90 + 11 = 101**

3. **Solve using place value strategy**

   87
   - 56
   _____

   80- 50 = 30; 7-6 = 1 : 30 + 1 = 31

4. **Which problem did the student solve?**

I started by adding 13 to 50 and got 63. Then I added 63 to 6 and my answer was 69.

a. 13 + 50 = _____
b. 13 + 56 = 69
c. 50 + 13 = _____
d. 19 + 13 = _____

5. **Solve the problem 67 – 34 = _____** **Show your work.**
Explain your answer. 60-30 =30 7-4 = 3 30+3=33

Using place value strategy I first subtract my tens value, 60-30 = 30; then subtract the ones value 7-4=3; finally I add the tens place value to the ones place value 30 + 3 = 33 to get my answer of 3.

Total assessment 100 points. 80 points indicates mastery