Curriculum Sample Template
Max. 8 Pages

Grade Level	3	**Content Area**	MATH
Course Title (grades 9-12 Only)			
Length of Unit	1 week	**Time of Year**	2nd Quarter
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	Students have had practice with concept of arrays for their introduction to multiplication. Students have had extensive practice with adding and subtracting by multiples of ten and discerning the patterns they find when doing so.		
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 lesson will implement guided math instruction. It will teach the mathematical concept from concrete/manipulative, through pictorial to abstract/equation to reach a deep understanding of the standard. Language: This lesson will be taught in all three languages. Technology: This lesson will incorporate an interactive white board for students to use during the lesson.		
Standard Number and Description *List the Number* and full description for the required Standard.*	3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.		
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.*	**Explore More worksheet-** This assessment will determine student mastery of building arrays to solve single digit times a multiple of ten problems. (a, b, c & d are worth 2 points each – one for visual, one for equation) **Independent worksheet**- This assessment will determine student mastery of multiplying single digit by multiples of ten using either strategy taught.		
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.*	**Explore More** 13-14 exceeds 10-12 meets 7-9 approaches 0-6 falls far below **Independent worksheet** 18-20 exceeds		

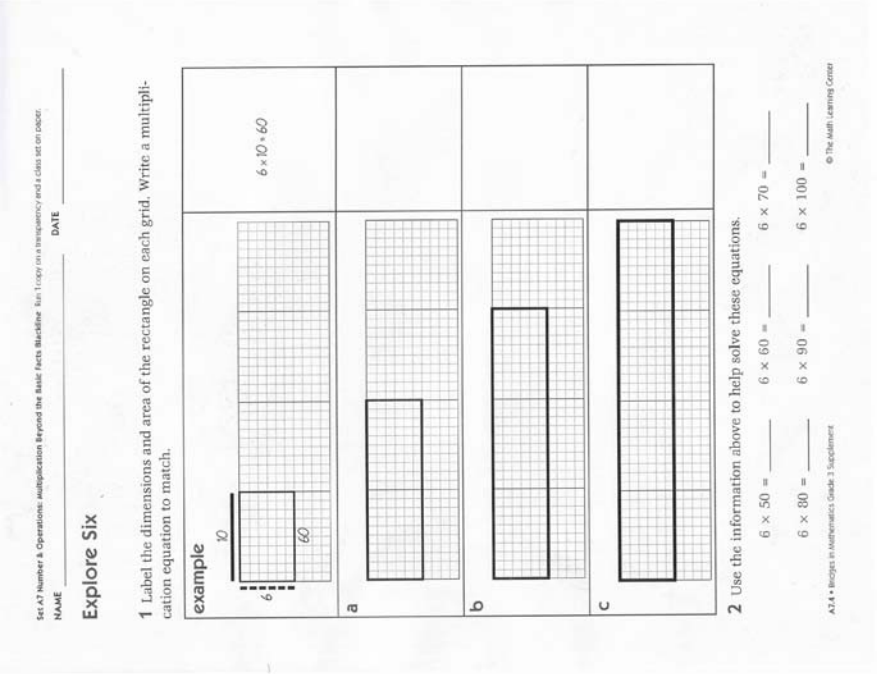
	15-17 meets 11-14 approaches 0-10 falls far below
Materials/Resources Needed	Explore six worksheet, Explore more worksheet, Independent worksheet, Interactive white board, red & blue pencils for students, Bridges in Mathematics supplement (mathlearningcenter.org), math journals

* ***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)	**Instruction**	**Student Activities**
1	The teacher will display a grid on the interactive white board. The teacher will review multiplying using arrays with students. The teacher will go through 5 basic multiplication problems, selecting random students to show how to build the array on the interactive white board. The teacher will write "5 x 10" on the interactive white board. The teacher will label the dimensions of the rectangle in red. Then the teacher will fill in the rectangle with blue ten strips (5 rows of tens) and ask students to collectively count by tens to determine the answer. The teacher will then ask a student to come up and display the dimensions for 5 x 20 in red, and another student to draw blue tens strips in the array. The class will collectively count by tens to determine the answer. The teacher will continue this practice for 5 x 30, 5 x 40. The teacher will then pair students up and have them discuss and record patterns that they noticed with each new multiplication problem. The teacher will ask each group to share something they noticed from the activity with the class. Guiding students to notice the relationship to single digit x single digit with a zero. The teacher will write the combination shown below and have students discuss further the relationship between single digit multiplication and multiplying by tens. 5x1=5 5x10=50 5x2=10 5x20=100 5x3=15 5x30=150 5x4=20 5x40=200 The teacher will pass out the Explore six worksheet and display it on the interactive white board. The teacher will label the dimensions of a 6x10 rectangle in red, and have students do the same with their red pencil on their papers. The teacher will fill the rectangle with ten strips in blue, and have students do the same with their blue pencils. Have students count the strips (tens) to determine the area of the rectangle and write a matching multiplication equation. (6 X 10 = 60) Teacher will circulate through the classroom as student finish the Explore Six worksheet. Upon completion, the teacher will ask students (who have not had a chance with the interactive white board yet) to come and show how they solved the problems. The teacher will then distribute the Explore More worksheet to the students. This will be the summative assessment for this strategy and day.	Students will participate in whole group demonstration/activity. Students will work in pairs in a "think-pair-share" activity. Students will discuss and record patterns that they noticed during the activity in their math journals. Students will complete the rest of the Explore six worksheet independently. Students will participate as a whole group. Students will complete the Explore More worksheet.
2	The teacher will review previous day's lesson with example problems that students will	Students will participate in whole group activity.

	solve in pairs and take turns displaying on the interactive white board. The teacher will then review the strategy of decomposing with addition in a whole group setting. (i.e. 25+34 = 20+5+30+4) The teacher will then write " 9x70" on the board and demonstrate decomposing as shown below. 9x70= 9x7x10= 63x10=630 The teacher will remind students from previous lesson the relationship of multiplying a number by one and then by ten to connect that they only need to add a zero to the answer. The teacher will repeat demonstration with three more numbers, asking for volunteer students to come to the interactive white board and solve using the strategy of decomposing. The teacher will then provide 5 more problems for students to solve in pairs using the decomposing strategy. The teacher will circulate as students work together to solve the problems and record their work in their math journals.	Students will work in pairs in a "think-pair-share" activity to solve given problems. Students will document the problems and strategy in their math journals.

Paste Summative Assessment Here:



Set A7 Number & Operations: Multiplication Beyond the Basic Facts Blackline Run 1 copy on a transparency and a class set on paper.

NAME _____ DATE _____

Explore Six

1 Label the dimensions and area of the rectangle on each grid. Write a multiplication equation to match.

example

10

6

60

6 × 10 = 60

a

b

c

2 Use the information above to help solve these equations.

6 × 50 = _____ 6 × 60 = _____ 6 × 70 = _____

6 × 80 = _____ 6 × 90 = _____ 6 × 100 = _____

A3.4 • Bridges in Mathematics Grade 3 Supplement

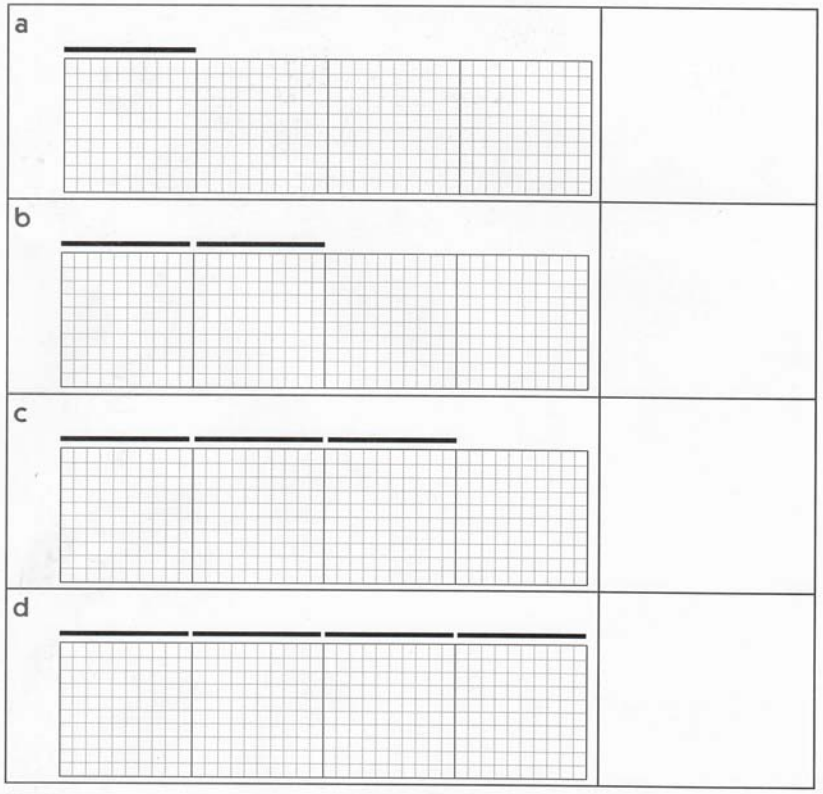
© The Math Learning Center

Set A7 Number & Operations: Multiplication Beyond the Basic Facts Blackline Run a class set.

NAME _____ DATE _____

Explore More

1 Choose a number between 4 and 9 (not 6) to multiply by 10 and multiples of 10. Draw the missing dimensions and the area of each rectangle. Write a multiplication equation to match.



2 Use the information above to help complete these equations.

_____ × 50 = _____ _____ × 60 = _____ _____ × 70 = _____

_____ × 80 = _____ _____ × 90 = _____ _____ × 100 = _____

© The Math Learning Center

Name:_____ Date:_____

Independent work

Directions: Complete the multiplication problems using your strategy of choice. Please show your work on the back.

30 x8	60 x7	20 x2	50 x5	40 x2
70 x6	80 x4	10 x3	90 x8	50 x9
60 x7	30 x5	70 x3	10 x3	20 x3
50 x8	80 x8	40 x4	90 x4	50 x6

Paste Answer Key/Scoring Rubric Here:

Independent work:
Row 1: 240, 420, 40, 250, 80
Row 2:420, 320, 30, 720, 450
Row 3: 420, 150, 210, 30, 60
Row 4: 400, 640, 160, 360, 300