Grade Level	3rd grade	**Content Area**	Math
Course Title (grades 9-12 Only)			
Length of Unit	10 days	**Time of Year**	Fall, 1st qtr
Expected Prior Knowledge *The knowledge/skills mastered earlier in the year foundational to the mastery of the required Standard in the current sample.*	Expected prior knowledge would relate to understanding of how numbers can be ordered and compared as well as have a base understanding of rounding. Students would need to have an understanding of place value through the thousands. Students would also need to be aware of forms of writing numbers (i.e. expanded, standard, and word form).		
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.*	Current school programming supports peer reviewed research based interventions and strategies. By way of Applied Behavioral Analysis (ABA), Discrete trial Therapy(DTT) , and the use of Pivotal Response Therapies.		
Standard Number and Description *List the Number* and full description for the required Standard.*	3.NBT.3 Use place value understanding and properties of operations to perform multi-digit arithmetic. 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.*	The Summative Assessment will look at student's ability to fluently multiply and to do so by multiples of 10. Students will need to demonstrate an understanding of place value, and various properties and operations.		
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.*	Mastery= 12/15 or higher. A copy of the assessment and answer key are attached. Each problem is worth 1 pt.		
Materials/Resources Needed	White board or chalk board, Skill Sheets, Fluency drill skill sheets, 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	Teacher will introduce the unit on multiplying one digit whole numbers by multiples of 10, with the introduction of a whole group, review game of multiplication facts on the board, for multiplication facts 0-10. The teacher will review the importance of knowing multiplication facts and will demonstrate how the game will be played. One the board there will be 5 columns with different colors(i.e. blue, red, green, yellow, orange) each of the columns represent a row of students in the classroom. In each row there are four students and that would make up one team. Each individual student in a row will have a chance to answer a specific multiplication fact question. But answering will be solely based on the individual. The team with the most points at the end of the game wins. The teacher will use this mini-review to look at students who may still struggle with mixing up certain facts, and plan to provide support to make sure they are prepared to start the unit. Once completed with the "Fact Family Game". Students will be taking a mixed multiplication timed drill quiz on the multiplication facts. Here the teacher will also be able to look at the fluency of students with their multiplication facts.	Students will participate in board review math game. Each student will have a chance to answer a specific multiplication question as it relates to basic multiplication and repeated addition. Students will then complete a timed multiplication fluency drill, to also look at fluency of skills on multiplying 0-10. Once the timer has gone off the teacher will have students participate in reviewing answers from their drill, and then record the number of correct answers at the top of their papers, then record their scores in their math journals.
2	The Teacher will introduce the lesson by placing a math problem on the board 2x40. The teacher will ask to students to pull out math journals and write the direct instruction sample down in their books. The teacher will demonstrate how to write the problem as well as review that when there is a larger number it goes on top. The teacher will review lining	Students will need to pull out math Journals and follow along in direct instruction and write down examples in their Math Journals, random students will be called on to help answer questions as the teacher directs students through sample problems. After direct instruction, students will complete an independent skills

	numbers up and placing the 2 directly under the zero, so that these numbers are all in place under the ones place value and the four will be represented in the tens. The teacher will review solving the problem from right to left, starting with the lowest place value column- just as it is done in addition and subtraction. The teacher will then demonstrate the multiplication of ones(0x2), then demonstrate the motion and direction students will take in multiplying the 2 by the tens column, and in this case the 4. The teacher will explain that when answers are written, it must be done according to the place value in which that number was multiplied. 40 X 2 The teacher will then complete two more examples on the board, but will call on random students to verbally walk her through what it is she is supposed to do to complete the problem. The teacher will then pass out a "skills practice sheet with 5 problems that each student must complete at their desk independently. The teacher will monitor and move about the room to provide support to students. Once complete with their sheet they are to turn in their work. **Homework:** Multiplying one digit, by two-digit, with review skills problems and vocabulary(show –your work).(15 problems)	practice sheet. Once the students are done with their skills practice sheet, they will turn it in, and then record their homework down for the night. If time remains in the period and they are finished early, they may begin working on their homework.
3	Today the teacher will start off the lesson by reviewing the homework assigned the night before. The teacher will ask for volunteers for the answers, and take this time to answer any questions that students may have about the homework or any presented concepts. The teacher will then start off instruction reviewing what was taught the day before when they learned a specific way to multiply one digit by two digit problems. On this day, they would be looking at another way to address the problems. The teacher will start off by reviewing the first practice problem that they worked on yesterday.(2x40)	Students will participate in answering/sharing their answers from their homework. Students will participate in whole class review of the assigned problems. Students will participate in completing problems on the math practice sheet during guided practice. Students will be called randomly to lead in completing a problem as the whole class follows. Once completed with guided math practice, with remaining class times students can start working on assigned homework.

	The teacher will explain that when we set up the problem this time we will once again be starting with the ones place value. When we look at the problem we will address the problem by looking at the property or rule of “zero” reminding students that when we multiple numbers by zero, our answer becomes zero. So when addressing the problem we can just bring the zero straight down, and then really what we look at is multiplying the tens place value, 4x2 , which will give the answer 6. We can just look at the problem as 4x6, when multiplying by 10’s. The teacher will go over two more examples (3x20, 7x50), explaining that once again we will look at these problems as 3x2=6 then add our zero, then 7x5=35, then add the zero. The teacher will then pass a math practice sheet out to everyone, that they will complete as a whole group (total of 8 problems, that have 5 problems that address one-digit multiplied by two digits And some review questions from the previous unit). Students will then have a chance to write down their homework for the night. **Homework:** One-digit multiplied by two-digit Skill Review Sheet	
4	The teacher will explain that today, the students will be participating in math centers to complete math multiplication exploration skills activities. The activities have been set up by the teacher, each student will be assigned to a particular center as it has already been set up to the specific skill level for each students. Some students will work on some intervention based skill review tasks, while those that are on-level, will address problems that are mixed review of multiplication skills and multiplying by 10’s. Those who have mastered the skill will be completing some extension based activities: extended problems outside of multiplying by 10’s.	Students will be going to math centers to complete multiplication exploration activities. Students will need to sit at the center the teacher has designated as it will correlate to the specific level that is appropriate for the student. Students are to write their results once done working through the activities. They will need to turn their result sheets to the teacher. Those that finish early will be allowed to participate in a special math games the remainder of the period.

	Students are to write their score results and turn them into the teacher, as each score sheet will detail specific core areas where students demonstrate strength and weaknesses. The teacher will use this to conference with students on tomorrow's lesson. Once the students have completed their skills practice, they will be allowed to go to a different math with games and select a math game of their choice until the period is over. *This will be a two day lesson.*	
5	Today, students will take a mid-unit skills quiz test that will look at multiplication fluency, place value understanding, along with basic multiplication skills where students will need to show work, as well as complete verbal assessment to explain the process utilized to analyze and complete problems. After each student is done with his or her quiz, they will rotate to complete two tasks in the remaining math period. The first, being teacher one-on-one conference. Once completed with their quiz, the teacher will call students up randomly to conference with them about their ability on their skills assessment from the math centers. The other is an in-class project where the students will complete making arrays from multiplication problems. Students will need to complete drawing 8 arrays from the listed multiplication problems on the board. They are free to be creative in their drawings.	Students will take a mid-unit quiz on multiplication fluency. Once done with the quiz, students will rotate to a one-on-one conference with the teacher, or start working on the in-class project of making arrays for specific multiplication problems that the teacher has placed on the board. Each student will have a chance to have a one-on-one conference to review skills and progress with the teacher. This will help prepare students for the upcoming summative assessment.

Name:_____ Date:_____

3rd grade Math 3.NBT. 3

Draw an array to find the product.

1. 50 x 6 = _____
2. 4 x 30 = _____

Skip count by tens to find each product. Draw lines to match.

3. 1x 10 =_____ -10+10+10+10+10+10
4. 2 x10= _____ -10 + 10+ 10+10
5. 4x 10= _____ -10+10
6. 6x 10= _____ -10

Complete the pattern.

7. 10, 20, ____, ____, _____, _____, 70, ____,90_____

Multiply use place value.

8. 6 x 20=
   _____ x ____ tens =_____ tens
   So, 6 x 20=____

9. 7 x 80=
   _____ x _____ tens =_____ tens
   So, 7 x 80 = _____

Multiply to find each product.

10. 5 x (3 x10)=(5 x 3) x 10
    = 15 x 10
    =_____
11. 7 x (9 x 10)= (7 x 9) x 10
    = 63 x 10
    =_____

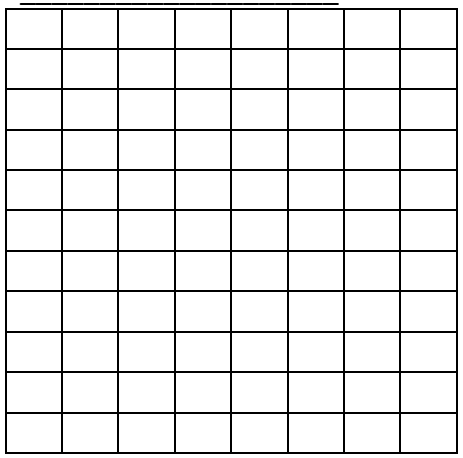
Write a Multiplication sentence for each word problem.

12. Kayla collected 2 boxes of dolls. Each box holds 20 dolls. She will sell each doll for $4 dollars. How much did she earn?

Use a related multiplication fact to find the unknown.

13. 60/ 10=____
    10 x ____=60
14. 50/10=_____
    10 x ____=50
15. What is the number sentence for the array.

_____



Name:_____ Date:_____

3rd grade Math 3.NBT. 3

Find the product.

1. 50 x 6 = ___300____ (1pt)
2. 4 x 30 = _120_____ (1pt)

Skip count by tens to find each product. Draw lines to match.

3. 1x 10 =__10___
4. 2 x10= __20__
5. 4x 10= __40___
6. 6x 10= __60_

- 10+10+10+10+10+10(1pt)
- 10 + 10+ 10+10(1pt)
- 10+10(1pt)
- 10 (1pt)

Complete the pattern. (1pt)

7. 10, 20, _30_, _40_, _50__, _60__, 70, _80__,90__100_

Multiply use place value.

8. 6 x 20=
   __6___ x ___2_ tens =_12__ tens
   So, 6 x 20=__120__ (1pt)

9. 7 x 80=
   _7____ x ___8__ tens =__56___ tens
   So, 7 x 80 = __560____ (1pt)

Multiply to find each product. (1 pt)

10. 5 x (3 x10)=(5 x 3) x 10
    = 15 x 10
    =__150___

11. 7 x (9 x 10)= (7 x 9) x 10(1pt)
    = 63 x 10
    =_630____

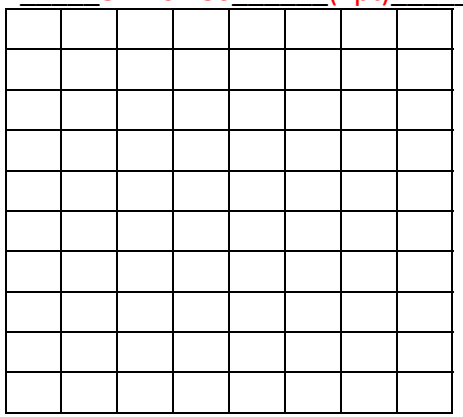
Write a Multiplication sentence for each word problem.

12. Kayla collected 2 boxes of dolls. Each box holds 20 dolls. She will sell each doll for $4 dollars. How much did she earn?
    _____$4 x 40= $160__(1pt)____

Use a related Multiplication fact to find the unknown.

13. 60/ 10=__6__
    10 x _6___=60(1pt)

14. 50/10=__5___
    10 x _5___=50(1pt)

15. What is the number sentence for the array.

_____8 x 10= 80_____(1pt)_____