Grade 3	Lesson: 4-1 Multiplication as Repeated Addition	Reference to English

Math Standard(s): 3.OA.1 also: 3.OA.3 and 3.OA.5   **Domain: Operations and Algebraic Thinking**

Content objective(s):	Language Objective(s):
Students will write multiplication number sentences for given equal group situations, using the X symbol. *I can write multiplication number sentences for given equal group situations, using the X symbol.*	Students will tell their neighbor repeated addition and multiplication sentences. *I can tell my neighbor repeated addition and multiplication sentences.*
Essential Understanding: Some real-world problems involving joining or separating equals groups or comparison can be solved using multiplication. Repeated addition involves joining equal groups and is one way to think about multiplication.	**Required Academic Vocabulary for Word Wall:** **Listen:** multiplication, factors, products **Read:** **Write:** **Speak:** multiplication, factors, products **Sentence Frame:**
Materials: • **Two-color counters** • **Whiteboards, erasers and markers** • **Guided Practice**	**Additional Lesson Vocabulary:** Jars, paint, box, fish, bags

Lesson:	Instructional Time: 25 minutes

Opening: (4 minutes)

T: "Today, you will learn how multiplication is like repeated addition and how to use multiplication to solve problems."

T: "What is repeated addition?"

S: *will answer, "adding the same number many times."*

T: "Will you give your neighbor an example please?"

S: *will turn to their neighbor and say, "5 plus 5 plus 5" or 2 plus 2 plus 2 plus 2" or 3 plus 3 plus 3"….*

T: "Raise your hand and tell me an example of repeated addition."

S: *will raise their hands and give an example.*

• Call on at least 4 students.

Introduction to New Material (Direct Instruction): (4 minutes)

T: "Ms. Witt bought 3 boxes of finger paints with 5 jars of paint in each box."

• Draw 3 boxes of paint on the board with 5 jars of paint in each box.

T: "How can you use counters to find the total number of jars? Tell your neighbor what you will do."

S: *will turn to their neighbor and discuss the method they will use to solve the problem.*

T: "One way to solve the problem is to use repeated addition. How many jars are in each box?"

S: *will respond, "5 jars"*

T: "Yes, there are 5 jars in each box. So, let's count by 5's. 5, 10, 15.** (write the numbers under the boxes draw on the board – 5, 10, 15) **How many jars are there all together?"**

S: *will respond, "15 jars."*

T: "The problem is about equal groups so you can use multiplication to find the total. Multiplication is a quick way to add."

• On the board write 3 X 5 = 15.

T: "The 3 and 5 are called factors and 15 is called the product.**

• Use the math vocabulary cards and put them on the board.

Guided Practice: (10 minutes)

Use the modeling cycle:

Teacher Does:

• Pass out whiteboards, markers, erasers and counters.

T: "Let's do one more problem together. There are 4 jars of paint in each of 3 boxes. Use counter to find the total number of jars. Draw a picture and write an addition sentence and a multiplication sentence."**

S: *will use their counters to represent the 4 jars of paint in each of 3 boxes. Then they will draw a picture and write an addition sentence and multiplication sentence.*

T: "Hold up your whiteboards and show me your work."**

S: *will hold up their whiteboards.*

T: "Please read the addition sentence and subtraction sentence to your neighbor."**

S: *will read, "4 plus 4 plus 4 equals 12 and 4 times 3 equals 12."*

T: "I want one student to come up and write the addition sentence on the board and another students to write the multiplication

sentence on the board."

- Teacher will choose 2 students.

S: *will write the sentences on the board.*

T: "Please read the addition sentence with me. 4 plus 4 plus 4 equals 12."

T: "Good job, please read the multiplication sentence with me. 4 times 3 equals 12."

All Students Do:

T: "Now I want you to work in pairs and solve the next 2 problems. I will draw them on the board and you write down the addition sentence and the multiplication sentence. Remember to read the addition sentence and multiplication sentence to your partner. You have 4 minutes."

- Teacher will draw 3 bags of 8 fish on the board.
- Teacher will draw 3 plates of 6 cookies on the board.

S: *will write the addition sentence and multiplication sentence to go along with each problem and read them to their partner.*

T: "10,9,8,7,6,5,4,3,2,1. Time is up. Please show me your boards."

S: *will show their boards with the addition and multiplication sentences written on them.*

T: "Good job, please read the sentences with me. 8 plus 8 plus 8 equals 24. 8 times 3 equals 24."

T: "How about the other problem. Who will read those sentences for me?"

S: *will say, "6 plus 6 plus 6 equals 18 and 6 times 3 equals 18."*

T: "Well done!"

Independent Practice: (5 minutes)

T: "Now I need you to do 4 more problems on your own at your desk. Please pull out your books to guided practice page 100. Please do problems 1, 2, 6 and 7. You have 4 minutes."

S: *will complete problems 1,2,6 and 7 at their desk.*

T: "Time is up. Please turn in your papers and come back to the carpet."

S: *will turn in their papers and return to the carpet.*

Closing: (3 minutes)

T: "Today we learned that repeated addition is the same as what?"

S: *will respond, "repeated addition is the same as multiplication."*

T: "Who can give me one example of repeated addition?"

S: *will give an example of repeated addition.*

T: "Who can tell me the multiplication sentence to go along with the repeated addition example?"

S: *will respond with the multiplication sentence to go along with the repeated addition example.*

Assessment:

Guided and Independent Practice page 100