

# Diocese of Wheeling-Charleston

## Math Unit Planner

Name of Teacher: Mrs. Morgan Allman

Grade Level: 3rd

**Domain:** Mathematics

Estimated Duration of Unit: 15 days (3) weeks

Specific **Clusters** Addressed: Division and multiplication

Teaching Strategies: Direct instruction, whole class, individual

Catholic Identity Connections: Cross Curricular Opportunities Stories of the Bible connecting with multiplication; technology

Assessment (authentic/published - summative/formative): Summative-Algebra Chapter 6 and 7 in math book, quizzes daily; Formative-Ipad multiplication games, workbook, in-class games

### Standards Addressed

Standard Number	<u>Standards</u>
M.3.OA.1	Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe context in which a total number of objects can be expressed as $5 \times 7$ .
M.3.OA.5	Apply properties of operations as strategies to multiply and divide.(Students need not use formal terms for these properties.) Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$ , then $15 \times 2 = 30$ , or by $5 \times 2 = 10$ , then $3 \times 10 = 30$ .
M.3.OA.6	Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.
M.3.OA.7	fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows $40 \div 5 = 8$ ) or properties of operations and by the end of Grade 3, know from memory all products of two one-digit numbers

Description of Activity			Date of Completion
Each day the students will work on multiplying a number with the numbers 1-12. (3X2)			Day 1-12
Students will play the math game around the world learning the understanding of multiplication.			Day 4,8,9,12
Students will think through and write down multiplication problems using commutative property.			Day 5, 6, 7
Students will take a 10 problem quiz each day after the 1 <sup>st</sup> day to help them understand and memorize multiplication factors 1-12			
Students will come to the board and write the multiplication out in order to see that the answers to the problem come in order by just adding. (e.i $2 \times 2 = 4$ $2 \times 3 = 6$ ) just add 2 more to the previous answer			Day 8
Students will work the reversing multiplication by working backwards on problems to learn division			Day 10,11,13
Differentiated Instruction Opportunities/Overview: We will be using the Ipad to reinforce multiplication using games. (Multiplication for kids, Third grade splash math games for third grade, Math factor monsters, Lumio Farm Factor free, squeezable multiplication.); We will be playing a game with two dice- the students will roll each die, then the students will multiply those two dice together to practice multiplication. The students will play a game called Division Dragon on the Ipad for extra practice.			
Cross Curricular Opportunities:			
Standard Number	Standard Description	Resources	Date
21C.O.3-4. 3.TT6	Student selects appropriate technology tools and resources needed to communicate information to others, to achieve personal goals, and to support independent learning.	IPad	Day 5,10,11,14,15
<b>Mathematical Practice Standards - 8 Progressions</b>			<b>Check all the Apply</b>
<b>1</b>	<b>Make sense of problems and persevere in solving them.</b>		<b>X</b>
<b>2</b>	<b>Reason abstractly and quantitatively.</b>		
<b>3</b>	<b>Construct viable arguments and critique the reasoning of others.</b>		
<b>4</b>	<b>Model with mathematics.</b>		<b>X</b>
<b>5</b>	<b>Use appropriate tools strategically.</b>		<b>X</b>

<b>6</b>	<b>Attend to precision.</b>	
<b>7</b>	<b>Look for and make use of structure.</b>	<b>x</b>
<b>8</b>	<b>Look for and express regularity in repeated reasoning</b>	<b>X</b>

**Summary of Unit:**

I am going to help the students learn their multiplication through the book, workbook, group work, and games on the Ipad. Each day starting with the number 1x- 1-12. Next day 2x-1-12. We will continue each day learning a new number to multiply the numbers 1-12. On day 4,8, 9, and 12 we would play a game called around the world where two students will compete with each other to see who knows the multiplication factors the fastest. Then whoever wins moves to the next person. On day 5,6,7 we would work on page 192-194 chapter 6 on communitive property. On day 5, 10, 12 we will play multiplication games on the Ipad to reinforce memorization of multiplication facts. I will do a minute math test each 1's the 1<sup>st</sup> day, 2's, 3<sup>rd</sup> day 3's and so on. If a student gets them wrong they write the correct math problem 5 times to reinforce the correct answer. I will also have the students challenge the 4<sup>th</sup> graders so we are helping to improve and bond with other students. We will play around the world with division cards. The class will also be taking minute math test on division daily. The student will work in their workbook nightly to practice what they have learned each day. The students will continue to play games on the Ipad like Division Dragon and Ninja Math. At the end of the three weeks I will give them a chapter test to check on all their multiplication and division skills.