Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Module 1 (Math)**

 Start Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Completion Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Total Days \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Students will be expected to complete activities during class and at home for 30 minutes each night.)

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| --- |
|  **Standards:**Order of Operations and Whole Numbers |
| **Write and interpret numerical expressions.** MGSE.5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. MGSE.5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product. | **Understand the place value system.** MGSE.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. MGSE.5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. | **Perform operations with multi-digit whole numbers and with decimals to hundredths.** MGSE.5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm (or other strategies demonstrating understanding of multiplication) up to a 3 digit by 2 digit factor. MGSE.5.NBT.6. Fluently divide up to 4- digit dividends and 2-digit divisors by using at least one of the following methods: strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations or concrete models. (e.g., rectangular arrays, area models) |
|  **Key Vocabulary:**Algorithm • Distributive Property • Dividend • Divisor • Equation • Exponents • Expression • Measurement Division (or repeated subtraction) • Multiplicand • Multiplier • Order of Operations • Partition Division (or fair-sharing) • Partial Product • Partial Quotient • Product • Remainder |
|  |  |  |
| **I can statement/ Essential Question** |
| * Why is it important to follow an order of operations?
* How can I effectively critique the reasoning of others?
* How can I write an expression that demonstrates a situation or context?
* How can an expression be written given a set value?
* What is the difference between an equation and an expression?
* In what kinds of real world situations might we use equations and expressions?
* How can we evaluate expressions?
* How can an expression be written?
 | • How does multiplying a whole number by a power of ten affect the product?• How can I use what I know about multiplying multiples of ten to multiply two whole numbers?\*How can I use the situation in a story problem to determine the best operation to use? | * How can estimating help us when solving multiplication problems?
* What strategies can we use to efficiently solve multiplication problems?
* How can I effectively explain my mathematical thinking and reasoning to others?
 |
| **Unit Performances:**  |
| Activity TitleChoose one colored activity from each colored row belowA (\*) indicates an assignment that **MUST** be completed | Est. Time | Quiz or Practice Work | Points Received | Total Points | Teacher Initial  |
| **OA1**-[BrainPop Quiz Orders of Operation](https://www.brainpop.com/math/numbersandoperations/orderofoperations/) Students will view video, Complete quiz and Email results to teacher | ¼ cp | Quiz | completed |   |  |
| **\*OA1-Order of Operations**Direction: Choose 7 problems. Solve and show your work in your math journal.

|  |  |
| --- | --- |
|   | **Problem** |
| 1 | 2 x (3 x 4 + 4) – 3 x (3-1) |
| 2 | 24 – 2 x (8 – 3 x 2) - 8 |
| 3 | 400 ÷ 4 + 2 x 4 – 100 ÷ 10 |
| 4 | (12 + 2 x 3) ÷ (2 + 2 x 2) |
| 5 | 24 + 12 ÷ (12 – 2 x 3) ÷ 2 |
| 6 | (15 + 5) ÷ (3 + (3 – 2) x 2) |
| 7 | 2 x (3 x (4 – 2) + 6) |
| 8 | 24 ÷ 2 ÷ 3 + 24 ÷ 12 ÷ 2 - 5 |
| 9 | 100 ÷ 2 x 10 ÷ 5 ÷ (8 ÷ 2 ÷ 2) |
| 10 | 200 ÷ (12 – 2 x 4) ÷ (8 - 3) |
| 11 | 200 ÷ (12 x 3 + 4) + 10) |
| 12 | 2 x 5 x 5 x 2 x 2 x 5 ÷ |

 | 1 cp | PW |  |  |  |
| **OA1**-Order of Operation Green Task Cards | 2cp |  |  |  |  |
| **\*OA1**-Independent Practice: Order of Operations Volume 1 page 489 | 1cp | PW |  |  |  |
| **OA2**-Expression Race - Game Time Card (My Math Learning Stations) | 1 cp | PW |  |  |  |
| **OA2**-Independent Practice Vol. 1 pg 495 | 2cp | PW |  |  |  |
| **OA2**- Leveled Reader Questions- Inside a Science Museum | 3 cp | PW |  |  |  |
| **OA2** - Leveled Reader Questions - Water Works | 3 cp  | PW |  |  |  |
| \***OA1 and OA2**- Expression Puzzle Folder Worksheet Pg.52-54 | 2 cp | PW |  |  |  |
| **NBT1**-[Understanding Place Value](https://learnzillion.com/lesson_plans/8372-understand-that-a-digit-in-one-place-is-1-10-the-value-of-the-digit-to-the-left-using-whole-numbers) (LearnZillion Video) | 1/4 cp | PW |  |  |  |
| \***NBT2**-Powers of ten: Volume 1 Page: 99-101 | ½ cp | PW |  |  |  |
| \***NBT2**-Powers of Tens: Study Island Practice 30 Questions | 2 cp | PW |  |  |  |
| **NBT1**  Patterns are us  | 1 cp | PW |  |  |  |
| **NBT5** - Leveled Reader Question - Early American Settlement  | 3 cp | PW |  |  |  |
| \***NBT5** - Students can choose to look at two LearnZillion videos on Multiplication:[Partial Product](https://learnzillion.com/lesson_plans/2644)[Standard Algorithm](https://learnzillion.com/lesson_plans/2653)[Area Model](https://learnzillion.com/lesson_plans/383)[Lattice Model](https://www.youtube.com/watch?v=gS6TfWUv97I) or [Lattice Model (2)](https://www.youtube.com/watch?v=cijuPxHgZAA) Students will practice multiplication problems using one of the strategies in My Math Workbook Vol.1 pg 139  |  |  |  |  |  |
| **\*NBT6** - Leveled Reader Questions- Into Uncharted Territory |  3 cp | Pw |  |  |  |
| **\*NBT6** Division Fluency Practice  | 1cp | PW |  |  |  |
| \*[Xtramath](https://xtramath.org/#/home/index)  |  |  |  |  |  |
| **\*Technology Student Assignments: (TenMarks, KhanAcademy, Study Island) Required** |  | Quiz |  |  |  |
|  **Performance Task** |
| **Activity Title** | **Est. Time** | **Group/****Independent** | **Points Received** | **Total Points** | **Teacher Initial**  |
| \*Unit 1 Post- Assessment | **1 ½ cp** | **Independent** |  |  |  |
| My Math Workbook Check-up | **2 cp** | **Independent** |  |  |  |
| Data Binder | **1 cp** | **Whole Group** |  |  |  |
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