|  |  |  |
| --- | --- | --- |
| **Second Trimester** | Grade: 3 | Unit Number: 7 |
| Unit Overview: * To review multiplication and division patterns
* To extend basic multiplication facts
* To practice making estimates of costs
* To explore ratios and geometric figures
 |
| Essential Question: |
| Academic Vocabulary: multiplication product dividend quotient equation associative property factor estimation place value factor division divisor array commutative property distributive property order of operations rounding multiply |
| Lesson | Standard | Guiding Questions | Differentiation  | Resources  | Student Learning Goals |
| 7.1 | **3.0A.1****3.0A.4**3.0A.7**3.0A.9** | Which pattern(s) helps you the most? Why? |  |  | I can…* Explain that multiplication is repeated addition of the same number.
* Interpret products of whole numbers in multiplication (e.g., 4x3 is 4 groups of 3 or 3 groups of 4; or, an array with 4 rows and 3 columns; or, the area of a 4-by-3 rectangle; or, 4 rows of 3 objects.).
* Identify parts of a multiplication problem (factors and products).
* Explain division as repeated subtraction of the same number or as a set of objects divided into an equal number of shares.
* Interpret whole-number quotients of whole numbers (e.g., 80/4 is 4 groups with 20 in each group, or 20 groups with 4 in each group).
* Identify parts of division equations (dividend, divisor, and quotients).
* Use equal groups, arrays, measurement, quantities and drawings to solve multiplication and division problems.
* Use equations with a symbol for the unknown number to represent multiplication and division problems.
* Determine the unknown whole number in multiplication and division problems.
* Apply the properties of operations as strategies to multiply and divide (commutative, associative, and distributive property of multiplication.
* Show the relationship between multiplication and division (e.g., turn a division problem into multiplication problems with an unknown factor).
* Quickly multiply and divide within 200 using strategies such as the relationship between multiplication and division or properties of operations to find the answers.
* Instantly recall the product of any one-digit numbers.
* Use the four operations (=,-,x,÷) to solve two-step word problems.
* Write equations using a letter standing for the unknown number.
* Decide if my answers are reasonable using mental math and estimation strategies including rounding.
* Round whole numbers to the nearest 10 or the nearest 100.
* Multiply one-digit whole numbers by multiples of 10 using strategies based on place value and properties of operation. (e.g., 5 x 40 = 5 x (4 x 10) = (5 x 4) x 10; or 5 x 40 = (5 x 20) + (5 x 20).
 |
| 7.2 | **3.OA.4****3.OA.5****3.OA.7****3.OA.9** | When do you use the multiplication/division facts table? |  |  |
| 7.3 | 3.OA.1**3.OA.2****3.OA.4****3.OA.5****3.OA.6****3.OA.7** | What tools helps you other math games? |  |  |
| 7.4 | 3.OA.33.OA.4**3.0A.7****3.0A.8**3.NBT.2 | What other symbols in number sentences help you understand how to solve them? |  |  |
| 7.5 | 3.OA.7**3.0A.8** | Why might it be helpful to know how to solve a problem in more than one way? |  |  |
| 7.6 | **3.OA.6****3.OA.7****3.NBT.3** | How could you continue these patterns? |  |  |
| 7.7 | 3.OA.3**3.0A.8****3.NBT.1****3.NBT.3** | When else might you estimate how much something costs rather than finding an exact cost? |  |  |
| 7.8 | 3.OA.3**3.NBT.3** | Why is it important to know what numbers mean when writing number models and solving number stories?  |  |  |
| 7.9 |  | Why is it important to keep trying to solve challenging math problems? |  |  |
| Assessment: |