

**Module 1: Properties of Multiplication and Division and  
Solving Problems with Units of 2–5 and 10  
(Trimester 1: 25 Days)**

Topic A	Multiplication and the Meaning of the Factors	3.OA.1 3.OA.3
Topic B	Division as an Unknown Factor Problem	3.OA.2 3.OA.6 3.OA.3 3.OA.4
Topic C	Multiplication Using Units of 2 and 3	3.OA.1 3.OA.5 3.OA.3 3.OA.4
Topic D	Division Using Units of 2 and 3	3.OA.2 3.OA.4 3.OA.6 3.OA.7 3.OA.3 3.OA.8
Topic E	Multiplication and Division Using Units of 4	3.OA.5 3.OA.7 3.OA.1 3.OA.2 3.OA.3 3.OA.4 3.OA.6
Topic F	Distributive Property and Problem Solving Using Units of 2–5 and 10	3.OA.3 3.OA.5 3.OA.7 3.OA.8 3.OA.1 3.OA.2 3.OA.4 3.OA.6
ASSESSMENT	Formative 3.OA.1- 3.OA.8	Reporting Strand: Multiplies and divides using properties and to solve word problems
		Report Card: M / I

- 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 a context in which a total number of objects can be expressed as  $5 \times 7$ .
- 3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret  $56 \div 8$  as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as  $56 \div 8$ .
- 3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Standards Glossary, Table 2.)
- 3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations  $8 \times ? = 48$ ,  $5 = \_ \div 3$ ,  $6 \times 6 = ?$
- 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  $3 \times 10 = 30$ . (Associative property of multiplication.) Knowing that  $8 \times 5 = 40$  and  $8 \times 2 = 16$ , one can find  $8 \times 7$  as  $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.)<sup>51</sup>
- 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.
- 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. By the end of Grade 3, know from memory all products of two one-digit numbers.
- 3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding

**Reporting Strand: Multiplies and divides using properties and to solve word problems**

	<b>Meets (Student is able to solve without major errors)</b>	<b>Proficient</b>	<b>Improvement Needed (Student needs to work on the following....)</b>
1		<p>3.OA.1: Explain the meaning of whole number multiplication problems by showing/explaining <b>all</b> the below</p> <ul style="list-style-type: none"> <li>• showing the number of groups</li> <li>• number of objects in each group</li> <li>• what the total represents</li> </ul>	
2		<p>3.OA.2 Interpret the meaning of whole number division problems by showing/explaining <b>all</b> of the below</p> <ul style="list-style-type: none"> <li>• How many objects are in each group so that the groups are equal</li> <li>• How many equal groups can you make</li> <li>• What the total represents</li> </ul>	
3: array 4: Measure 5: Equal		<p>3.OA.3-Use multiplication and division within 100 to solve word problems using drawings <b>and</b> equations <b>all</b> of the types of problems below:</p> <ul style="list-style-type: none"> <li>• Equal groups</li> <li>• Arrays/Area</li> <li>• Compare/Measurement quantities</li> </ul>	
6		<p>3.OA.4- Solve multiplication and division equations when the unknown is in any of the <b>three</b> positions.</p>	
7		<p>3.OA.5, 3.OA.6, 3.OA.7 Fluently multiply and divide <b>within 100</b> using strategies such as:</p> <ul style="list-style-type: none"> <li>• The relationship between multiplication and division</li> <li>• Skip Counting/count bys...</li> <li>• Distributive Property</li> <li>• Commutative Property</li> <li>• Associative Property</li> </ul>	
8		<p>3.OA.8 Solve two-step word problems using the four operations and creating equations with a letter for the unknown <b>and determine the reasonableness of the answer</b></p>	

## Multiplica y divide usando propiedades y para resolver problemas de palabras

	Cumple con el objetivo (El estudiante es capaz de resolver el problema sin grandes errores)	Domina el objetivo	Necesita mejorar (El estudiante necesita trabajar en lo siguiente....)
1		3.OA.1 Explica el significado de problemas con multiplicación de números entero demostrando/explicando <b>todo</b> lo siguiente: <ul style="list-style-type: none"> <li>• Número de grupos</li> <li>• Número de objetos en cada grupo</li> <li>• Lo que representa el total</li> </ul>	
2		3.OA.2 Interpreta el significado de los problemas con division de números enteros demostrando/explicando <b>todo</b> lo siguiente <ul style="list-style-type: none"> <li>• Cuántos objetos hay en cada grupo para que los grupos sean iguales</li> <li>• Cuántos grupos iguales puedes hacer</li> <li>• Qué representa el total</li> </ul>	
3: array 4: Measure 5: Equal		3.OA.3 Usa la multiplicación y división hasta 100 para resolver problemas de palabras usando dibujos <b>y</b> ecuaciones en <b>todos</b> los siguientes tipos de problemas: <ul style="list-style-type: none"> <li>• Grupos iguales</li> <li>• Matrices/área</li> <li>• Comparar/Medir cantidades</li> </ul>	
6		3.OA.4 Resuelve ecuaciones de multiplicación y division cuando el valor desconocido está en cualquiera de las <b>tres</b> posiciones.	
7		3.OA.5, 3.OA.6, 3.OA.7 Multiplica y divide con fluidez <b>hasta 100</b> usando estrategias como: <ul style="list-style-type: none"> <li>• La relación entre la multiplicación y la division</li> <li>• Contar de (2 en 2, 5 en 5...)</li> <li>• Propiedad Distributiva</li> <li>• Propiedad Conmutativa</li> <li>• Propiedad Asociativa</li> </ul>	
8		3.OA.8 Resuelve problemas verbales de dos pasos usando las cuatro operaciones y creando ecuaciones con una letra para la cantidad desconocida <b>y determina lo razonables que son las respuestas</b>	