Module 7: Exploring Measurement with Multiplication
(Trimester 3: 20 Days)

Topic A	Measurement Conversion Tables		**4.OA.1 4.OA.2 4.MD.1**
Topic B	Problem Solving with Measurement		**4.OA.3 4.OA.2 4.MD.1 4.MD.2**
ASSESSMENT	4.MD.1 4.MD.2	Reporting Strand: Solves word problems involving measurements	Report Card: 0-4
Topic C	Investigation of Measurements Expressed as Mixed Numbers		
Topic D	Year in Review		

4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. (See Standards Glossary, Table 2.)

4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. 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.

4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), …*

4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

Reporting Strand: Solves word problems involving measurements

CCSS	4 – Mastery	3- Proficient	2 – Basic	1 – Below Basic	0 – No Evidence
4.MD.1	Can extend thinking beyond the standard, including tasks that may involve one of the following: • Designing • Connecting • Synthesizing • Applying • Justifying • Critiquing • Analyzing • Creating • Proving	Given conversion rates, generate equivalent measurements in a two-column table, when conversions require **more than one step** Know the relative sizes within system of units, including **all** of the following: • km, m, cm • kg, g • lb, oz • l, ml • hr, min, sec to express measurements of a larger unit in terms of a smaller unit	Given conversion rates, generate equivalent measurements in a two-column table, when conversions require one step **Know the relative sizes within system of units, including 3 of the following:** • km, m, cm • kg, g • lb, oz • l, ml • hr, min, sec to express measurements of a larger unit in terms of a smaller unit	**Given conversion rates, generate equivalent measurements in a two-column table, when conversions require one step**	Little evidence of reasoning or application to solve the problem Does not meet the criteria in a level 1
4.MD.2		Use the four operations to solve word problems involving all of the following • distances • intervals of time • liquid volumes • masses of objects • money that include **both** • simple fractions or decimals, • same system conversions Represent measurement quantities using diagrams	Use the four operations to solve word problems involving **at least three** of the following • distances • intervals of time • liquid volumes • masses of objects • money that include same system conversions **Represent measurement quantities using diagrams**	Use the four operations to solve word problems involving **two** of the following • distances • intervals of time • liquid volumes • masses of objects • money that include same system conversions	

Resuelve problemas de palabras que involucran medidas

CCSS	4 – Dominio	3- Apto	2 – Básico	1 – Por debajo de lo Básico	0 – No hay Evidencia
4.MD.1	Puede pensar más allá del estándar, incluyendo tareas que puedan involucrar uno de los siguientes aspectos: • Diseñar • Conectar • Sintetizar • Aplicar • Justificar • Criticar • Analizar • Crear • Demostrar	Dadas las tasas de conversión, genere medidas equivalentes en una tabla de dos columnas, cuando las conversiones requieren **<u>más de</u>** un paso **<u>Dados</u>** los tamaños relativos dentro de un Sistema de unidades, incluye todo los siguiente: • km, m, cm • kg, g • lb, oz • l, ml • hr, min, seg para expresar medidas de unidades más grandes en términos de una unidad más pequeña	Dadas las tasas de conversión, genere medidas equivalentes en una tabla de dos columnas, cuando las conversiones requieren un paso **<u>Dados</u>** los tamaños relativos dentro de un Sistema de unidades, incluye 3 de los siguiente: • km, m, cm • kg, g • lb, oz • l, ml • hr, min, seg para expresar medidas de unidades más grandes en términos de una unidad más pequeña	Dadas las tasas de conversión, genere medidas equivalentes en una tabla de dos columnas, cuando las conversiones requieren un paso	Hay poca evidencia de razonamiento o aplicación para resolver el problema No reúne los criterios del nivel 1
4.MD.2		Usa las cuatro operaciones para resolver problemas verbales con todo lo siguiente: • distancias • intervalos de tiempo • volúmenes de líquidos • masas de objetos • dinero que incluyen **<u>tanto</u>** • fracciones simples o decimals • conversiones dentro del mismo sistema Representan cantidades de medidas usando diagramas	Usa las cuatro operaciones para resolver problemas verbales con **<u>al menos tres</u>** de lo siguiente: • distancias • intervalos de tiempo • volúmenes de líquidos • masas de objetos • dinero que incluyen conversiones dentro del mismo sistema	Usa las cuatro operaciones para resolver problemas verbales con **<u>dos</u>** de lo siguiente: • distancias • intervalos de tiempo • volúmenes de líquidos • masas de objetos • dinero que incluyen conversiones dentro del mismo sistema	