Learning Design Template

Grade Level & Content Area: 4th Math			
Essential Learning Target: Readiness TEKS	**Verbs:** Determines Level of Thinking	**Nouns:** Academic Vocabulary	**Prerequisite Skills/Supporting Standards:** What do they need to know before
4.4H- solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders **4.5A**- represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity **4.5B** represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence	Split Separate Interpret Divisible by Share Represent Identify Solve Determine	Equal groups Quotient Divisor Dividend Remainder Inverse operation (opposite of multiplication) Algorithm Partial quotient Array Equation Strip diagram MULTI-STEP	Fact Fluency 📄 M_4 Unit 3 Prerequisite Ass… **4.4B**- determine products of a number and 10 or 100 using properties of operations and place value understandings **4.4C**- represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15 **4.4D**- use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties

Essential/Guiding/Coaching Questions: **What questions will the learner be answering as they progress through the learning continuum? These are key questions students answer as they move from background knowledge to the level of the ELT for each big idea.**	Assessment Question Examples: **Look at summative assessments & STAAR questions**
- How do you explain to someone how to solve mental math problems? - How do I know which mathematical operation to use and how do mathematical operations relate to each other? - Is there a pattern? If so, how do you determine what it is? - Explain more than one way to solve a problem. (addition, subtraction, multiplication, or division)	📄 M_4 Unit 3 Assessment 📄 M_4 Unit 3 Assessment KEY

Big Idea: **The LEARNING GOAL is linked to the "I can" statements. Generate the overall target that is obtained by mastering ALL the "I can" statements.**	Success Criteria "I can..." Statements: **Create measurable statements to achieve each level of mastery. What does learning look like when it's mastered? Construct "I can VERB ..... NOUN " statements. "I can" statements should be listed for each level of the learning progressions linked to the LEARNING GOAL.**
Students are able to meet expectations, with 80% or higher accuracy, solving one and two step problems involving division.	I can use models to represent a division quotient. I can divide four-digit by one-digit. I can solve multi-step problems involving division. I can identify all parts of a division problem. I can interpret how to use my remainder.

Possible Misconceptions: **What are misconceptions students have? These are either**	Formative Assessments: **Which assessment type is best for MASTERY?**

predicted or observed.	
Label or interpret remainder Dropping remainder Only do one step of a multi step problem. Calculation errors Wrong operation	5 Question Pretest Daily Grade FA Re-Teach

Feedback & Coaching Opportunities: Based on formative assessment data, how are you going to reteach?	Practice Opportunities: Independent, guided, small group, stations, etc.
In small groups, with those that did not master formative assessment, we will be working on more examples targeting misconceptions. We will also be revisiting with those students during flex time, with other teachers, in giving them more examples.	Dice in dice multiplication with white boards, Multiply Scoot https://www.openmiddle.com/category/grade-4/

Extend/Enrich Opportunities: Based on formative assessment data, how are you going to extend learning?	Differentiation Opportunities: SPED, ELL, 504, Tier II & III, GT
Escape Rooms Choice Boards PBL	**Sheltered Instruction Ideas: Flex and pull out.** **Areas to consider differentiating. You don't have to differentiate in all four areas**. 1) Content (the "what", the standards you want the students to learn): 2) Process (the "how", how the student is processing the content or information being taught): 3) Product (the evidence that the student has indeed acquired the content and the processes): 4) Environment (the physical space and affective climate of the classroom): SPED and tiers- Use a bank of 3rd grade word problems

	GT- Create their own word problems