

Mathematics CFA Template

Pre-Instruction

1. List the Standard. Underline the nouns (what students will know) and highlight the verbs (what student will do):

4NBT.5 **Multiply** a whole number of up to four digits by a one-digit whole number, and **multiply** two-digit numbers, **using** strategies based on place value and the properties of operations (in particular the distributive property). **Illustrate** and **explain** the calculation by using equations, rectangular arrays, and/or area models.

2. Mathematical Practices

1. Reason abstractly and quantitatively
2. Construct viable arguments and critique the reasoning of others.
3. Model with mathematics
4. Use appropriate tools strategically.
5. Look for and make use of structure.

3. I Can Statements – Put learning targets in student friendly terms.

I can multiply four digits by a one-digit whole number.

I can multiply two-digit numbers.

I can illustrate and explain the calculations by using equations, rectangular arrays, and/or area models.

Depth of Knowledge of the standard (Highlight the Level of the Learning Target):

Level 1 Recall; Level 2 – Skill/Concept; Level 3 – Strategic Thinking; Level 4 – Extended Thinking

4. List the skills students need to know in order to begin this standard:

1. Students need to fluently know multiplication facts.
2. Understand that multiplication is repeated addition.
3. Students should have an understanding of rectangular arrays, equations, and area models.
4. Students need to know and understand the distributive property.

5. What type of assessment am I going to write? [selected response (m/c, t/f, y/n, matching, fill in ___) **or** constructed response (**short:** word, phrase, sentence, single problem; **extended:** multi-step operations in math, problem solving)] List the assessment questions.

Constructed response-short: single problem

Solve the following problems. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

$$321 \times 7 =$$

$$4,372 \times 8 =$$

$$12 \times 7 =$$

$$23 \times 53 =$$

6. Scoring Guide

Exceeds Expectations: Student answered 4 out of 4 with various illustrations and explanations.

Proficient: Student answered 4 out of 4 with illustration and explanations.

Approaching Proficiency: Correctly answers 3 out of 4 problems with some illustration and explanations

Not Proficient: Answers less than 3 problems. Little concept of explanations.

Name: _____

4.NB T.5 – Formative Assessment

Directions: Solve the following problems. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

$321 \times 7 =$	$4,372 \times 8 =$
$12 \times 7 =$	$23 \times 53 =$

Name: _____

4.NB T.5 – Formative Assessment

Directions: Solve the following problems. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

$321 \times 7 =$	$4,372 \times 8 =$
$12 \times 7 =$	$23 \times 53 =$