Mathematics CFA Template

Pre-Instruction

1. List the Standard. Underline the nouns (what students will know) and highlight the verbs (what student will do): 3.OA.3 3. OA.3 *Represent* and *solve* problems *involving* multiplication and division: *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.

2. Mathematical Practices

1. Make sense of problems and persevere in solving them.

2. Reason abstractly and quantitatively.

4. Model with mathetmatics.

5. Use appropriate tools strategically.

6. Attend to precision.

7. Look for and make use of structure.

8. Look for and express regularity in repeated reasoning.

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

1. I can use equal groups, arrays and measurement quantities to solve multiplication and division word problems w/in 100. (2,3)

2. I can multiply and divide within 100 to solve word problems. (2,3)

3. I can write an equation for a multiplication word problem. (2)

4. I can write an equation for a division word problems. (2)

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Depth of Knowledge of the standard (Italics 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:

Vocabulary: equal groups, arrays, measurement quantities, symbol for unknown number, equation

What a multiplication and division model is.

What a multiplication and division sentence/equation is.

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.

Assessment 1:

Question 1: Meredith has 3 boxes of pencils. There are 8 pencils in each box. How many pencils are there in all?

A. Use equal groups, arrays and measurement quantities to solve.

B. Write an equation to represent the problem.

Question 2: Mrs. Stephens has 20 students in her class. She needs to split them into 4 equal groups. How many students will be in each group? Use equal groups, arrays and measurement quantities to solve.

A. Use equal groups, arrays and measurement quantities to solve.

B. Write an equation to represent the problem.

6. Scoring Guide

**Exceeds Expectations:** Student will solve questions with more than 1 answer (either with more equal groups, arrays and measurement quantities or equations).

**Proficient:**  Student will solve both problems correctly.

**Approaching Proficiency:** Student could complete 1/2 of the task correctly (could complete A and not B or could complete B and not A)

**Not Proficient:** Student could not complete half the task correctly.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Power Standard: 3.OA.3 3. OA.3

Directions: Solve the following word problems.

1. Meredith has 3 boxes of pencils. There are 8 pencils in each box. How many pencils are there in all?

A. Use equal groups, arrays and measurement quantities to solve.

B. Write an equation to represent the problem.

2. Mrs. Stephens has 20 students in her class. She needs to split them into 4 equal groups. How many students will be in each group?

A. Use equal groups, arrays and measurement quantities to solve.

B. Write an equation to represent the problem.

Rubric: **Exceeds Expectations:** Student will solve questions with more than 1 answer (either with more equal groups, arrays and measurement quantities or equations).

**Proficient:**  Student will solve both problems correctly.

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Tracking Sheet

Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade: \_\_\_\_\_

Skill: ­­­­­3.OA.3 3. OA.3 Represent and solve problems involving multiplication and division: 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.

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| Student | 1st Attempt | | | | 2nd Attempt | | | | 3rd Attempt | | | |
| Not Proficient | Approaching Proficiency | Proficient | Exceeds Expectations | Not Proficient | Approaching Proficiency | Proficient | Exceeds Expectations | Not Proficient | Approaching Proficiency | Proficient | Exceeds Expectations |
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