

Mathematics CFA Template

Pre-Instruction

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

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.

2. Mathematical Practices

1. Reason abstractly and quantitatively.
2. Model with mathematics.
3. Use appropriate tools strategically.
4. Look for and make use of structure.

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

1. I can multiply and/or divide to find a solution for a word problem.
2. I can represent a multiplication/division problem using a drawing, model, or equation.

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:

Know key words/phrases to determine the operation needed to solve the problem.

Multiplication and Division concepts.

Definition of Multiplicative Comparison

Concept of Equation

Variable

Additive Comparison

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 short response

Answer the following questions. Model and provide an equation for each problem.

- 1) The giraffe in the zoo is 4 times as tall as the gorilla. The gorilla is 4 feet tall. How tall is the giraffe?
- 2) This month Peter saved 4 times as much money as last month. Last month he saved \$8. How much money did Peter save this month?
- 3) A rubber band is stretched to be 18 cm long, 3 times as long as it was to begin with. How long was the rubber band to begin with?
- 4) You read 5 times as long this week as you read last week. If you read for 110 minutes this week, how long did you read last week?
- 5) A single rose cost \$3 and a bunch of roses cost \$12. How many times as much does the bunch of roses cost than the single rose?
- 6) A piece of string is 7 cm long. A piece of wool is 42 cm long. How many times longer is the piece of wool than the piece of string?

6. Scoring Guide

Exceeds Expectations: Student answers 6 out of 6 problems with various/creative models and equations.

Proficient: Student answers 6 out of 6 problems with correct models and equations

Approaching Proficiency: Student answers at least 4 out of 6 problems with correct models and equations.

Not Proficient: Student answers less than 4 with little concept of models and equations.

Name: _____

4.OA.2 Formative Assessment

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