Mathematics CFA Template

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| 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**

Directions: 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?

1. 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?
2. 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?
3. 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?
4. 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?
5. 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?

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4.OA.2 Tracking Sheet

Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade: 4 Skill: 4.OA.2

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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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