

Mathematics CFA Template

Pre-Instruction

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

5.NF.3 **Interpret** a fraction as **division** of the numerator by the denominator ($a/b = a$ divided by b). **Solve** word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, eg., by using visual fraction models or equations to **represent** the problem. For example, **interpret** $\frac{3}{4}$ as the result of **dividing** 3 by 4, **noting** that $\frac{3}{4}$ **multiplied** by 4 equals 3, and that when 3 wholes are **shared** equally among 4 people each person has a share of size $\frac{3}{4}$. If 9 people want to **share** a 50-pound sack of rice equally by weight, how many pounds of rice should each person **get**? Between what two whole numbers does your answer lie?

2. Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.

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

I know that a fraction can be understood as a division of the numerator and denominator.

I can solve word problems involving division of whole numbers and some solutions may be fractions or mixed numbers.

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:

Vocabulary – numerator, denominator

Addition and subtraction of fractions

Some understanding of multiplication and division of fractions involving unit fractions divided by whole numbers and whole numbers divided by unit fractions.

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.

Show how each of the fractions below can be interpreted as division.

1. $\frac{3}{4}$
2. $\frac{1}{2}$
3. $\frac{1}{5}$

Solve the following open response.

Two after-school clubs are having pizza parties. For the Math Club, the teacher will order 3 pizzas for every 5 students. For the student council, the teacher will order 5 pizzas for every 8 students. Since you are in both groups, you need to decide which party to attend. How much pizza would you get at each party? If you want to have the most pizza, which party should you attend?

6. Scoring Guide

Exceeds Expectations: Students complete all 4 questions correctly and shows the solutions when dividing.

Proficient: Students complete each question correctly.

Approaching Proficiency: Students complete 3 of the questions correctly.

Not Proficient: Student completes 2 or fewer correctly.

Name: _____ Date: _____

Power Standard: 5.NF.3

Directions: Show how each fraction below can be interpreted as division.

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Tracking Sheet

Class: _____ Grade: 5

Student	1 st Attempt				2 nd Attempt				3 rd 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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