Unit Map 2012-2013

Monroe #2 - Orleans BOCES (Regional Collaboration)

Collaboration / Math 3* / Grade 3 (Math Regional Curriculum)

Wednesday, September 26, 2012, 2:51PM

Standard/Module: Proficiency in fractions 3.NF.1 (Week 24, 8 Weeks)

Stage 1: Desired Results

Standards Focus

- Major (70%) connects to 3.NF.2-3

Grade 3 Proficiency Maps.pdf

Standards

NYS: CCLS:Mathematics, NYS: 3rd Grade , Number & Operations—Fractions

3.NF Develop understanding of fractions as numbers.

- 1. Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.

Enduring Understandings	Essential Questions
1. Fractions are made of equal parts. 2. When combining equal parts of a partitioned whole the numerator represents the number of combined equal parts and the denominator represents the number of parts in the entire whole.	1. What does a fraction represent? 2. How do you know how many parts there are in a whole? 3. What is a unit fraction? 4. Can you explain how to combine equal parts of a whole?

Critical Content

a.Numerator/denominator

b.Represent fractions from pictures and various situations written in words.

1. Fraction

2. Quantity

   a.Connect fractions as being a number, an amount.

   b.Locate on number line.

3.Part/Whole

a. Equal parts represent the numerator

b. The whole is the denominator

Skills	Vocabulary
1. ***Understand*** 1/b is the quantity of 1 part compared to a whole of b equal parts. a. Students will be able to write/identify a fraction that represents one part of a whole of equal parts. b. Students will be able to explain that a fraction cannot represent a part of a whole that does not have equal parts. ***2. Understand*** a/b is the quantity created by combining ***a*** equal parts of 1/b. a. Students will be able to represent fractions appropriately by combining equal parts of a partitioned whole. b. Students will begin to see that when you add fractions with the same denominator the numerators are added and the denominator stays the same	Tier 2: Part, whole, quantity, equal Tier 3: Fraction, numerator, denominator, unit fraction

Stage 2: Assessment Evidence

<u>Assessments</u>

Performance: Skill Demonstration

Pre-Assessment: Students will represent fractions given diagrams/pictures (up to ten questions), which will assess their ability to represent fractions such as 1/b as well as a/b.

Post-Assessment: Students will represent fractions given diagrams/pictures (up to ten questions), which will assess their ability to represent fractions such as 1/b as well as a/b.

The assessments (pre- and post-) will be identical except for the numbers used in the problems to ensure validity.

Stage 3: Learning Plan

Learning Activities	Resources
1. Have students identify numerators and denominators given various fractions. 2. Locate unit fractions and non-unit fractions on number line and discuss their quantity. 3. Have students draw a representation of a unit fraction given a situation. 4. Have students draw a representation of a non-unit fraction given a situation. 5. Provide opportunities for students to see the pattern that when you combine unit fractions you simply add numerators and put over the denominator. 6. Provide students with representations of fractions where the regions are partitioned into unequal parts.	www.illustrativemathematics.org http://illuminations.nctm.org/ http://www.p12.nysed.gov/apda/common-core-sample-questions/ http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html enVision Math Program Investigations Mathematics Program Everyday Math Program

Differentiation Opportunities

It is helpful for students to make their own fraction manipulatives. This way they can see the relationships between certain unit fractions (like it takes two fourths to make a half or two eighths to make a fourth).

<< Previous Year

Last Updated: Thursday, August 30, 2012, 6:56PM

Atlas Version 7.2.6
© Rubicon International 2012. All rights reserved