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Curriculum Units by Fellows of the National Initiative

2014 Volume V: Place Value, Fractions, and Algebra: Improving Content Learning through the Practice Standards

Fractions Aren't So Scary! Using the Unit Fraction to Ease the Fear

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This mathematics unit, created with the Common Core Mathematical Practice Standards in mind, is designed for students who have a limited conceptual understanding of fractions, particularly fourth grade students. The idea that a fraction is a real number, like a whole number, is foreign to many students. This unit will challenge the perspective students have that a fraction is made up and does not exist as a real number. We as teachers tend to focus on the procedural aspect instead of conceptual aspects when teaching fractions. While the procedural aspects of computation are important, the conceptual understanding should come first. The introduction of the unit fraction along with two types of models to illustrate those fractions hopes to create a conceptual shift of this understanding.

Students will become familiar with how to create area models and linear models through different activities. Students will then apply their new knowledge of the unit fraction to adding, subtracting, comparing, locating on a number ray, and creating equivalent fractions through the use of those models.

(Developed for Mathematics, grade 4; recommended for Mathematics, grades 3-6)

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