

UNIT OF STUDY #7 Fractions

Title: Fractions	Subject/Course: Math	Length: 2 weeks
Topic: Fractions	Grade: 4th	Designer: Carrie Holt Shaundra Flanery Tammie Nelson
UNIT GOALS AND EXPECTATIONS		
IMPORTANT CONCEPTS: <ul style="list-style-type: none">• Various models can be used to show fractions.• Fractions are part of whole.• Improper fractions and mixed numbers are more than a whole.• Some fractions can be simplified.• Fractions can be compared using manipulatives and cross multiplication.• Fractions can also be written in decimal form.	ESSENTIAL QUESTIONS: <ul style="list-style-type: none">• How can fractions be modeled, compared, and ordered?• How do fractions and decimals relate?• How are improper fractions and mixed numbers related?	
STUDENT LEARNING EXPECTATIONS: <ul style="list-style-type: none">• NO.1.4.4a Write a fraction to name part of a whole or part of a set using models up to 12/12.• NO.1.4.4b Write a fraction to name a location on a number line using models up to 12/12.• NO.1.4.4c Write a fraction to name the division of whole numbers using models up to 12/12	<ul style="list-style-type: none">• NO.1.4.5 Utilize models, benchmarks, and equivalent forms to recognize that the size of the whole determines the size of the fraction.• NO1.4.7 Write an equivalent decimal for a given fraction relating to money.• NO1.4.8 Write a fraction that is equivalent to a given fraction with the use of models.	
SPECIFIC DECLARATIVE KNOWLEDGE – What I know <ul style="list-style-type: none">• Vocabulary Terms: Fraction, Numerator, Denominator, Equivalent Fractions, Simplest Form, Mixed Number• Recognize the purpose of numerator and denominator.• Understand that fractions are used in daily life.• Understand that fractions are part of a whole.• Recognize that the fraction of one object might be a different size or value than another object depending on the size or value of the wholes.• Understand that some fractions can be reduced into simplest form.	SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do <ul style="list-style-type: none">• Demonstrate fractions using various manipulatives and models• Represent equivalent fractions using fractions bars.• Use calculator to change fractions to decimals or decimals to fractions.• Use calculator and fraction bars to simplify fractions.• Demonstrate cross multiplication to compare fractions.• Group coins into fraction sets.	
UNIT ASSESSMENTS (Include tasks related to Dimensions 3 and 4 and Bloom’s Taxonomy)		
Open Response: Design Firm (Application) RAFT: Candy Store Owner (Synthesis) Vocabulary Stories (Application and Synthesis)		

Traditional Assessments: Test, Vocabulary Quiz, TLI Quiz, Class work, Homework	Other Evidence of Learning:
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ACTIVITIES AND LEARNING EXPERIENCES	Resources
<ul style="list-style-type: none"> Daily prior knowledge will be assessed by using one of the following: KWL charts, brainstorming, anticipation guides, admit slips, think-pair-share and problems of the day. Students will draw a specific topic and incorporate their vocabulary words correctly within a story. Introduce Fractions by reading <u>Hershey's Milk Chocolate Bar Fractions</u> Model fractions by using Hershey chocolate bars. Whole Group: Eat More Pie Song Whole Group: Jog, Tempo, Sprint Fraction game Small Group: Modeling Fractions on smartboard RAFT Activity: Role: Candy Store Owner, Audience: Customer, Format: Candy Store Floor Plan, Topic: Fractions Scenario: Mandy just bought a new candy store in Lonoke. She wants to have several types of goodies in her store. Could you please help her set up her store with the correct fractional amount of candy? (Example: $\frac{1}{6}$ of the store would be chocolate candy, $\frac{2}{6}$ of the store is types of suckers, $\frac{1}{6}$ of the store is gummies, and $\frac{2}{6}$ of the store is cookies) Task: Create a floor plan to match these amounts. Small Groups: Compare fractions using fraction bars. Compare fractions using cross multiplication. Activity: Fraction Bow Tie: Students will copy ten problems from their classmates bowties onto a sheet of paper. They will compare the fractions. Then they will check the fractions by looking at the 	<p>Pallota, Jerry</p> <p>Math Jingles</p> <p>http://www.kidsrunning.com/school/krschool0526fractions.html</p> <p>http://www.visualfractions.com/</p> <p>Harcourt</p> <p>Mailbox 2004-2005</p>

<p>answers on the solved bowties.</p> <ul style="list-style-type: none"> • Use calculators to simplify fractions. • Teacher Lead Small Groups: Rarin' to Reduce Activity: On chart paper simplified fractions will be shown. Each student will be given a large handful of small different colored manipulatives. Each student will find what fraction of his manipulatives is the announced color and then mentally reduce that fraction to its simplest form. If the simplified fraction is listed in the chart have him write its unsimplified form in the matching row. • Pairs: Students will find fractional parts of money using play money. • Conversion Song • Converting mixed numbers and improper fractions by using the calculator. 	<p>Mailbox 2004-2005</p> <p>Harcourt</p> <p>Mailbox 2004-2005</p>
Career Connections	
Candy Store Owner, Architect	