

Unit Plan by Prioritized Standards

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| Content Area | Math |
| Grade/Course | 5th grade |
| Unit of Study | Module 4 |
| Duration of Unit | 28 days |

Insert priority standards below (include code). **CIRCLE or Highlight** the **SKILLS** that students need to be able to do and **UNDERLINE** the **CONCEPTS** that students need to know. (address “supporting” standards in daily lesson plans)

MGSE5.NF.6 **Solve real world problems** involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

MGSE5.NF.7 **Apply and extend** previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.

a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.

b. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.

c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$ -cup servings are 2 cups of raisins

Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.

MGSE5.NBT.7 **Add, subtract, multiply, and divide** decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

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| Skills (what must be able to do) | Concepts (what students need to know) | DOK Level / Bloom's |
|--|---|---|
| <ul style="list-style-type: none"> ● Solve real world problems ● Apply and extend ● Add, subtract, multiply or divide using concrete models or drawings and strategies, then relate the strategy | <ul style="list-style-type: none"> ● Multiplication of fractions and mixed numbers ● Previous understanding of division to divide unit fractions by whole numbers and whole numbers by unit fractions ● Decimals to hundredths based on place value, properties of operations, & relationship between addition & subtraction ● Use written methods and explaining the reasoning used | <p>2/3</p> <p>2/3</p> <p>2/3</p> |
| Step 5: Determine BIG Ideas (enduring understandings students will remember long after the unit of study) | | Step 6: Write Essential Questions (these guide instruction and assessment for all tasks. The big ideas are answers to the essential questions) |
| <ul style="list-style-type: none"> • Fractions are relations – the size or amount of the whole matters. • Fractions may represent division with a quotient less than one. • Shares don't have to be congruent to be equivalent. • Fractions and decimals are different representations for the same amounts and can be used interchangeably. | <ul style="list-style-type: none"> • How can decomposing fractions or mixed numbers help us model fraction multiplication? • How can decomposing fractions or mixed numbers help us multiply fractions? • How can modeling an area help us with multiplying fractions? • How can we describe how much someone gets in a fair-share situation if the fair share is between two whole numbers? • How can we model dividing a unit fraction by a whole number with manipulatives and diagrams? • What does dividing a unit fraction by a whole number look like? • What does dividing a whole number by a unit fraction look like? | |
| Essential Unit Vocabulary | | |
| <ul style="list-style-type: none"> • simplify • common denominator • unlike denominator • numerator • unit fraction • equivalent • reasonableness | | |
| Next step, create assessments and engaging learning experiences | | |