Math - Grade 6 - Santini

Curriculum Unit Overview

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6th Grade Math Course Summary: Math 6 focus is on four critical areas (1) connection ratio and rate to whole number multiplication and division and using concepts of tattoo and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers: (3) writing, interpreting and using expressions and equations and (4) developing understanding of statistical thinking.

Curriculum Development Hub

Module 1 - Integer Concepts

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Course Title: Math 6	**Course Author:** Gina Santini	**Grade Level:** 6
Unit Name : Number System and Operations 7	**Time/Duration**: 90 Min Block	

Standards Addressed:

CC.2.1.6.E.4 Apply and extend previous understandings of numbers to the system of rational numbers.

Eligible Content: M06.A-N.3 Apply and extend previous understandings of numbers to the system of rational numbers.

M06.A-N.3.2 Understand ordering and absolute value of rational numbers.

M06.A-N.3.1.1 Represent quantities in real-world contexts using positive and negative numbers, explaining the meaning of 0 in each situation (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge).

M06.A-N.3.1.2 Determine the opposite of a number and recognize that the opposite of the opposite of a number is the number itself (e.g., – (– 3) = 3; 0 is its own opposite).

M06.A-N.3.1.3 Locate and plot integers and other rational numbers on a horizontal or vertical number line; locate and plot pairs of integers and other rational numbers on a coordinate plane.

M06.A-N.3.2.1 Write, interpret, and explain statements of order for rational numbers in real-world contexts. Example: Write – 3°C > – 7°C to express the fact that – 3°C is warmer than – 7°C.

M06.A-N.3.2.2 Interpret the absolute value of a rational number as its distance from 0 on the number line and as a magnitude for a positive or negative quantity in a real-world situation. Example: For an account balance of – 30 dollars, write |– 30| = 30 to describe the size of the debt in dollars, and recognize that an account balance less than – 30 dollars represents a debt greater than 30 dollars

Common Core Standards:

6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
6.NS.C.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates
6.NS.C.6a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is itself.
6.NS.C.7 Understand ordering and absolute value of rational numbers.

6.NS.C.7a Interprest statements of inequality as statements about the relative postiiotn of two numbers on a line diagram
6.NS.C.7c Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute vales as magnitude for a positive or negative quantity in a real world situation.
6.NS.C.7d Distinguish comparisons of absolute value from statements about order.

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

1. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values.
2. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line.

Content Standards:

Apply and extend previous understandings of numbers to the system of rational numbers.

Transfer

Students will be able to independently use their learning to...

1. Graph positive and negative integers and find their opposites.
2. Identify and interpret integers using a number line.
3. Use correct real-world terms for positive and negative values such as depth, temperature, and electric charge.
4. Order integers from least to greatest and use inequalities to compare integers.
5. Use number lines to compare and order integers
6. Use terms for relative distance and magnitude in real-world and mathematical contexts.

Meaning

UNDERSTANDINGS

Students will understand that…

1. Positive and Negative numbers are used together to describe quantities having opposite directions or values
2. The meaning of what 0 represents is situational
3. Numbers are opposites if they are (1) the same distance from zero on a number line and (2) they must be on different sides of the numberline.
4. The opposite of the opposite of a number is the number itself
5. Numbers to the left of 0 have a values that is less than integers to the right of 0 (also numbers farther to the left are less than the numbers on the right)
6. The absolute value of a rational number is its distance from 0 on the numberline.
7. The absolute value of a number can be described as magnitude

ESSENTIAL QUESTIONS

1. How is mathematics used to quantify, compare, represent, and model numbers? (temperature, money, elevation, credit/debit,)
2. How can mathematics support effective communication? (using appropriate language to describe situations)
3. How are relationships represented mathematically? (relationship between numbers such as greater than or less than, or opposites, magnitude etc.
4. How can you represent real-life situations with positive and negative integers? (ex. football field)

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

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Acquisition

KNOWLEDGE

Students will know…

1. Key vocabulary: absolute value, inequality, integers, negative numbers, positive numbers, opposites, magnitude,
2. What vocabulary words in real life indicate a positive or negative value such as depth, above sea level, credit, withdraw.
3. How to graph integers on a numberline, compare and order those numbers, locate a numbers opposite
4. Determine the absolute value (distance as always positive) of magnitude of a number

5. Numbers increase in value as you move to the right on a numberline and decrease in value as you move left
6. 0 is its own opposite

SKILLS

Students will be skilled at (be able to do)...

1. Use positive and negative numbers to represent quantities in real world contexts.
2. Plot integers and other rational numbers on a number line and on a coordinate graph.
3. Interpret the opposite and absolute value of an integer as its distance from zero on a number line.
4. Compare and order rational numbers using a variety of appropriate tools such as benchmark numbers, common denominators, comparing decimals and using the numberline as tools
5. Write an inequality to compare numbers on a number line.
6. Write an inequality for a real-world science situation.

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
1. Graph positive integers 2. Graph negative integers 3. Compare Integers 4. Order Integers 5. Write inequalities 6. Find absolute value 7. Find opposites of an integer	PERFORMANCE TASK(S)/Think GRASPS: 1. Group Jams in IXL 2. Task cards - Absolute value 3. Get More Math Assignments 4. IXL skills based M 1,2,3,4,5,6,7,8,9,10 5. Study Island 2 d,e,f,g,h, i 6. Quizlet vocabulary 7. Edpuzzle - compare and order integers 8. “Footloose” absolute value review

1. Module 1 Test 2. Module 1 Adapted Test 3. Module 1 Vocabulary Quiz 4. Enrichment page 5. Weekly Spiral Review Quiz	OTHER EVIDENCE: 1. Reteach pages 2. Enrichment pages 3. PSSA review pages 4. Spiral Review weekly homework 5. Daily spiral review

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template

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Summary of Key Learning Events and Instruction

Integer Concepts:

1. 2 Days of Identify and Interpret Integers (opposites)
2. 3 Days of Compare and Order Integers on a Number line
3. 2 days Find and Apply Absolute Value
4. 2 Days review
5. 1 Day of testing
6. Each week also contains Friday review and individual focus on IXL Diagnostic skills
7. Daily Spiral review with a quiz each Friday that includes current learning skills and review of material from previous years.
8. Enrichment/ remediation is provided via IXL, Study Island or Get More Math

- Types of learning activities: IXL skills, Study Island PSSA skills, task cards for partner work, experience graphing numbers on a numberline, Quizlet

Vocabulary:

Absolute Value (The absolute value of a number is the distance between the number and zero on the number line. For example, $|3| = 3$, $|-4| = 4$, etc.)

Integer (An integer is a number that can either be represented as a whole number or as the opposite of a whole number. The set of integers is the

infinite list of numbers: ... ,−3, −2, −1, 0, 1, 2, 3, ….)
Magnitude (The magnitude of a measurement is the absolute value of the measure of the measurement. For example, the magnitude of the measurement −25°F is 25.)
Negative Number (A negative number is a number less than zero.)
Opposite (Given a nonzero number aa on the number line, the opposite of aa, denoted $-aa$, is the number on the number line such that (1) 0 is between aa and $-aa$, and (2) the distance between 0 and aa is equal to the distance between 0 and $-aa$. The opposite of 0 is 0.)
Positive Number (A positive number is a number greater than zero.)

Module 2 - Rational Numbers

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Course Title: Math 6	**Course Author:** Gina Santini	**Grade Level(s):** 6	**Time/Duration:** 90 minutes
Unit Name: Number Systems and Operations	**Unit Number:** 1		

Standards Addressed: **CC.2.1.6.E.4** Apply and extend previous understandings of numbers to the system of rational numbers.

Eligible Content: **M06.A-N.3** Apply and extend previous understandings of numbers to the system of rational numbers

M06.A-N.3.2 Understand ordering and absolute value of rational numbers

M06.A-N.3.1.3 Locate and plot integers and other rational numbers on a horizontal or vertical number line; locate and plot pairs of integers and other rational numbers on a coordinate plane.

M06.A-N.2.2 Apply number theory concepts (specifically, factors and multiples).

M06.A-N.2.2.1 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12.

M06.A-N.2.2.2 Apply the distributive property to express a sum of two whole numbers, 1 through 100, with a common factor as a multiple of a sum of two whole numbers with no common factor. Example: Express 36 + 8 as 4(9 + 2)

Common Core Standards:

6.NS.C.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.

6.NS.C.7 Understand ordering and absolute value of rational numbers.

6.Ns.C.b Write, interpret, and explain statements of order for rational numbers in real-world contexts.

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

1. Understand a rational number as a point on the number line.
2. Find and graph integers and rational numbers on a horizontal or vertical number line
3. Absolute value of a rational number is its distance from 0 on the number line
4. Distinguish comparisons of absolute value from statements about order
5. Mathematical relationships can be represented as expressions, equations and inequalities in mathematical situations

Transfer

Students will be able to independently use their learning to…

Write, interpret, and explain statements of order of rational numbers in real world contexts. (ex. Temperature, sea level, banking, electric charges)

Meaning

UNDERSTANDINGS

Students will understand that…

1. Positive and negative numbers are used together to describe quantities having opposite directions or values
2. Opposite signs of rational numbers indicate locations on opposite sides of 0 on the number line
3. You will common denominators to add and subtract fractions
4. The least common multiple is the least number of a set of numbers that all numbers in the set can divide into
5. The least common multiple is used to find a common denominator of fractions with unlike denominators
6. The least common multiple can be used to write fraction equivalents so that all fractions have a common denominator

7. A number line can be labeled with equivalent fractions and decimals so that numbers in different forms can be compared, and ordered
8. Numers on a number line increase from left to right

ESSENTIAL QUESTIONS

1. How is mathematics used to quantify, compare, represent, and model numbers? (temperature, money, elevation, credit/debit,)
2. How can mathematics support effective communication? (using appropriate language to describe situations)
3. How are relationships represented mathematically? (relationship between numbers such as greater than or less than, or opposites, magnitud etc.
4. How do benchmark and number sense help when estimating the location of a rational number on a number line?
5. Why is it helpful to show temperature, depth or height on a vertical number line?

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

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Acquisition

KNOWLEDGE

Students will know…

1. Key Vocabulary - rational numbers, common denominator, denominator, Distributive Property, factor, greatest common factor (GCF), least common multiple (LCM)
2. Numbers increase in value as you move to the right on a numberline and decrease in value as you move left
3. You can compare and order rational numbers using a variety of appropriate tools such as benchmark numbers, common denominators, comparing decimals and using the numberline as tools
4. Finding the greatest common factor and the least common multiple of two rational numbers helps to compare and order them
5. The distributive property is the product of a common factor and another sum - ex. 24 + 16 is 8(3 + 2)

SKILLS
Students will be skilled at (be able to do)... 1. Plot integers and other rational numbers on a vertical or horizontal number line 2. Compare and order rational numbers using a variety of appropriate tools such as benchmark numbers, common denominators, comparing decimals and using the numberline as tools 3. Compare rational numbers using their GCF and LCM. 4. Order rational numbers of different forms and justify why 5. Find the greatest common factor of two whole numbers 6. Find the least common multiple of two numbers 7. Compare decimals 8. Compare fractions 9. Find equivalent fractions

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
1. Plot rational numbers on a horizontal or vertical number line 2. Compare rational numbers in various forms 3. Order rational numbers on a number line 4. Interpret statements of inequality as statements about the relative position of two rational numbers on a number line 5. Find the GCF of two whole numbers less than or equal to 100 6. Find the LCM of two whole numbers less than or equal to 12	PERFORMANCE TASK(S)/Think GRASPS: 1. Group Jams in IXL 2. Task Cards (ordering and comparing rational numbers) 3. Task Cards (LCM and GCF) 4. Task Cards (LCM and GCF Word Problems) 5. IXL Assignments - P1, P3, P4, P5, P6, P8 6. Get More Math Assignments 7. Study Island 8. Quizlet Vocabulary Review 9. Edpuzzle - Comparing fractions and decimals

7. Order and compare rational numbers in real world contexts 8. Distributive Property	10. Exit Tickets 11. Prime factorization assignment
1. Module 2 Test 2. Module 2 Adapted Test 3. Module 2 Enrichment page 4. Module 2 Vocabulary Quiz 5. Weekly Spiral Review Quiz 6. GCF and LCM quiz	OTHER EVIDENCE: 1. Reteach pages 2. Enrichment pages 3. PSSA review pages 4. Spiral Review weekly homework 5. Daily spiral review

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template

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Summary of Key Learning Events and Instruction

Rational Numbers:

1. 1 day of Interpret Rational Numbers
2. 2 days of Comparing Rational Numbers on a Number Line
3. 3 days of LCM and GCF practice with distributive property
4. 2 days ordering Rational Numbers (using common denominators, number lines and benchmarks
5. 2 days of Review
6. 1 Day for testing, Diagnostic and IXL graded work completion

Key Vocabulary:
Rational numbers - A number that can be written in the form A/B where A and B are integers and B can not be equal to 0
Denominator - The bottom number of a fraction that tell how many equal parts are in the whole
Common denominator -A denominator that is the same in two or more fractions

Distributive property - The property that states if you multiply the sum by a number, you will get the same result if you multiply each addend by that number and then add the products
Factor - A number that is multiplied by another number to get a product
Product - The answer to a multiplication problem
Greatest common factor (GCF) - The largest common factor of two or more given numbers
Least Common Multiple (LCM) - The smallest number, other than zero, that is a multiple of two or more given numbers

Module 3 - Fraction Division

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Course Title: Math 6	**Course Author:** Gina Santini	**Grade Level(s):** 6	**Time/Duration:** 90 minute blocks
Unit Name: Number System and Operations	**Unit Number:** 1		

Standards Addressed:
CC.2.1.6.E.1 Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
CC.2.1.6.E.3 Develop and/or apply number theory concepts to find common factors and multiples.

Eligible Content:
M06.A-N.1.1 Solve real-world and mathematical problems involving division of fractions.

M06.A-N.1.1.1 Interpret and compute quotients of fractions (including mixed numbers), and solve word problems involving division of fractions by fractions.

M06.A-N.2.1 Compute with multi-digit numbers using the four arithmetic operations with or without a calculator.

M06.A-N.2.1.1 Solve problems involving operations (+, –, ×, and ÷) with whole numbers, decimals (through thousandths), straight computation, or word problems.

M06.A-N.2.2.1 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12.

M06.A-N.2.2.2 Apply the distributive property to express a sum of two whole numbers, 1 through 100, with a common factor as a multiple of a sum of two whole numbers with no common factor.

Common Core Standards:
6.NS.B.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor.

6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

1. Identify the reciprocal of a number
2. Use a model and multiply by the reciprocal to divide with fractions
3. Divide a fraction by a fraction or a whole number
4. Divide a whole number or a mixed number by a fraction

Meaning

UNDERSTANDINGS

Students will understand that…

1. To divide two fractions, multiply the dividend by the reciprocal of the divisor
2. There is a connection between division and multiplication
3. You use the LCM to find the common denominator.
4. A whole number written as a fraction is over the denominator of one.
5. When you multiply a fraction by its reciprocal it is equal to one whole.

ESSENTIAL QUESTIONS

1. How is dividing a whole number by a fraction like dividing a whole number by a whole number?
2. How can you tell if two numbers are recipricals?
3. Can a number have more than one reciprocal?
4. What is the multiplicative inverse? How does this help you to divide fractions?

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

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Acquisition

KNOWLEDGE

Students will know…

1. Key vocabulary: denominator, dividend, divisor, expression, numerator, quotient, rectangle, simplify, multiplicative inverse, reciprocal
2. How to compute quotients of fractions
3. The quotient of two fractions with like denominators is equal to the quotient of the numerators.
4. To write mixed numbers as improper fractions in order to divide
5. How to solve real-world problems involving division of fractions by fractions.
6. How to use least common multiple and greatest common factor to add, subtract, multiply, and divide fractions

SKILLS

Students will be skilled at (be able to do)...

1. Make a mixed number into an improper fraaction
2. Make an improper fraction into a mixed number
3. Find the reciprocal of a number
4. Students will use a bar model to represent division of a fraction by a fraction and apply the concept of division as the separation of the dividend into equal groups of the divisor
5. Divide fractions with the same denominator
6. Divide fractions with unlike denominator
7. Divide mixed numbers
8. Use LCM and GCF to add, subtract, multiply and divide fractions
9. Find the GCF of two numbers in a variety of methods such as Prime factorization, the ladder method or listing factors
10. FInd the LCM two numbers in a variety of methods such as Prime factorization, the ladder method or listing multiples

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
1. Divide fractions with the same denominator 2. Divide fractions with unlike denominator 3. Divide mixed numbers 4. Use LCM and GCF to add, subtract, multiply and divide fractions 5. Find the reciprocal of a number 6. Make a mixed number into an improper fraaction 7. Make an improper fraction into a mixed number 8. FInd the LCM two numbers 9. Find the GCF of two numbers in a variety of methods	PERFORMANCE TASK(S)/Think GRASPS: 1. Group Jams in IXL 2. Task Cards - Dividing Mixed Numbers 3. Task Dividing Fractions 4. IXL Assignments -I1, I3, I4, I5, I6, I8, I9, L1, L2, L3, L4, L5, L6, L7, L8, L9, L10 5. Get More Math Assignments 6. Study Island 7. Quizlet Vocabulary Review 8. Edpuzzle 9. Exit Tickets
1. Module 3 Test 2. Module 3 Adapted Test	OTHER EVIDENCE: 1. Reteach pages

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3. Module 3 Enrichment page 4. Module 3 Vocabulary Quiz 5. Dividing Fractions Quiz *no calculator 6. Spiral Review Weekly Quiz	2. Enrichment pages 3. PSSA review pages 4. Spiral Review weekly homework 5. Daily spiral review

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

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Summary of Key Learning Events and Instruction

Key Vocabulary:
denominator the bottom number of a fraction that tells how many equal parts are in the whole
dividend the number to be divided in a division problem
divisor the number you are dividing by in a division problem
expression a mathematical phrase that contains operations, numbers, and/or variables
numerator the top number of a fraction that tells how many parts of a whole are being considered
quotient the result when one number is divided by another
rectangle a parallelogram with four right angles
simplify to write a fraction in simplest form
multiplicative inverse one of two numbers whose product is 1
reciprocal one of two numbers whose product is 1

Module 4 - Fluency with Multi-Digit Decimal Operations

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Course Title: Math 6	**Course Author:**Gina Santini	**Grade Level(s):** 6	**Time/Duration:** 90 min block
Unit Name: Number Systems and Operations	**Unit Number: 1**		

Standards Addressed:
CC.2.1.6.E.2 Students acquire the knowledge and skills needed to: Identify and choose appropriate processes to compute fluently with multi-digit numbers.

CC. 2.5.8.A. Invent, select, use and justify the appropriate methods, materials and strategies to solve problems.

Core Standard:
M06.A-N.2.1 Compute with multi-digit numbers using the four arithmetic operations with or without a calculator.

M06.A-N.2.1.1 Solve problems involving operations (+, –, ×, and ÷) with whole numbers, decimals (through thousandths), straight computation, or word problems.

Common Core Standards:
6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

6.NS.B.2 Fluently divide multi-digit numbers using the standard algorithm.

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

1. Mathematical relationships among numbers can be represented, compared, and communicated.
2. Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.

Transfer

Students will be able to independently use their learning to…

Fluently add, subtract, multiply and divide multi-digit decimals in real world situations, such as banking.

Meaning

UNDERSTANDINGS

Students will understand that…

1. You need to line up the decimals to add and subtract multi-digit decimals.
2. A fraction can be written as a decimal.
3. Remove the decimals to multiply, then place the decimals in the answer when finished computing.
4. Change the divisor to a whole number by also multiplying the dividend.
5. You can not have a remainder when dividing decimals.
6. Dividend is what is being divided. The divisor is how much the dividend is being divided into.
7. Factors determine how much a divisor goes into the dividend.
8. When using a division box, knowing where does the divisor, dividend and quotient go.

ESSENTIAL QUESTIONS

1. What is the first step when adding and subtracting decimals?
2. When adding decimals less than one, is it possible that the sum could be greater than one? Why or why not?
3. How can you subtract decimals when the thousandths digit being subtracted is greater than the thousandths digit being subtracted from?
4. What is the first step in multiplying decimals?
5. What is the first step in dividing decimals?
6. How do you divide decimals to not have a remainder?
7. How can you check if your answer is reasonable?
8. If a remainder is equal to or greater than the divisor, what does this mean?

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

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Acquisition
KNOWLEDGE
Students will know… 1. Key vocabulary - remainder, equivalent, sum, difference, quotient, product, divisor, dividend 2. How to multiply/divide multi-decimal numbers. 3. How to subtract/add multi-decimal numbers.
SKILLS
Students will be skilled at (be able to do)... 1. Add/subtract multi-digit decimals to the thousandths with or without a model and explain their steps to others. 2. Multiply mult-digit decimals up to thousandths. 3. Match a product to an expression. 4. Match a sum/difference to an expression. 5. Match a quotient to an expression. 6. Read a word problem independently and determine what operation they need to complete to answer the given question. 7. Divide a multi-digit decimal with and without a remainder. 8. Determine what operation is needed to solve problems with multi-digit decimals.

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
1. Add, subtract, multiply and divide multi-digit decimals without a calculator. 2. Correctly enter a division problem into the calculator. 3. Identify what is the divisor and the dividend. 4. Solve real world problems involving operations with multi-digit decimals. 5. Compare sums, products, quotients, differences	PERFORMANCE TASK(S)/Think GRASPS: 1. Group Jams in IXL 2. Tasks Cards 3. IXL Assignments 4. Get More Math Assignments 5. Study Island 6. Quizlet Vocabulary Review

6. Match an expression to the answer (sum, difference, product, quotient) 7. Determine what operation is needed to solve problems with multi-digit decimals. 8. Analyze and correct an error in computation	7. Edpuzzles 8. Detective puzzle
1. Module 4 Test 2. Skills test - add, subtract, multiply, divide decimals without a calculator 3. Module 4 Adapted Test 4. Module 4 Enrichment page 5. Module 4 Vocabulary quiz 6. Weekly Spiral Review quiz	OTHER EVIDENCE: 1. Reteach pages 2. Enrichment pages 3. PSSA review pages 4. Spiral Review homework 5. Daily Spiral Review

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template

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Module 5 - Ratios and Rates

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Course Title: Math 6	**Course Author:** Gina Santini	**Grade Level(s):** 6	**Time/Duration:** 90 min blocks

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Unit Name: Ratios and Rates	**Unit Number:** 2		

Standards Addressed:
CC.2.1.8.D. Apply ratio and proportion to mathematical problem situations involving distance, rate, time and similar triangles.

CC.2.1.6.D.1 Students acquire the knowledge and skills needed to: Understand ratio concepts and use ratio reasoning to solve problems.

CC.2.8.8.J. Show that an equality relationship between two quantities remains the same as long as the same change is made to both quantities; explain how a change in one quantity determines another quantity in a functional relationship.

Eligible Content:
M06.A-R.1.1.1 Use ratio language and notation (such as 3 to 4, 3:4, 3/4) to describe a ratio relationship between two quantities.

M06.A-R.1.1.2 Find the unit rate a/b associated with a ratio a:b (with b ≠ 0) and use rate language in the context of a ratio relationship.

M06.A-R.1.1.3 Construct tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and/or plot the pairs of values on the coordinate plane. Use tables to compare ratios.

M06.A-R.1.1.4 Solve unit rate problems including those involving unit pricing and constant speed.

Common Core Standards:
6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

6.RP.2 Understand the concept of a unit rate a/b associated with a ratio, a:b associated with a ratio with b not equal to zero, and use ratio language in the context of a ratio relationship

6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems.

6.RP.3a Make tables of equivalent ratios relating wuatities with whole number measurements, find missing values in the tables, and plot the pairs of vales on the coordinate plane.
.
6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed.

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

Jump to Table of Contents

Big Ideas:
Ratios and Rates can be used to solve many problems in the real world.

Transfer

Students will be able to independently use their learning to...

Use ratios, rates and unit rates and apply them to real-world situations, such as recipes, mph, and finding the best cost of an item.

Meaning

UNDERSTANDINGS

Students will understand that…

1. Ratios can be written with a colon, the word "to" or in fraction form.
2. A ratio can compare a part to a part, a part to a whole, a whole to a part.
3. A fraction can not compare a part to a part. The bottom number has to be the amount of equal pieces in all. (whole)
4. You can simplify ratios the same way you simplify fractions.
5. You can make equivalent ratios the same way you make equivalent fractions. (multipl/divide)
6. Equivalent ratios will show a pattern.
7. Unit rates are always over 1.

ESSENTIAL QUESTIONS

1. What type of ratio did you create? (part to part, part to whole, whole to part)
2. What did you do to the top/bottom number in the ratio to create an equivalent ratio?
3. Can you change the order of the terms in the ratios?
4. What are some ratios that are equivalent to the one shown?
5. What is the multiplicative relationship that the table shows?
6. If you double the recipe what does that do to the ratio?
7. What pattern do you see in the table?
8. What must be true about a rate in order for it to be a unit rate?

9. How do you find the unit rate? (what operation)
10. Are the unit rates in the same unit to compare the two amounts?

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

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Acquisition

KNOWLEDGE

Students will know…

1. How to write ratios three different ways given a diagram or description.
2. How to use a table or graph to find equivalent ratios and use the ratios to solve problems.
3. How to compare ratios and rates using a table or a double number line.
4. Find and use unit rates to solve problems.
5. Use and find equivalent ratios using tables, models, or double number lines to solve real-world problems.

SKILLS

Students will be skilled at (be able to do)...

1. Write a ration three different ways. (ex. 3:1, 3 to 1, 3/1)
2. Simplify a ratio
3. Make equivalent ratios
4. Create ratios and rates represented in a graph, double number line or table
5. Comparing unit rates
6. Solve real-world problems by using equivalent ratios
7. Compare ratios

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?

How will you know that they did it?

Jump to Table of Contents

Evaluative Criteria	Assessment Evidence
1. Write a ratio three ways from a model 2. Create ratios 3. Compare ratios 4. Make equivalent ratios 5. Identify equivalent ratios in tables and double number lines 6. Find equivalent ratios 7. Find the unit rate 8. Compare unit rates 9. Use rates to solve real world problems 10. Round the unit price to the nearest dollar amount	PERFORMANCE TASK(S)/Think GRASPS: 1. Group jams in IXL 2. Task Cards 3. IXL Assignments 4. Study Island 5. Get More Math 6. Edpuzzles 7. Quizlet 8. Unit price game
1. Module 5 Test 2. Module 5 adapted test 3. Module 5 Vocabulary test 4. Weekly spiral review quiz 5. Edpuzzle	OTHER EVIDENCE: 1. Reteach pages 2. Enrichment pages 3. Enrichment puzzles 4. PSSA review pages 5. Spiral Review homework 6. Daily spiral review

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template

Jump to Table of Contents

Module 6 - Apply Ratios and Rates to Measurement

Jump to Table of Contents

Course Title: Math 6	**Course Author:** Gina Santini	**Grade Level(s):** 6	**Time/Duration:** 90 minutes
Unit Name: Ratios and Rates	**Unit Number:** 2		

Standards Addressed:

CC.2.1.6.D.1 *Understand ratio concepts and use ratio reasoning to solve problems.*

CC.2.1.8.D. Apply ratio and proportion to mathematical problem situations involving distance, rate, time and similar triangles.

Eligible Content:

M06.A-R.1.1.3 Construct tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and/or plot the pairs of values on the coordinate plane. Use tables to compare ratios.

M06.A-R.1.1.1 Use ratio language and notation (such as 3 to 4, 3:4, 3/4) to describe a ratio relationship between two quantities.

M06.A-R.1.1.2 Find the unit rate a/b associated with a ratio a:b (with b ≠ 0) and use rate language in the context of a ratio relationship.

Common Core Standards:

6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

6.RP.2 Understand the concept of a unit rate a/b associated with a ratio, a:b associated with a ratio with b not equal to zero, and use ratio language in the context of a ratio relationship

6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems.

6.RP.3a Make tables of equivalent ratios relating wuatities with whole number measurements, find missing values in the tables, and plot the pairs of vales on the coordinate plane.

.

6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed.

6.RP.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

Jump to Table of Contents

Big Ideas:
Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying and dividing quantities.

Transfer

Students will be able to independently use their learning to…

Convert units within a measurement system.

Meaning

UNDERSTANDINGS

Students will understand that…

1. There are 2 systems of measurement; metric and customary.
2. A ratio can be written as a fraction.
3. You can simplify ratios the same way you simplify fractions.
4. Multiply and divide both numerator and denominator by the same amount to make equivalent ratios.
5. Use equivalent rates to convert.
6. Use tables to convert one unit to another within the same measurement system.

ESSENTIAL QUESTIONS

1. How do you find the unit rate?
2. How do you make 2 ratios equivalent?
3. What is the pattern you see in the table?
4. What is an equivalent measurement to the one shown?
5. What operation do you use to make the measurement unit smaller? Larger?
6. Why might you use a conversion factor rather than equivalent ratios?
7. What unit should be the numerator of the fraction?
8. When in real life would you need to convert units?

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

Jump to Table of Contents

Acquisition

KNOWLEDGE

Students will know…

1. There are 2 systems of measurement.
2. When using the metric system you can move the decimal left or right to convert units.
3. We use the customary system of measurement in the US.
4. You multiply to make the uit larger. Divide to make the unit smaller.
5. Metric system is in units of 10.
6. In the metric system you can move the decimal to the right or left to convert.

SKILLS

Students will be skilled at (be able to do)...

1. Write equivalent ratios.
2. Find the unit rate
3. Find a pattern in a ratio table
4. Determine if two ratios are equivalent.
5. Use ratio reasoning to convert measurement units.
6. Use equivalent ratios to convert units within a measurement system.
7. Compare measurements.
8. Determine if two ratios are proportional.
9. Use ratio reasoning to solve real world mathematical problems. (such as baking, etc)

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

Jump to Table of Contents

Evaluative Criteria	Assessment Evidence
1. Compare measurements 2. Convert units in metric system 3. Convert units in customary system 4. Make equivalent ratios to convert units 5. Determine if two measurement ratios are equivalent 6. Write equivalent measurement rates 7. Use unit rate to solve real world measurement problems	1. 1Group jams in IXL 2. Task Cards 3. IXL Assignments 4. Study Island 5. Get More Math 6. Edpuzzles 7. Quizlet 8. Conversion jeopardy game
1. Module 6 Test 2. Module 6 adapted test 3. Module 6 Vocabulary test 4. Weekly spiral review quiz 5. Edpuzzle 6. Study Island	OTHER EVIDENCE: 1. Reteach pages 2. Enrichment pages 3. Enrichment puzzles 4. PSSA review pages 5. Spiral Review homework 6. Daily spiral review

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template

Jump to Table of Contents

Summary of Key Learning Events and Instruction

Module 7 - Understand and Apply Percent

Jump to Table of Contents

Course Title: Math 6	**Course Author:** Gina Santini	**Grade Level(s):** 6	**Time/Duration:** 90 min
Unit Name: Ratios and Rates	**Unit Number:** 2		

Standards Addressed:
CC.2.1.6.D.1 Understand ratio concepts and use ratio reasoning to solve problems.

Eligible Content:
M06.A-R.1 Understand ratio concepts and use ratio reasoning to solve real world problems.

M06.A-R.1.1.5 Find a percent of a quantity as a rate per 100 (e.x 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percentage.

M06.A-R.1.1.5a Calculate a percent of a quantity as a rate per 100.

Core Standard:

M06.A-R.1.1.5 Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percentage.

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

Jump to Table of Contents

Big Ideas: Use ratio and rate reasoning to solve real world and mathematical problems.

Transfer

Students will be able to independently use their learning to…

Find a percent of a quantity as a rate per 100, and solve problems involving finding the whole, given a part and the percentage.

Meaning

Students will understand that…

1. Percent means per 100.
2. To go from a decimal to a percent you multiply by 100 or move the decimal 2 to the right.
3. To go from a percent to a decimal you divide by 100 or move the decimal 2 to the left.
4. To go from a fraction to a percent, you divide, then multiply by 100.
5. Percent symbol goes after the digits.
6. You can use equivalent ratios to find the percent.

ESSENTIAL QUESTIONS

1. How can you go from a percent to a decimal?
2. How can you change a decimal to a percent?
3. What is the first step in converting a fraction to a percent?
4. How can you find the percect of an amount if given the total?
5. If making a percent a decimal, what is the denominator?

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

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Acquisition

KNOWLEDGE

Students will know…

1. Percent is a rate per 100.
2. You can move the decimal in a number to multiply or divide by a base 10.
3. How to convert a decimal to a percentage.
4. How to convert a percentage to a decimal.
5. How to convert a fraction to a percent.

6. How to find a percent of a quantity.

SKILLS

Students will be skilled at (be able to do)...

1. Complete a tabel to find a percent
2. Convert a fraction to a percentage
3. Convert a decimal to a percent
4. Convert a percent to a decimal
5. Convert a percent to a fraction
6. Find the percent of a quantity
7. Use a bar diagram to find a percent of a quantity
8. Use equivalent ratios to find percentages

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

Jump to Table of Contents

Evaluative Criteria	Assessment Evidence
1. Convert a fraction to a percentage 2. Convert a decimal to a percent 3. Convert a percent to a decimal 4. Convert a percent to a fraction 5. Find the percent of a quantity 6. Use a bar diagram to find a percent of a quantity 7. Use equivalent ratios to find percentages 8. Complete a table to find a percent	PERFORMANCE TASK(S)/Think GRASPS: 1. Group jams in IXL 2. Task Cards 3. IXL Assignments 4. Study Island 5. Get More Math 6. Edpuzzles 7. Quizlet
1. Module 7 Test 2. Module 7 adapted test 3. Module 7 Vocabulary test 4. Weekly spiral review quiz	OTHER EVIDENCE: 1. Reteach pages 2. Enrichment pages 3. Enrichment puzzles

5. Edpuzzle 6. Study Island	4. PSSA review pages 5. Spiral Review homework 6. Daily spiral review

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

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Summary of Key Learning Events and Instruction

Module 8 - Numerical and Algebraic Expressions

Jump to Table of Contents

Course Title: Math 6	**Course Author:** Gina Santini	**Grade Level(s):**6	**Time/Duration:**: 90 min
Unit Name: Expressions, Equations and Inequalities	**Unit Number:** 3		

Standards Addressed:
CC.2.2.6.B.1 Apply and extend previous understandings of arithmetic to algebraic expressions.

CC.2.2.6.B.2 Understand the process of solving a one-variable equation or inequality and apply to real-world and mathematical problems.

Eligible Content:
M06.B-E.1.1.1 Write and evaluate numerical expressions involving whole-number exponents.

M06.B-E.1.1.2 Write algebraic expressions from verbal descriptions. Example: Express the description “five less than twice a number” as 2y – 5.

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M06.B-E.1.1.3 Identify parts of an expression using mathematical terms (e.g., sum, term, product, factor, quotient, coefficient, quantity). Example: Describe the expression 2(8 + 7) as a product of two factors.

M06.B-E.1.1.4 Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems. Example: Evaluate the expression b^2 – 5 when b = 4.

M06.B-E.1.1.5 Apply the properties of operations to generate equivalent expressions.

M06.B-E.2.1.2 Write algebraic expressions to represent real-world or mathematical problems.

Core Standard:
6.EE.1 Write and evaluate numerical expressions involving whole-number exponents.

6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers.

6. EE. 2a Write expressions that record operations with numbers and with letters standing for numbers

6.EE. 2b Identify parts of an expression using mathematical terms (sum, product, terms, etc)

6.EE. 2c Evaluate expressions at specific values of their variables

6.EE. 3 Apply properties of operations to generate equivalent expressions

6.EE. 4 Identify when two expressions are equivalent

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

Jump to Table of Contents

Big Ideas:
Apply and extend previous understandinds of arithmetic to numerical and algebraic expressions.

Transfer

Students will be able to independently use their learning to…

Identify, write, and evaluate numerical and algebraic expressions.

Meaning

Students will understand that…

1. The base is the number you multiply. The exponent is the amount of times you multiply the base.
2. How to enter an exponent into the calculator.
3. Use order of operations to evaluate numerical and algebraic expressions.
4. Product, quotient, sum, difference determine how you set up an expression
5. Vocabulry for algebraic expressions - terms, coefficient, constant, variable
6. Properties of addition and multiplication simplify expressions or make them equivalent

ESSENTIAL QUESTIONS

1. What does the exponent state? The base?
2. What are the order of operations?
3. What operation means product? Quotient? Sum? Difference?
4. How can you write an algebraic expression to represent a real world problem?
5. What algebraic expression matches the word problem?
6. If you make a value for the variable, what will the solution be?
7. What is the difference between an expression and an equation?
8. Are those expressions equivalent?
9. What property did you use?
10. Can you combine like terms?

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

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Acquisition

KNOWLEDGE

Students will know…

1. Order of operations
2. Base and exponents and how to evaluate a number raised to a power
3. What exponent is squared? Cubed?
4. Distributive property
5. Like terms and what you can and can't combine
6. Vocabulary terms - constant, coefficient, variable, terms
7. Operational words (product, quotient, sum, product, difference)

SKILLS

Students will be skilled at (be able to do)...

Evaluate numeric expressions using exponents
Write numeric expressions using exponents
Perform arithmetic operations using order of operations
Identify parts of an expression using mathematical terms (sum, terms, product, factor, etc.)
Write expressions that record operations with numbers
Write expressions that record operations with letters standing for numbers
Identify constant, coefficient, variable, term
Evaluate expressions at specific values of their variables
Identify equivalent expressions
Generate equivalent expressions
Simplify expressions by combining like terms

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

Jump to Table of Contents

Evaluative Criteria	Assessment Evidence
1. Solve numeric expressions 2. Write numeric expressions from word phrases 3. Evaluate expressions with exponents 4. Make equivalent expressions 5. Identify variable, constant, coefficient, terms 6. Use the distributive property to generate equivalent algebraic expressions 7. Evaluate an expression with a given value for the variable 8. Determine if two expressions are equivalent 9. Write an algebraic expression from words 10. Write an algebraic expression from a real life problem	PERFORMANCE TASK(S)/Think GRASPS: 1. Group jams in IXL 2. Task Cards 3. IXL Assignments 4. Study Island 5. Get More Math 6. Edpuzzles 7. Quizlet 8. Vocabulary foldable 9. Operation word sort
1. Module 8 Test 2. Module 8 adapted test 3. Module 8 Vocabulary test 4. Weekly spiral review quiz 5. Skills quiz - order of operations	OTHER EVIDENCE: 1. Reteach pages 2. Enrichment pages 3. Enrichment puzzles 4. PSSA review pages 5. Spiral Review homework 6. Daily spiral review

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
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Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template Jump to Table of Contents

Module 9 - Solve Problems Using Equations and Inequalities

Jump to Table of Contents

Course Title: Math 6	**Course Author: Gina Santini**	**Grade Level(s):** 6	**Time/Duration:** 90 min
Unit Name: Numeric and Algebraic Expresions	**Unit Number:** 3		

Standards Addressed:

CC.2.2.6.B.1 Apply and extend previous understandings of arithmetic to algebraic expressions.

CC.2.2.6.B.2 Understand the process of solving a one-variable equation or inequality and apply to real-world and mathematical problems.

Eligible Content:

M06.B-E.1.1.1 Write and evaluate numerical expressions involving whole-number exponents.

M06.B-E.1.1.2 Write algebraic expressions from verbal descriptions. Example: Express the description “five less than twice a number” as 2y – 5.

M06.B-E.1.1.3 Identify parts of an expression using mathematical terms (e.g., sum, term, product, factor, quotient, coefficient, quantity). Example: Describe the expression 2(8 + 7) as a product of two factors.

M06.B-E.1.1.4 Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems. Example: Evaluate the expression b^2 – 5 when b = 4.

M06.B-E.1.1.5 Apply the properties of operations to generate equivalent expressions.

M06.B-E.2.1 Create, solve, and interpret onevariable equations or inequalities in real-world and mathematical problems.

Core Standard:
6.EE.1 Write and evaluate numerical expressions involving whole-number exponents.

6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers.

6. EE. 2a Write expressions that record operations with numbers and with letters standing for numbers

6.EE. 2b Identify parts of an expression using mathematical terms (sum, product, terms, etc)

6.EE. 2c Evaluate expressions at specific values of their variables

6.EE. 3 Apply properties of operations to generate equivalent expressions

6.EE. 4 Identify when two expressions are equivalent

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

Jump to Table of Contents

Big Ideas:

Transfer

Students will be able to independently use their learning to...

Meaning

Students will understand that…

ESSENTIAL QUESTIONS

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

Jump to Table of Contents

Acquisition
KNOWLEDGE
Students will know…
SKILLS
Students will be skilled at (be able to do)...

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
8. [Type Here] 9. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 9. [Type Here] 10. [Type Here]
6. [Type Here] 7. [Type Here]	OTHER EVIDENCE: 6. [Type Here]

	7. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template

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Summary of Key Learning Events and Instruction

Unit 10 [Type Name Here]

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Course Title: [Type Here]	**Course Author:** [Type Here]	**Grade Level(s):** [Type Here]	**Time/Duration:** [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	**Unit Number:** [Type Here]	**Created:** [Type Here]	**Revised:** TBD
Standards Addressed: [Type Here]			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:
[Type Here]

Transfer

Students will be able to independently use their learning to...

7. [Type Here]
8. [Type Here]

Meaning

UNDERSTANDINGS

Students will understand that…

8. [Type Here]
9. [Type Here]
10. [Type Here]

ESSENTIAL QUESTIONS

5. [Type Here]
6. [Type Here]

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

Jump to Table of Contents

Acquisition
KNOWLEDGE
Students will know… 7. [Type Here] 8. [Type Here]
SKILLS
Students will be skilled at (be able to do)... 7. [Type Here] 8. [Type Here]

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

Jump to Table of Contents

Evaluative Criteria	Assessment Evidence
10. [Type Here] 11. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 11. [Type Here] 12. [Type Here]
8. [Type Here] 9. [Type Here]	OTHER EVIDENCE: 8. [Type Here] 9. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

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Summary of Key Learning Events and Instruction

9. [Type Here]
10. [Type Here]
11. [Type Here]

Unit 10 [Type Name Here]

Jump to Table of Contents

Course Title: [Type Here]	**Course Author:** [Type Here]	**Grade Level(s):** [Type Here]	**Time/Duration:** [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	**Unit Number:** [Type Here]	**Created:** [Type Here]	**Revised:** TBD
Standards Addressed: [Type Here]			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

Jump to Table of Contents

Big Ideas:
[Type Here]

Transfer

Students will be able to independently use their learning to...

9. [Type Here]
10. [Type Here]

Meaning

UNDERSTANDINGS

Students will understand that…

11. [Type Here]
12. [Type Here]
13. [Type Here]

ESSENTIAL QUESTIONS

7. [Type Here]
8. [Type Here]

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

Jump to Table of Contents

Acquisition
KNOWLEDGE
Students will know… 9. [Type Here] 10. [Type Here]
SKILLS
Students will be skilled at (be able to do)... 9. [Type Here] 10. [Type Here]

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
12. [Type Here] 13. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 13. [Type Here] 14. [Type Here]
10. [Type Here] 11. [Type Here]	OTHER EVIDENCE: 10. [Type Here] 11. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

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Summary of Key Learning Events and Instruction

12. [Type Here]
13. [Type Here]
14. [Type Here]

Unit 10 [Type Name Here]

Jump to Table of Contents

Course Title: [Type Here]	**Course Author:** [Type Here]	**Grade Level(s):** [Type Here]	**Time/Duration:** [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	**Unit Number:** [Type Here]	**Created:** [Type Here]	**Revised:** TBD
Standards Addressed: [Type Here]			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

Jump to Table of Contents

Big Ideas:
[Type Here]

Transfer

Students will be able to independently use their learning to...

11. [Type Here]
12. [Type Here]

Meaning

UNDERSTANDINGS

Students will understand that…

14. [Type Here]
15. [Type Here]
16. [Type Here]

ESSENTIAL QUESTIONS

9. [Type Here]
10. [Type Here]

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

Jump to Table of Contents

Acquisition
KNOWLEDGE
Students will know… 11. [Type Here] 12. [Type Here]
SKILLS
Students will be skilled at (be able to do)... 11. [Type Here] 12. [Type Here]

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

Jump to Table of Contents

Evaluative Criteria	Assessment Evidence
14. [Type Here] 15. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 15. [Type Here] 16. [Type Here]
12. [Type Here] 13. [Type Here]	OTHER EVIDENCE: 12. [Type Here] 13. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template

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Summary of Key Learning Events and Instruction

15. [Type Here]
16. [Type Here]
17. [Type Here]

Unit 10 [Type Name Here]

Jump to Table of Contents

Course Title: [Type Here]	**Course Author:** [Type Here]	**Grade Level(s):** [Type Here]	**Time/Duration:** [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	**Unit Number:** [Type Here]	**Created:** [Type Here]	**Revised:** TBD
Standards Addressed: [Type Here]			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:
[Type Here]

Transfer

Students will be able to independently use their learning to...

13. [Type Here]
14. [Type Here]

Meaning

UNDERSTANDINGS

Students will understand that…

17. [Type Here]
18. [Type Here]
19. [Type Here]

ESSENTIAL QUESTIONS

11. [Type Here]
12. [Type Here]

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

Jump to Table of Contents

Acquisition
KNOWLEDGE
Students will know… 13. [Type Here] 14. [Type Here]
SKILLS
Students will be skilled at (be able to do)... 13. [Type Here] 14. [Type Here]

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

Jump to Table of Contents

Evaluative Criteria	Assessment Evidence
16. [Type Here] 17. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 17. [Type Here] 18. [Type Here]
14. [Type Here] 15. [Type Here]	OTHER EVIDENCE: 14. [Type Here] 15. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?

Curriculum Development Hub

This section provides a summary of the Key Learning Events and Instruction ***Teachers may summarize the topics within lessons or may utilize Laurel UbD Lesson Plan Template*** Jump to Table of Contents
Summary of Key Learning Events and Instruction 18. [Type Here] 19. [Type Here] 20. [Type Here]

Unit 10 [Type Name Here]

Jump to Table of Contents

Course Title: [Type Here]	**Course Author:** [Type Here]	**Grade Level(s):** [Type Here]	**Time/Duration:** [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	**Unit Number:** [Type Here]	**Created:** [Type Here]	**Revised:** TBD
Standards Addressed: [Type Here]			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:
[Type Here]

Transfer

Students will be able to independently use their learning to...

15. [Type Here]
16. [Type Here]

Meaning

UNDERSTANDINGS

Students will understand that…

20. [Type Here]
21. [Type Here]
22. [Type Here]

ESSENTIAL QUESTIONS

13. [Type Here]
14. [Type Here]

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Unit 10 [Type Name Here]

Jump to Table of Contents

Course Title: [Type Here]	**Course Author:** [Type Here]	**Grade Level(s):** [Type Here]	**Time/Duration:** [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	**Unit Number:** [Type Here]	**Created:** [Type Here]	**Revised:** TBD
Standards Addressed: [Type Here]			

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UNDERSTANDINGS

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24. [Type Here]
25. [Type Here]

ESSENTIAL QUESTIONS

15. [Type Here]
16. [Type Here]

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Summary of Key Learning Events and Instruction 24. [Type Here] 25. [Type Here] 26. [Type Here]