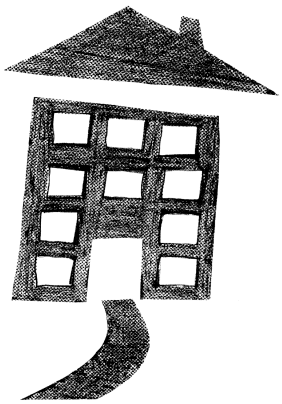
Teaneck Community Charter School

3rd Grade Mathematics Curriculum



Updated: August 2026

Math at T.C.C.S.

The Grade K-8 curriculum was designed to strengthen students' procedural skills and fluency while developing the foundational skills of mathematical reasoning and problem solving that are important for success in High School mathematics. Curriculum maps are Unit plans that are aligned with the NJSLS for Mathematics.

Core Curriculum Resource

enVision Mathematics Plus Grade 3 (2027 Edition)
Publisher: Savvas Learning Company
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NJ Student Learning Standards

Click here to view the NJSLS for Mathematics.

3rd Grade Math at T.C.C.S.

The Grade 3 Mathematics Curriculum, based on the principles of enVision Mathematics 2027, is designed to develop students' mathematical understanding through problem solving, reasoning, communication, and real-world application. This curriculum builds upon the foundational skills developed in earlier grades while introducing more complex mathematical concepts and strategies. Topics are organized around important mathematical ideas, allowing students to make meaningful connections among numbers, operations, multiplication, division, fractions, measurement, geometry, and data.

Throughout the year, students engage in hands-on learning experiences, collaborative discussions, visual models, and technology-enhanced activities that promote conceptual understanding, procedural fluency, and strategic problem-solving skills. Instruction encourages students to explain their mathematical thinking, use multiple strategies, justify solutions, and apply mathematical concepts to authentic and real-world situations.

The curriculum focuses on key Grade 3 standards, including multiplication and division, multiplication and division facts, area and perimeter, addition and subtraction within 1,000, solving multi-step problems, fractions, measurement, time, liquid volume, mass, data analysis, and geometry. Lessons are designed to support all learners through differentiated instruction, targeted interventions, enrichment opportunities, and ongoing formative assessment. Students are encouraged to develop perseverance, confidence, accuracy, and a positive mathematical mindset as they work toward greater independence and mathematical fluency.

By fostering mathematical curiosity, critical thinking, and effective problem-solving skills, this curriculum prepares students to become confident mathematicians who can apply their knowledge in school and everyday life. Through engaging instruction, meaningful practice, and opportunities to communicate their reasoning, students develop the knowledge and skills necessary for continued success in mathematics and beyond.

3rd Grade Math Pacing Guide

Topic	Topic Title	Lessons	Topic Review and Assessment	Total
1	Multiplication and Division Meanings	9	3	12
2	Foundational Multiplication Facts	7	3	10
3	Derived Multiplication Facts	10	3	13
4	Division Facts: Think Multiplication	8	3	11
5	Connect Area to Multiplication and Addition	10	3	13
6	Use Strategies and Properties to Add and Subtract	11	3	14
7	Fluently Add and Subtract Within 1,000	9	3	12
8	Represent and Interpret Data	7	3	10
9	Understand Fractions as Numbers	11	3	14
10	Fraction Equivalence and Comparison	10	3	13
11	Solve Time, Liquid Volume, and Mass Problems	8	3	11
12	Quadrilaterals, Perimeter, and Area	10	3	13
	Days	**110**	**36**	**146**

Topic 1: Multiplication and Division Meanings	**Time Frame:** 10 days **Grade:** 3rd
Essential Understanding - There are different ways to find the total when equal groups are joined. - Repeated addition is one way to find the total when joining equal-sized groups. - An array involves displaying objects in equal rows and columns. - The order of factors does not change the product. This is called the Commutative Property of Multiplication. - There are two ways to separate a total into equal groups. - One meaning of division is to determine the number in each group, given a quantity and the number of groups. - A second meaning of division refers to dividing a total into equal-sized groups to determine the number of groups. - Multiplication and division have an inverse relationship.	**Standards** 3.OA.A.1 3.OA.A.2 3.OA.A.3 3.OA.B.5 **Resources** - Student class workbook - Homework workbook - Savvas online student subscription - Teacher generated materials
Mathematics Objectives - Use different strategies to find the total number of items for a quantity of equal groups when the number of groups and group size are known. - Use repeated addition and skip counting to show the relationship between multiplication and addition. - Use arrays and properties to understand multiplication. - Understand and use the Commutative Property of Multiplication. - Build an understanding of the two meanings of division. - Build understanding of dividing a quantity into a known number of groups to find the number of objects in each group. - Understand the meaning of division: that of equal groups. - Use multiplication facts to divide.	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use counters, arrays, equal groups, and drawings to model multiplication and division. **Flexible Grouping:** Provide small-group, partner, and individual instruction based on student needs.
Language Objectives - Describe different ways to find the total when equal groups are joined. - Describe different ways to find the total of equal-sized groups using vocabulary related to multiplication: factor, product, times. - Explain how an array represents multiplication. - Explain how an array can show the Commutative Property of Multiplication. - Describe different strategies for separating a total into equal groups. - Describe how to form equal groups from a given quantity of objects. - Explain why repeated subtraction forms equal groups from a quantity of objects. - Explain how multiplication and division are related.	**Assessments (Formative/Informative)** - Daily classwork - Daily homework - Lesson exit slips - Topic Assessments - Fluency timed practice - Class Participation
Vocabulary - Equal group - Equation - Multiplication - Factors - Product - Number line - Array	**Supporting Lessons** - Making Equal Groups - Counting Equal Groups - Repeated Addition - Introducing Multiplication - Arrays - Sharing Equally - Making Equal Groups (Division)

- Rows - Columns - Commutative Property of Multiplication - Division - Dividend - Divisor - Quotient - Fact family	- Multiplication and Division Connections

Accommodations & Modifications

Gifted & Talented Students

1. Solve multiplication and division problems using multiple strategies.
2. Create and solve real-world problems involving multiplication and division.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use arrays, counters, number lines, and visual models.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and multiplication/division vocabulary.
2. Provide sentence frames and partner practice to explain strategies.

At-Risk Students

1. Provide frequent practice using concrete objects and visual models.
2. Use small-group instruction, reteaching, and immediate feedback.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: Students use multiplication and division strategies to solve problems and explain their mathematical reasoning.

Topic 2: Foundational Multiplication Facts	**Time Frame:** 8 days **Grade:** 3rd
Essential Understanding - There are patterns in the products when multiplying with 2 as a factor. - There are patterns in the products of 10s facts and 5s facts. - There are patterns in the products when multiplying by 0 and by 1. - Patterns in the multiplication table can help students reason about and remember multiplication facts. - Multiplication can be used to solve problems when the problem involves equal groups. - Strong math thinkers choose and apply math they know to show and solve problems from everyday life.	**Standards** 3.OA.A.3 3.OA.A.1 3.OA.D.9 3.OA.B.5 3.OA.C 7 **Resources** - Student class workbook - Homework workbook - Savvas online student subscription

	- Teacher generated materials
Mathematics Objectives - Develop strategies to build fluency with 2s facts. - Develop strategies to build fluency with 10s and 5s facts. - Develop understanding of multiplying by 1 and by 0. - Investigate patterns in a multiplication table. - Use relationships and patterns to develop strategies to build fluency of foundation multiplication facts. - Use concepts and skills to represent and solve problems using multiplication.	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use arrays, counters, fact cards, and multiplication games to build fact fluency. **Flexible Grouping:** Provide small-group, partner, and individual practice based on student needs.
Language Objectives - Describe patterns when multiplying by 2. - Describe the relationship between 10s facts and 5s facts. - Explain patterns when multiplying by 0 and by 1. - Describe patterns in a multiplication table. - Explain how to use facts they know to solve problems. - Read a problem involving multiplication for understanding and explain a strategy to solve the problem.	**Assessments (Formative/Informative)** - Daily classwork - Daily homework - Lesson exit slips - Topic Assessments - Fluency timed practice - Class Participation
Vocabulary - Multiples - Identity (one) Property of Multiplication - Zero Property of Multiplication	**Supporting Lessons** - Review Equal Groups and Arrays - Skip Counting Strategies - Facts of 0, 1, and 2 - Facts of 5 and 10 - Doubles (Facts of 2) - Fact Families and Missing Factors

Accommodations & Modifications

Gifted & Talented Students

1. Solve multiplication facts using multiple strategies.
2. Create and solve challenging real-world multiplication problems.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use arrays, number lines, fact charts, and manipulatives.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and multiplication vocabulary.
2. Provide sentence frames and partner practice to explain strategies.

At-Risk Students

1. Provide frequent practice using concrete models and fact strategies.

2. Use small-group instruction, reteaching, and immediate feedback.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: Students use strategies to develop multiplication fact fluency and explain their mathematical thinking

Topic 3: Derived Multiplication Facts	**Time Frame:** 11 days **Grade:** 3rd
Essential Understanding - One strategy for solving multiplication equations is to decompose the factors into factors of known multiplication facts and to add the products of the known facts. - One strategy for finding unknown multiplication facts is to decompose one of the factors into factors of known facts and to add the products of known facts. - One strategy for developing fluency with 3s and 4s facts is to decompose 3 into 2 +1 and 4 into 2+2 and then add the products of known facts. - One strategy for developing fluency with 6s and 7s facts is to decompose 6 into 5 +1 and 7 into 5+2 and then add the products of known facts. - Three or more numbers can be grouped and multiplied in any order. - Develop fluency with 8s facts by decomposing 8 into 5 + 3 and use the Distributive Property, or decompose 8 into 4 x 2 and use the Associative Property. - Known facts, including10s facts and 1s facts, and properties can be used to multiply with 9 as a factor. - Various strategies can be used to solve multiplication problems. - When you reason to solve a problem, you apply your experiences and what you know to solve the problem.	**Standards** 3.OA.A.3 3.OA.A.1 3.OA.D.9 3.OA.B.5 3.OA.C 7 **Resources** - Student class workbook - Homework workbook - Savvas online student subscription - Teacher generated materials
Mathematics Objectives - Describe ways to decompose factors into known facts to solve multiplication equations. - Use the strategy of decomposing factors of unknown multiplication facts into factors of known multiplication facts and adding the products of known facts. - Use known facts and the Distributive Property to develop fluency with 3s and 4s facts. - Use known facts and the Distributive Property to develop fluency with 6s and 7s facts. - Use the strategy of decomposing factors of unknown multiplication facts into factors of known multiplication facts and using the Associative Property to multiply the products of known facts. - Use known facts and patterns to begin to develop fluency with 9s facts. - Solve multiplication problems by using a chosen strategy. - Use reasoning to solve problems involving multiplication	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use arrays, fact families, number lines, and manipulatives to derive multiplication facts. **Flexible Grouping:** Provide small-group, partner, and individual practice based on student needs.

Language Objectives	**Assessments (Formative/Informative)**
- Describe different ways to break apart an array to find the total of the array and explain why the total remains the same. - Describe ways of breaking an array into two smaller arrays. - Explain strategies used to determine the total of objects arranged in an array. - Explain strategies used to determine the total of objects arranged in an array. Describe and demonstrate different multiplication strategies. - Describe the reasoning used to solve problems. Use data from a data table to help solve multiple problems.	- Daily classwork - Daily homework - Lesson exit slips - Topic Assessments - Fluency timed practice - Class Participation
Vocabulary - Distributive Property - Associative Property of Multiplication	**Supporting Lessons** - Review Equal Groups and Arrays - Skip Counting Strategies - Facts of 3 and 4 - Facts of 6, 7, 8, and 9 Using Strategies - Fact Families and Missing Factors - Multiplication Fact Fluency and Problem Solving

Accommodations & Modifications

Gifted & Talented Students

1. Use known facts to derive and solve more challenging multiplication facts.
2. Create and explain multiple strategies for solving multiplication problems.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use arrays, fact charts, number lines, and manipulatives.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and multiplication vocabulary.
2. Provide sentence frames and partner practice to explain strategies.

At-Risk Students

1. Provide frequent practice using concrete models and familiar facts.
2. Use small-group instruction, reteaching, and immediate feedback.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: Students use known multiplication facts and strategies to derive unknown facts and explain their reasoning.

Topic 4: Division Facts: Think Multiplication	**Time Frame:** 9 days **Grade:** 3rd

<table>
<tr>
<td>Essential Understanding
- Any division problem can be thought of as a missing factor multiplication problem.
- Knowing the relationship between multiplication and division facts can help solve problems involving multiplication and division.
- The inverse relationship between multiplication and division can be used to find division facts; every division fact has a related multiplication equation.
- Any number (except 0) divided by itself is equal to 1. Any number divided by 1 is that number. Zero divided by any number (except 0) is 0 . Zero cannot be a divisor.
- Solving problems may require one or more operations to get to the final answer.</td>
<td>Standards
3.OA.A.3
3.OA.D.9
3.OA.B.5
3.OA.A.2
3.OA.A.4
3.OA.B.6
3.OA.D.8
3.OA.C 7

Resources
- Student class workbook
- Homework workbook
- Savvas online student subscription
- Teacher generated materials</td>
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<td>Mathematics Objectives
- Describe patterns related to multiplication and division in a multiplication table.
- Investigate ways to use multiplication to solve division equations.
- Solve division equations using related multiplication facts.
- Understand division involving 0 and 1.
- Use previously learned multiplication and division facts to solve problems.</td>
<td>Differentiation
Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student’s cognitive ability, interest area, motivation, and learning styles.

Hands-On Learning: Use arrays, counters, fact families, and multiplication models to connect multiplication and division.

Flexible Grouping: Provide small-group, partner, and individual practice based on student needs.</td>
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<tr>
<td>Language Objectives
- Describe the relationship between multiplication and division
- Explain the connection between multiplication and division.
- Explain how to use multiplication facts to find related division facts.
- Describe patterns when dividing by 0 and 1.
- Read and interpret problems and describe how to solve them.</td>
<td>Assessments (Formative/Informative)
- Daily classwork
- Daily homework
- Lesson exit slips
- Topic Assessments
- Fluency timed practice
- Class Participation</td>
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<tr>
<td>Vocabulary
- Inverse operation</td>
<td>Supporting Lessons
- Review Multiplication Facts and Fact Families
- Relating Multiplication and Division
- Using Multiplication to Find Division Facts
- Dividing Using Equal Groups and Arrays
- Finding Missing Factors to Solve Division Facts</td>
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<tr>
<td colspan="2">Accommodations & Modifications</td>
</tr>
</table>

Gifted & Talented Students

1. Use multiplication facts to solve more challenging division problems.
2. Create and explain their own division problems and strategies.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use arrays, fact charts, number lines, and manipulatives.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and multiplication/division vocabulary.
2. Provide sentence frames and partner practice to explain strategies.

At-Risk Students

1. Provide frequent practice connecting multiplication facts to division.
2. Use small-group instruction, reteaching, and immediate feedback.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: SStudents use known multiplication facts to solve division problems and explain their reasoning.

Topic 5: Connect Area to Multiplication and Addition	**Time Frame:** 12 days **Grade:** 3rd
Essential Understanding - To cover a region means placing unit squares next to each other to fill the region with no gaps or overlaps. - The area of a 2-dimensional shape measures the surface of a shape. One way to find the area of a rectangle is to count the unit squares that cover the rectangle. - Another way to find the area of a rectangular shape is to multiply its length by its width. - The Distributive Property can be used to find the area of rectangles. - The area of some composite shapes can be found by decomposing the shapes into rectangles, finding the area of each rectangle, and adding all of the areas. - Patterns can be used to find products when one factor is a multiple of 10. - Different strategies can be used to find products when one factor is a multiple of 10. - Properties of multiplication can be used to find products when one factor is a multiple of 10. - Some problems require more than one step or operation to solve. Use different models, like bar diagrams, can help find hidden questions.	**Standards** 3.M.B.3 3.M.B.3a 3.M.B.3b 3.M.B 4 3.M.B 5 3.M.B 5a 3.M.B 5b 3.M.B 5c 3.M.B 5d 3.OA.A.4 **Resources** - Student class workbook - Homework workbook - Savvas online student subscription - Teacher generated materials
Mathematics Objectives	**Differentiation**

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- Investigate ways to find the number of tiles needed to cover part of a region or the entire region.
- Use tiling with unit squares to find the area of a shape.
- Use multiplication to find the areas of rectangles.
- Find the area of rectangles by using the Distributive Property.
- Find the area of composite shapes.
- Use patterns to find products when one factor is a multiple of 10.
- Use different strategies to find products when one factor is a multiple of 10.
- Use the properties of multiplication to find products when one factor is a multiple of 10.
- Solve two-step problems involving area.

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Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.**

Hands-On Learning: Use tiles, grids, arrays, and drawings to model area and connect it to multiplication and addition.

Flexible Grouping: Provide small-group, partner, and individual practice based on student needs.

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Language Objectives

- Explain how to determine the total number of tiles covering part of a region or the entire region.
- Describe how to find the area of shapes by using unit squares and different strategies for counting.
- Explain how to use multiplication to find the area of rectangles.
- Describe how to use the Distributive Property to find the area of a rectangle.
- Explain how to find the area of a composite shape.
- Read and listen to patterns to identify how they can be used to find products when one factor is a multiple of 10.
- Describe how to use known facts and place value to find products when one factor is a multiple of 10.
- Describe how properties of multiplication can be used to find products when one factor is a multiple of 10.
- Explain strategies for representing a two-step problem.

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Assessments (Formative/Informative)

- Daily classwork
- Daily homework
- Lesson exit slips
- Topic Assessments
- Fluency timed practice
- Class Participation

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Vocabulary

- Area
- Unit square

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Supporting Lessons

- Counting Square Units to Find Area
- Finding Area Using Rows and Columns
- Connecting Arrays to Area Models
- Finding Area Using Multiplication
- Finding Area Using Repeated Addition

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Accommodations & Modifications

Gifted & Talented Students

1. Solve area problems using multiple strategies.
2. Create and solve real-world problems involving area, multiplication, and addition.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use grid paper, tiles, arrays, and visual models.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

</td>
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</table>

1. Use visuals, gestures, and area/multiplication vocabulary.
2. Provide sentence frames and partner practice to explain strategies.

At-Risk Students

1. Provide frequent practice with concrete models and grid paper.
2. Use small-group instruction, reteaching, and immediate feedback.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: Students use multiplication and addition strategies to find area and explain their reasoning.

Topic 6: Use Strategies and Properties to Add and Subtract	**Time Frame:** 12 days **Grade:** 3rd
Essential Understanding - The Associative Property of Addition allows for grouping of addends in any way, while the Commutative Property of Addition allows for changing the order of the addends. Using these properties can make adding three or more addends easier. - Generalizations about how addition works emerge from investigating patterns and reasoning about mathematical relationships. - There is more than one way to add. Strategies include compensation or decomposition of one or both addends. - Two meanings of subtraction are taking away or apart and finding the difference. - A number line is a useful tool to subtract multi-digit numbers. - There is more than one way to subtract multi-digit numbers. - Rounding is a process of finding multiples of 10 and 100 that make estimating sums and differences easier. - There is more than one way to estimate a sum. Two ways to estimate are rounding and using compatible numbers. - There is more than one way to estimate a difference. - Good math thinkers choose and apply math they know to show and solve problems from everyday life.	**Standards** 3.NBT.A.1 3.NBT.A.2 3.OA.C 7 3.OA.D.8 **Resources** - Student class workbook - Homework workbook - Savvas online student subscription - Teacher generated materials
Mathematics Objectives - Use properties of addition to find the sum of 3-digit addends. - Identify and explain patterns in the addition table. - Use compensation and decomposition of an addend as strategies for addition. - Investigate different ways to think about subtraction. - Use an open number line as a tool to subtract whole numbers. - Use compensation and partial differences as two strategies for subtraction. - Use place value and a number line to round numbers. - Use rounding or compatible numbers to estimate a sum. - Use rounding or compatible numbers to estimate a difference. - Solve one-step and multi-step problems.	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use manipulatives, number lines, drawings, and place-value models to practice strategies. **Flexible Grouping:** Provide small-group, partner, and individual practice based on student needs.

Language Objectives	**Assessments (Formative/Informative)**
- Explain how addition properties make it easier to find sums. - Explain addition patterns. - Describe various strategies for addition. - Describe different ways to think about subtraction. - Describe two strategies for subtraction. - Explain how to round a number to the nearest 10 or 100. - Describe estimation strategies for estimating sums. - Describe strategies for estimating a difference. - Describe strategies orally and in writing.	- Daily classwork - Daily homework - Lesson exit slips - Topic Assessments - Fluency timed practice - Class Participation
Vocabulary - Associative Property of Addition - Commutative Property of Addition - Place vale - Round - Compatible numbers	**Supporting Lessons** - Review Place Value to 1,000 - Adding Using Place Value Strategies - Subtracting Using Place Value Strategies - Using the Commutative and Associative Properties to Add - Breaking Apart Numbers to Add and Subtract - Using Compensation to Add and Subtract - Estimating Sums and Differences

Accommodations & Modifications

Gifted & Talented Students

1. Solve problems using multiple strategies and explain their reasoning.
2. Create and solve challenging multi-step addition and subtraction problems.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use number lines, place-value models, and manipulatives.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and mathematical vocabulary.
2. Provide sentence frames and partner practice to explain strategies.

At-Risk Students

1. Provide frequent practice using concrete materials and visual models.
2. Use small-group instruction, reteaching, and immediate feedback.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: Students select appropriate strategies and properties to solve addition and subtraction problems and explain their reasoning.

Topic 7: Fluently Add and Subtract Within 1,000	**Time Frame:** 10 days **Grade:** 3rd

Essential Understanding

- One strategy for adding 3-digit numbers is to decompose one or both addends and add the parts.
- Using the vertical equation to add within 1,000 prepares students for using a standard algorithm for addition.
- Using partial differences involves decomposing the subtrahend and subtracting by parts.
- The process for regrouping and subtracting 3-digit numbers is an extension of the process for regrouping and subtracting 2-digit numbers.
- Different strategies can be used to add and subtract.
- Analyzing the numbers in an addition equation is useful for deciding on a strategy for adding.
- Analyzing the numbers in a subtraction equation is useful to decide on a strategy to subtract.
- Different models can be used to represent a problem, and different strategies can be used to solve it.

Standards

3.NBT.A.2
3.OA.C 7
3.OA.D.8

Resources

- Student class workbook
- Homework workbook
- Savvas online student subscription
- Teacher generated materials

Mathematics Objectives

- Add two 3-digit numbers by decomposing one or both addends and adding parts.
- Use vertical addition to add within 1,000.
- Use partial differences to subtract 3-digit numbers.
- Use regrouping to subtract 3-digit numbers.
- Investigate strategies for adding and subtracting within 1,000.
- Choose and use strategies to add within 1,000.
- Choose and use strategies to subtract within 1,000.
- Represent and solve real-world problems involving any of the four operations.

Differentiation

Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.**

Hands-On Learning: Use base-ten blocks, place-value charts, number lines, and drawings to build fluency.

Flexible Grouping: Provide small-group, partner, and individual practice based on student needs.

Language Objectives

- Describe how to add two 3-digit numbers using partial sums.
- Describe how to add 3-digit numbers using vertical equations.
- Describe strategies for decomposing the number being subtracted and using partial differences to subtract.
- Describe how to subtract by using place value.
- Describe the addition and subtraction strategies chosen to solve a problem.
- Explain the reasoning for choosing strategies to add.
- Explain the reasoning for choosing a strategy to subtract.
- Read a problem silently for comprehension and orally describe a strategy to solve it.

Assessments (Formative/Informative)

- Daily classwork
- Daily homework
- Lesson exit slips
- Topic Assessments
- Fluency timed practice
- Class Participation

Vocabulary

- regroup

Supporting Lessons

- Review Place Value to 1,000
- Fluently Add Within 1,000 Without Regrouping
- Fluently Add Within 1,000 With Regrouping
- Fluently Subtract Within 1,000 Without Regrouping
- Fluently Subtract Within 1,000 With

	Regrouping - Check Addition and Subtraction Using Inverse Operations - Estimate to Check the Reasonableness of Answers

Accommodations & Modifications

Gifted & Talented Students

1. Solve multi-step problems using multiple strategies.
2. Create and solve challenging real-world problems involving numbers beyond 1,000.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use place-value charts, base-ten blocks, and number lines.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and mathematical vocabulary.
2. Provide sentence frames and partner practice to explain strategies.

At-Risk Students

1. Provide frequent practice using concrete materials and visual models.
2. Use small-group instruction, reteaching, and immediate feedback.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: Students select efficient strategies to add and subtract within 1,000 and explain their mathematical reasoning.

Topic 8: Represent and Interpret Data	**Time Frame:** 8 days **Grade:** 3rd
Essential Understanding - Picture and bar graphs often use scales to display a wider range of data in a smaller space. - Data can be displayed in picture graphs and bar graphs. Displaying the data in a graph can make it easier to interpret the data. - When making a scaled picture graph, you look at the data values to decide on a scale for the graph. - When making a scaled bar graph, you look at the data values to decide on a scale for the graph. - You can interpret data displayed in a scaled picture or bar graph to solve one- and two-step problems. - A frequency table can be used to collect and organize data, and a graph, either a picture graph or a bar graph, can display the data collected.	**Standards** 3.DL. A1 3.DL. A2 3.DL. B3 3.DL. B4 3.OA.A.3  3.OA.D.8  **Resources** - Student class workbook - Homework workbook - Savvas online student subscription - Teacher generated materials

Mathematics Objectives - Interpret data displayed in a scaled picture bar graph. - Collect and represent data using scaled picture graphs and bar graphs. - Make scaled picture graphs to display data. - Make scaled bar graphs to display data sets and answer questions about the data. - Solve problems involving data displayed in scaled bar graphs and picture graphs. - Collect and/or organize data in a frequency table, and display the data in a picture or bar graph.	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use tables, picture graphs, bar graphs, and real-world data to represent and interpret information. **Flexible Grouping:** Provide small-group, partner, and individual practice based on student needs.
Language Objectives - Explain the number of data points in a category of a scaled picture or bar graph. - Ask questions orally to classmates to collect data. - Explain how many symbols are needed to display the given data set in a scaled picture graph. - Explain the scale used to make a scaled bar graph. - Use comparative language to describe the relationship among categories in a data set. - Ask survey questions to classmates and record the responses in writing.	**Assessments (Formative/Informative)** - Daily classwork - Daily homework - Lesson exit slips - Topic Assessments - Fluency timed practice - Class Participation
Vocabulary - Scaled picture graph - Data - Key - Scale - Scaled bar graph - Frequency table - Survey	**Supporting Lessons** - Collect and Organize Data - Read and Interpret Picture Graphs - Read and Interpret Bar Graphs - Create Picture Graphs - Create Bar Graphs - Compare Data Using Graphs - Solve One-Step "How Many More" and "How Many Fewer" Problems Using Graphs

Accommodations & Modifications

Gifted & Talented Students

1. Create and analyze graphs using larger or more complex data sets.
2. Develop questions and solve problems using data from multiple graphs.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use labeled graphs, charts, and visual models.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and data-related vocabulary.
2. Provide sentence frames and partner discussions to interpret data.

At-Risk Students

1. Provide frequent practice with simple graphs and concrete data.
2. Use small-group instruction, modeling, and repeated practice.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: Students analyze data, identify patterns, and use information to answer questions and make decisions.

Topic 9: Understand Fractions as Numbers	**Time Frame:** 13 days **Grade:** 3rd
Essential Understanding - A whole can be partitioned into equal parts. - You can use a number to describe an equal part of a figure. - A unit fraction represents one part of a whole that has been partitioned into equal parts. - A fraction can represent multiple copies of a unit fraction. - The whole can be represented by various fractions. - Points on a number line can represent fractions. The denominator represents the number of equal parts between0 and 1, and the numerator represents the number of parts between 0 and the point. - A number line can be used to represent fractions greater than 1. - Measuring lengths to the nearest half- and fourth inch allows for great precision in measuring. - A line plot is a way to organize data on a number line.	**Standards** 3.NF.A.1 3.NF.A.3c 3.NF.A.2a 3.NF.A.2b 3.G.A.2 **Resources** - Student class workbook - Homework workbook - Savvas online student subscription - Teacher generated materials
Mathematics Objectives - Understand how to read and write about equal-sized parts of a region. - Describe the shapes and parts of a figure, including whether the parts are equal parts. - Understand how to read and write unit fractions for equal-sized parts of a region. - Use a fraction to represent multiple copies of a unit fraction. - Determine fractions that can be used to represent one whole or more than one whole. - Represent fractions less than 1 on a number line. - Represent fractions greater than 1 on a number line. - Use an inch ruler to measure lengths to the nearest half and fourth inch. - Measure length to the nearest half inch and show the data on a line plot. - Measure length to the nearest fourth inch and show the data on a line plot.	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use fraction strips, number lines, and visual models to represent fractions. **Flexible Grouping:** Provide small-group, partner, and individual practice based on student needs.

Language Objectives - Read, write, and use the term equal parts and unequal parts to describe partitioned regions. - Describe the shapes and parts within the designs of flags using math language. - Read and write unit fractions to describe equal parts of a region. - Listen to how non-unit fractions are pronounced to connect to the idea that they are multiple copies of a unit fraction. - Describe fractions that represent one whole or more than one whole. - Use terms related to fractions appropriately. - Explain how to use a ruler to measure length to the nearest half and fourth inch. - Read and write measurements to the nearest half and fourth inch and draw a line plot to organize and analyze the data.	**Assessments (Formative/Informative)** - Daily classwork - Daily homework - Lesson exit slips - Topic Assessments - Fluency timed practice - Class Participation
Vocabulary - Fraction - Unit fraction - Numerator - Denominator - Nearest half inch - Nearest fourth inch - Line plot	**Supporting Lessons** - Review Fractions as Equal Parts of a Whole - Identify and Represent Unit Fractions - Build Fractions Using Visual Models - Understand Fractions on a Number Line - Locate Fractions Between 0 and 1 on a Number Line - Compare Fractions Using Visual Models and Number Lines - Recognize Equivalent Fractions Using Models - Understand Fractions Greater Than 1

Accommodations & Modifications

Gifted & Talented Students

1. Compare and represent fractions using multiple models.
2. Create and solve real-world fraction problems.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use fraction strips, number lines, and concrete models.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and fraction vocabulary.
2. Provide sentence frames and partner practice to explain fractions.

At-Risk Students

1. Provide frequent practice using concrete fraction models.
2. Use small-group instruction, modeling, and repeated practice.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

Critical Thinking & Problem-Solving: Students use models and number lines to understand, represent, and compare fractions.

Topic 10: Fraction Equivalence and Comparison	**Time Frame:** 11 days **Grade:** 3rd
Essential Understanding - Different fractions can name the same part of a whole. Fractions that name equivalent parts of the whole are called equivalent fractions. - Models can help identify equivalent fractions. - You can use a number line to show equivalent fractions. - Whole numbers can be represented by many different fractions. - Two fractions can be compared only if their wholes represent the same size. - To compare fractions with the same denominator, you compare the numbers in the numerators. - When comparing fractions with the same number of parts, you compare the size of each part. The greater the digit in the denominator, the smaller the part. - Benchmark numbers such as 0, ½, and 1 can be used to compare fractions. - Choosing a strategy to compare fractions requires analysis of the fractions being compared.	**Standards** 3.NF.A.3a 3.NF.A.3b 3.NF.A.3c 3.NF.A.3d **Resources** - Student class workbook - Homework workbook - Savvas online student subscription - Teacher generated materials
Mathematics Objectives - Investigate equivalent fractions using fraction strips. - Use models to find equivalent fractions. - Represent equivalent fractions on the number line. - Use fractions to name whole numbers. - Understand that fractions can be compared only if their wholes are the same size. - Use models to compare fractions that refer to the same whole and have the same denominator. - Use models to compare fractions that refer to the same whole and have the same numerator. - Use benchmark numbers to compare fractions. - Choose and use a strategy to compare fractions.	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use fraction strips, number lines, and visual models to explore equivalent and comparable fractions. **Flexible Grouping:** Provide small-group, partner, and individual practice based on student needs.
Language Objectives - Give examples of two equivalent fractions with different denominators. - Describe equivalent fractions using same-sized fraction pieces. - Explain how to find equivalent fractions on a number line. - Explain how whole numbers can be represented by different fraction names. - Explain why the wholes must be the same size to compare two fractions. - Explain how to compare fractions with the same denominator. - Explain how to compare fractions with the same numerator. - Describe how to use benchmark numbers when comparing fractions. - Explain the selection of a strategy to compare fractions.	**Assessments (Formative/Informative)** - Daily classwork - Daily homework - Lesson exit slips - Topic Assessments - Fluency timed practice - Class Participation
Vocabulary	**Supporting Lessons**

- Equivalent fraction - Benchmark fraction	- Review Fraction Models and Fraction Meaning - Identify Equivalent Fractions Using Visual Models - Compare Fractions Using Area Models and Fraction Strips - Compare Fractions Using Number Lines - Compare Fractions With Like and Unlike Denominators - Order Fractions From Least to Greatest

Accommodations & Modifications

Gifted & Talented Students

1. Compare fractions using multiple strategies and explain their reasoning.
2. Create and solve challenging real-world fraction problems.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use fraction strips, number lines, and concrete models.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and fraction vocabulary.
2. Provide sentence frames and partner practice to explain comparisons.

At-Risk Students

1. Provide frequent practice with concrete fraction models.
2. Use small-group instruction, modeling, and repeated practice.

Career Readiness, 21st Century, Life Literacies & Key Skills — NJSL 9.4

Critical Thinking & Problem-Solving: Students use models and strategies to identify equivalent fractions and compare their values.

Topic 11: Solve Time, Liquid Volume and Mass Problems	**Time Frame:** 10 days **Grade:** 3rd
Essential Understanding - Clocks can be used to tell time to the nearest minute. - Elapsed time can be found by finding the total amount of time that has passed between a starting time and an ending time. - Time intervals can be added or subtracted to solve problems. - Objects have attributes besides length, height, or distance. - Capacity is a measure of the amount of liquid a container can hold. - Mass is a measure of the quantity of matter in an object. - Problems involving mass and liquid volume can often be solved with pictures, bar diagrams, and equations.	**Standards** 3.M.A.1 3.M.A.2 3.OA.A.3: 3.OA.C 7 **Resources** - Student class workbook - Homework workbook

	- Savvas online student subscription - Teacher generated materials
Mathematics Objectives - Show and tell time to the nearest minute using analog and digital clocks. - Given the start time and end time, determine the elapsed time. - Solve word problems involving addition and subtraction of time. - Investigate tools that measure liquid volume or mass. - Use standard units to estimate and measure liquid volume. - Use standard units to estimate and measure mass. - Use pictures, bar diagrams, and equations to help solve problems about mass and liquid volume.	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use clocks, measuring cups, scales, and real-world objects to solve measurement problems. **Flexible Grouping:** Provide small-group, partner, and individual practice based on student needs.
Language Objectives - Write and describe times in different ways by using numbers and words. - Explain how to determine elapsed time. Describe the relationship between start times and end times. - Explain how addition and subtraction can be used to solve word problems involving time. - Describe how different measuring tools can be used and identify similarities and differences between the tools. - Describe how to estimate and measure liquid volume. - Describe how to estimate and measure mass. - Read word problems about mass and liquid volume and draw pictures, bar diagrams, or write equations to help solve them.	**Assessments (Formative/Informative)** - Daily classwork - Daily homework - Lesson exit slips - Topic Assessments - Fluency timed practice - Class Participation
Vocabulary - Elapsed time, - A.M. - P.M. - Capacity - Liquid volume - Liter (L) - Mass - Grams (g) - Kilograms(Kg)	**Supporting Lessons** - Review Measurement Units and Tools - Tell and Write Time to the Nearest Minute - Solve Elapsed Time Problems Using Number Lines and Clocks - Convert and Compare Time Units (hours, minutes, seconds) - Measure and Estimate Liquid Volume Using Appropriate Units - Read and Interpret Liquid Volume Measurements - Measure and Compare Mass Using Appropriate Units
Accommodations & Modifications **Gifted & Talented Students** 1. Solve multi-step problems involving different units of measurement.	

2. Create and solve real-world measurement problems.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use clocks, measuring tools, diagrams, and visual models.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and measurement vocabulary.
2. Provide sentence frames and partner practice to explain solutions.

At-Risk Students

1. Provide frequent practice using concrete measuring tools.
2. Use small-group instruction, modeling, and repeated practice.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

1. **Critical Thinking & Problem-Solving:** Students use measurement tools and strategies to solve real-world problems involving time, liquid volume, and mass.

Topic 12: Quadrilaterals, Perimeter, and Area	**Time Frame:** 10 days **Grade:** 3rd
Essential Understanding - Quadrilaterals can be described and classified by their sides and angles. - Shapes have attributes that you can use to name, describe, and group them. Attributes include sides and angles. - Quadrilaterals can be classified by their attributes. - The distance around a figure is its perimeter. - To find the perimeter of a polygon, add the lengths of the sides. - Finding the unknown side length of a polygon is like solving for an unknown addend in an addition equation. - Polygons with the same perimeter may have different areas. - Polygons with the same area may have different perimeters.	**Standards** 3.G.A.1 3.G.A.2 3.M.C.6 3.OA.A.3: 3.OA.C 7 3.NBT.A.2 3.M.B 5 **Resources** - Student class workbook - Homework workbook - Savvas online student subscription - Teacher generated materials
Mathematics Objectives - Identify quadrilaterals and use attributes to describe them. - Investigate attributes of quadrilaterals. - Analyze and compare quadrilaterals and group them by their attributes. - Find the perimeter of different polygons. - Find the perimeter of different polygons. - Use the known side lengths and perimeter of a polygon to find the unknown side length. - Understand the relationship of shapes with the same perimeter and different areas.	**Differentiation** Differentiation can occur through the content, process, & product of a unit or lesson. It should support the varying levels of the student's cognitive ability, interest area, motivation, and learning styles**.** **Hands-On Learning:** Use tiles, grid paper, rulers, and shape models to explore quadrilaterals, perimeter, and area.

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- Understand the relationship of shapes with the same area and different perimeters.

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Flexible Grouping: Provide small-group, partner, and individual practice based on student needs.

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Language Objectives

- Orally summarize attributes of quadrilaterals and use these to identify given examples.
- Describe attributes of quadrilaterals and identify names of quadrilaterals.
- Read and listen to descriptions of quadrilaterals to compare and analyze them.
- Explain how to find the perimeter of a polygon.
- Explain how to use addition or multiplication to find the perimeter of shapes.
- Describe how to find the unknown side length of a polygon when the perimeter and other side lengths are known.
- Describe shapes with the same perimeter and different areas.
- Describe shapes with the same area and different perimeters.

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Assessments (Formative/Informative)

- Daily classwork
- Daily homework
- Lesson exit slips
- Topic Assessments
- Fluency timed practice
- Class Participation

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Vocabulary

- Vertex
- Polygon
- Sides
- Quadrilateral
- Angles
- Rectangle
- Right angles
- Rhombus
- Square
- Perimeter

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Supporting Lessons

- Identify and Classify Quadrilaterals
- Describe Attributes of Quadrilaterals (sides, angles, parallel lines)
- Review Perimeter as the Distance Around a Shape
- Find the Perimeter of Quadrilaterals Using Addition
- Review Area as the Number of Square Units Covering a Shape
- Find the Area of Rectangles and Squares Using Multiplication
- Solve Problems Involving Perimeter and Area

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Accommodations & Modifications

Gifted & Talented Students

1. Solve multi-step problems involving perimeter and area.
2. Create and solve real-world problems using different quadrilaterals.

Students with Disabilities

1. **Follow IEP:** Implement accommodations and modifications outlined in the student's IEP.
2. **Visual Supports:** Use grid paper, rulers, diagrams, and hands-on models.
3. **Additional Support:** Provide extra time, repeated directions, and guided practice.

English Language Learners

1. Use visuals, gestures, and geometry vocabulary.
2. Provide sentence frames and partner practice to explain solutions.

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At-Risk Students

1. Provide frequent practice using concrete models and grid paper.
2. Use small-group instruction, modeling, and repeated practice.

Career Readiness, 21st Century, Life Literacies & Key Skills: NJSL 9.4

1. **Critical Thinking & Problem-Solving:** Students use geometry and measurement strategies to solve real-world problems involving quadrilaterals, perimeter, and area.