Grade 3 Math Curricular Framework

UNIT 1 FOCUS
Foundations of Multiplication and Division

Unit Pacing: 1st Marking Period - **Beginning of September - Beginning of November**

- **Topic 1: Understand Multiplication and Division of Whole Numbers**
  - Represent and solve problems involving multiplication and division
- **Topic 2: Multiplication Facts: Use Patterns**
  - Represent and solve problems involving multiplication and division
- **Topic 3: Apply Properties: Multiplication Facts for 3, 4, 6, 7, 8**
  - Understand properties of multiplication and the relationship between multiplication and division
- **Topic 4: Use Multiplication to Divide: Division Facts**
  - Use place value understanding and properties of operations to add and subtract

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE
• **3.OA.A.1** (Topics 1, 2) • **3.OA.A.2** (Topic 1) • **3.OA.A.3** (Topics 1, 2, 3, 4) • **3.OA.A.4** (Topic 4) • **3.OA.B.5** (Topics 1, 2, 3, 4) • **3.OA.B.6** (Topic 4) • **3.OA.D.8** (Topic 4) • **3.OA.D.9** (Topics 2, 3, 4)	**MP.1** Make sense of problems and persevere in solving them. **MP.2** Reason abstractly and quantitatively. **MP.3** Construct viable arguments and critique the reasoning of others. **MP.4** Model with mathematics. **MP.5** Use appropriate tools strategically. **MP.6** Attend to precision. **MP.7** Look for and make use of structure. **MP.8** Look for and express regularity in repeated reasoning.

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INTERDISCIPLINARY CONNECTIONS	UNIT 1 GENERAL ASSESSMENTS

21st Century Skills: Career Ready Practice Standards:
CRP1, CRP2, CRP4, CRP6, CRP8, CRP11
PBL: Open a Fast Food Restaurant
 	
Literature Connection:
Interactive Math Stories for each topic from Pearson 2.0
7x9 = Trouble by Claudia Mills
Amanda Bean's Amazing Dream by Cindy Neuschwander
How Do You Count a Dozen Ducklings by Seon Chae
A Remainder of One by Elinor Pincezes
The Great Divide: A Mathematical Marathon by Dayle Ann Dodds
Bean Thirteen by Matthew McEllcott
 	
STEM Connection:
Math and Science Activities (Topic 1, 2, 3, 4)
	• enVision Grade 3 Placement Test
	• enVision Grade 3 End-of-Year Benchmark Assessment (Pre-Test)
	• enVision Topic 1 Assessment: Understand Multiplication and Division of Whole Numbers
	  ○ 3.OA.A.1; 3.OA.A.2; 3.OA.A.3; 3.OA.A5
	• enVision Topic 2 Assessment: Multiplication Facts: Use Patterns
	  ○ 3.OA.A.1; 3.OA.A.3; 3.OA.B.5; 3.OA.D.9
	• enVision Topic 3 Assessment: Apply Properties: Multiplication Facts for 3, 4, 6, 7, 8
	  ○ 3.OA.A.3; 3.OA.B.5; 3.OA.D.9
	• enVision Topic 4 Assessment: Use Multiplication to Divide: Division Facts
	  ○ 3.OA.A.3; 3.OA.A.4; 3.OA.B.5; 3.OA.B.6; 3.OA.D.8; 3.OA.D.9
	
	• Possible Formative Assessments:
	  ○ Lesson's Diagnostic Questions: (indicated in Teacher's Edition - large pink check mark)
	  ○ Exit Ticket: Lesson Quick Check (Digital Resource)
	  ○ Topic Fluency Practice Activity (Student Textbook)
	  ○ Topic Vocabulary Review (Student Textbook)

RESOURCES	**TECHNOLOGY INTEGRATION**
EnVision Materials for Topic 1, 2, 3, 4 including student edition worksheets, problem solving mat, interactive math story, vocabulary cards, and center ideas which are listed in each topic 3.OA.A.2 Fish Tanks 3.OA.A.3 Analyzing Word Problems Involving Multiplication 3.OA.A.3 Two Interpretations of Division 3.OA.A.4 Finding the unknown in a division equation 3.OA.B.5 Valid Equalities? (Part 2)	**STANDARDS** 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose. 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums). **RESOURCES** • Animated Glossary • BrainPop • BrainPop Jr. • Educreations

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3.OA.D.8 The Class Trip 3.OA.D.8 The Stamp Collection 3.OA.D.9 Addition Patterns	• enVisions 2.0 • Google Classroom • Ixl.com • Kahoot • Khan Academy • Learn Zillion • Math Playground • Measuring Up Live • Popplet • Prodigy • Scholastic Study Jams • SeeSaw • That Quiz • XtraMath

KEY VOCABULARY

Topic 1: equal groups, multiplication, factors, product, equation, unknown, number line, array, row, column, Commutative (order) Property of Multiplication, division
Topic 2: multiples, Identity (One) Property of Multiplication, Zero Property of Multiplication
Topic 3: Distributive Property
Topic 4: dividend, divisor, fact family, quotient, even, odd

GENERAL CONSIDERATIONS FOR DIVERSE LEARNERS

English Language Learners	Students Receiving Special Education Services	Advanced Learners
• WIDA Can Do Descriptors for Grades 2-3* • WIDA Essential Actions Handbook • FABRIC Paradigm • Wall Township ESL Grading Protocol *Use WIDA Can Do Descriptors in coordination with Student Language Portraits (SLPs).	• New Jersey Tiered System of Supports • National Center on Universal Design for Learning - About UDL • UDL Checklist • UDL Key Terms Students within this class receiving Special Education/Section 504 programming have specific goals and objectives, as well	• Knowledge and Skill Standards in Gifted Education for All Teachers • Pre-K-Grade 12 Gifted Programming Standards • Gifted Programming Glossary of Terms

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Potential Accommodations for ELLs

- Personal glossary
- Text-to-speech
- Extended time
- Simplified / verbal instructions
- Frequent breaks
- Small group/One to one
- Additional time
- Review of directions
- Student restates information
- Extra visual and verbal cues and prompts
- Preferential seating
- Verbal and visual cues regarding directions and staying on task
- Checklists
- Immediate feedback

as accommodations and modifications outlined within their Individualized Education Plans (IEP)/504 Plans due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, instruction is differentiated based upon the student's needs. The IEP/504 Plan acts as a supplemental curriculum guide inclusive of instructional strategies that support each specific learner.

Potential Accommodations for Special Education

Presentation accommodations:

- Listen to audio recordings instead of reading text
- Pre-teach unknown vocabulary through pictures or videos, and relate to prior knowledge
- Work with fewer items per page and/or materials in a larger print size
- Use a visual blocker
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instructions/picture cues

Response accommodations:

- Give responses in a form (oral or written) that's easier for him/her
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to give responses in class
- Use a calculator or table of "math facts"

Setting accommodations:

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he/she learns best (for example, near the teacher)
- Take a test in small group setting

Timing accommodations:

- Take more time to complete a task or a test
- Have extra time to process oral information and directions

Potential Accommodations for Advanced Learners

- Use of high level academic vocabulary/texts
- Problem-based learning
- Pre-assess to condense curriculum
- Interest-based research
- Authentic problem-solving
- Homogeneous grouping opportunities

Students with 504 Plans

Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.

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	• Take frequent breaks, such as after completing a task **Assignment modifications**: • Complete fewer or different homework problems than peers • Shorten assignment • Answer fewer or different test questions • Create alternate projects or assignments	

At Risk Learners / Differentiation Strategies

Alternative Assessments Choice Boards Games and Tournaments Group Investigations Guided Reading Learning Contracts Leveled Rubrics Literature Circles Multiple Texts Personal Agendas	Independent Research & Projects Multiple Intelligence Options Project-Based Learning Varied Supplemental Activities Varied Journal Prompts or RAFT Writing Tiered Activities/Assignments Tiered Products Graphic Organizers Choice of Books/Activities Mini-Workshops to Reteach or Extend Think-Pair-Share by readiness or interest Use of Collaboration of Various Activities	Jigsaw Think-Tac-Toe Cubing Activities Exploration by Interest Flexible Grouping Goal-Setting with Students Homework Options Open-Ended Activities Use of Reading Buddies Varied Product Choices Stations/Centers Work Alone/Together

CONTENT STANDARD	SUGGESTED MATHEMATICAL PRACTICES	CRITICAL KNOWLEDGE & SKILLS
• 3.OA.A.1. Interpret products of whole numbers, e.g., interpret 5 x 7 as the total number of objects in 5 groups of 7 objects each. For example, describe and/or represent a context in which a total number of objects can be expressed as 5 x 7.	• MP 2 Reason abstractly and quantitatively. • MP.4 Model with mathematics.	*Students will be able to:* • interpret products of whole numbers as a total number of objects. • use repeated addition to find the total number of objects arranged in an array and in equal groups and compare to the result of multiplication. • describe a context in which a total number of objects is represented by a product. • interpret the product in the context of a real-world problem.

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• 3.OA.A.2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe and/or represent a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.	• MP 2 Reason abstractly and quantitatively. • MP.4 Model with mathematics.	*Students will be able to:* • interpret division of whole numbers as a number of equal shares or the number of groups when objects are divided equally. • use repeated subtraction to find the number of shares or the number of groups and compare to the result of division. • describe a context in which the number of shares or number of groups is represented with division. • interpret the quotient in the context of a real-world problem.
• 3.OA.A.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. *(benchmarked)	• MP.1 Make sense of problems and persevere in solving them. • MP.4 Model with mathematics.	*Students will be able to:* • multiply to solve word problems involving equal groups and arrays. • divide to solve word problems involving equal groups and arrays. • represent a word problem with a drawing showing equal groups, arrays, equal shares, and/or total objects. • represent a word problem with an equation.
• 3.OA.A.4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = ÷ 3, 6 × 6 = ?.	• MP 2 Reason abstractly and quantitatively. • MP.7 Look for and make use of structure.	*Students will be able to:* • determine which operation is needed to find the unknown. • multiply or divide, within 100, to find the unknown whole number in a multiplication or division equation.
• 3.OA.B.5. Apply properties of operations as strategies to multiply and divide. *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative*	• MP.3 Construct viable arguments and critique the reasoning of others. • MP.5 Use appropriate tools strategically. • MP.6 Attend to precision.	*Students will be able to:* • multiply whole numbers using the commutative property as a strategy. • multiply whole numbers using the associative property as a strategy.

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property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5× 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 =16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.) *[Students need not use the formal terms for these properties.] *[Limit to single digit factors and multipliers. 7 x 4 x 5 would exceed grade 3 expectations because it would result in a two-digit multiplier (28 x 5)]	• MP.7 Look for and make use of structure.	• use tiling to show that the area of a rectangle with whole-number side lengths *a* and *b* + *c* is the sum of *a* × *b* and *a* × *c*. • multiply whole numbers using the distributive property as a strategy.
• 3.OA.B.6. Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.	• MP.3 Construct viable arguments and critique the reasoning of others. • MP.6 Attend to precision. • MP.7 Look for and make use of structure.	*Students will be able to:* • write division number sentences as unknown factor problems. • solve division of whole numbers by finding the unknown factor.
• 3.OA.D.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. *(benchmarked)	• MP.1 Make sense of problems and persevere in solving them. • MP 2 Reason abstractly and quantitatively. • MP.3 Construct viable arguments and critique the reasoning of others. • MP 4. Model with mathematics • MP.5 Use appropriate tools strategically. • MP.6 Attend to precision.	*Students will be able to:* • represent the solution to two-step word problems with equations. • use a symbol to represent an unknown in an equation. • use rounding as an estimation strategy. • explain, using an estimation strategy, whether an answer is reasonable.

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● 3.OA.D.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	● MP.3 Construct viable arguments and critique the reasoning of others. ● MP.6 Attend to precision. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	*Students will be able to:* ● explain arithmetic patterns using properties of operations.

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UNIT 2 FOCUS
Subtraction Within 100: Fluency and Strategies

Unit Pacing: 2nd Marking Period - **Beginning of November - Middle of January**

- **Topic 5: Fluently Multiply and Divide Within 100**
  - Multiply and divide within 100
- **Topic 6: Connect Area to Multiplication and Addition**
  - Geometric measurement: understand concepts of area and relate area to multiplication and to addition
- **Topic 16: Solve Perimeter Problems**
  - Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures
- **Topic 7: Represent and Interpret Data**
  - Represent and interpret data

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE
• *3.OA.A.3* (Topics 5, 7) • **3.OA.C.7** (Topic 5) • *3.OA.D.8* (Topic 7) • *3.OA.D.9* (Topic 5) • **3.MD.B.3** (Topic 7) • **3.MD.C.5a, b** (Topic 6) • **3.MD.C.6** (Topic 6) • **3.MD.C.7a, b, c, d** (Topics 6, 16) • **3.MD.D.8** (Topics 16, 7)	**MP.1** Make sense of problems and persevere in solving them. **MP.2** Reason abstractly and quantitatively. **MP.3** Construct viable arguments and critique the reasoning of others. **MP.4** Model with mathematics. **MP.5** Use appropriate tools strategically. **MP.6** Attend to precision. **MP.7** Look for and make use of structure. **MP.8** Look for and express regularity in repeated reasoning.

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INTERDISCIPLINARY CONNECTIONS	UNIT 2 GENERAL ASSESSMENTS

21st Century Skills: Career Ready Practice Standards:
CRP1, CRP2, CRP4, CRP6, CRP8, CRP11
 	
Literature Connection:
Interactive Math Stories for each topic from Pearson 2.0
 	
STEM Connection:
Math and Science Activities (Topic 5, 6, 16, 7)
	• enVision Topic 5 Assessment: Fluently Multiply and Divide Within 100
	  ○ 3.OA.A.3; 3.OA.C.7; 3.OA.D.9
	• enVision Topic 6 Assessment: Connect Area to Multiplication and Addition
	  ○ 3.MD.C.5a, b; 3,MD.C.6; 3.MD.C.7a, b, c, d
	• enVision Topic 16 Assessment: Solve Perimeter Problems
	  ○ 3.MD.C.7a, b, c, d; 3.MD.D.8
	• enVision Topic 7 Assessment: Represent and Interpret Data
	  ○ 3.OA.A.3; 3.OA.D.8; 3.MD.B.3; 3.MD.D.8
	
	• Possible Formative Assessments:
	  ○ Lesson's Diagnostic Questions: (indicated in Teacher's Edition - large pink check mark)
	  ○ Exit Ticket: Lesson Quick Check (Digital Resource)
	  ○ Topic Fluency Practice Activity (Student Textbook)
	  ○ Topic Vocabulary Review (Student Textbook)

RESOURCES	**TECHNOLOGY INTEGRATION**
EnVision Materials for Topic 5, 6, 16, 7 including student edition worksheets, problem solving mat, interactive math story, vocabulary cards, and center ideas which are listed in each topic 3.OA.A.3 Analyzing Word Problems Involving Multiplication 3.OA.A.3 Two Interpretations of Division 3.OA.C.7 Kiri's Multiplication Matching Game 3.OA.D.8 The Class Trip 3.OA.D.8 The Stamp Collection 3.OA.D.9 Addition Patterns 3.MD.C.6 Finding the Area of Polygons 3.MD.C.7a India's Bathroom Tiles 3.MD.C.7c Introducing the Distributive Property	**STANDARDS** 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose. 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums). **RESOURCES** • Animated Glossary • BrainPop • BrainPop Jr. • Educreations • enVisions 2.0 • Google Classroom • Ixl.com • Kahoot

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3.MD.C.7d Three Hidden Rectangles 3.MD.D Shapes and their Insides	• Khan Academy • Learn Zillion • Math Playground • Measuring Up Live • Popplet • Prodigy • Scholastic Study Jams • SeeSaw • That Quiz • XtraMath

KEY VOCABULARY

Topic 5: No new vocabulary introduced
Topic 6: area, unit square, square unit, estimate
Topic 16: No new vocabulary introduced
Topic 7: data, scaled picture graph, scale, key, scaled bar graph, frequency table, survey

GENERAL CONSIDERATIONS FOR DIVERSE LEARNERS

English Language Learners

- WIDA Can Do Descriptors for Grades 2-3*
- WIDA Essential Actions Handbook
- FABRIC Paradigm
- Wall Township ESL Grading Protocol

*Use WIDA Can Do Descriptors in coordination with Student Language Portraits (SLPs).

Potential Accommodations for ELLs

- Personal glossary
- Text-to-speech
- Extended time

Students Receiving Special Education Services

- New Jersey Tiered System of Supports
- National Center on Universal Design for Learning - About UDL
- UDL Checklist
- UDL Key Terms

Students within this class receiving Special Education/Section 504 programming have specific goals and objectives, as well as accommodations and modifications outlined within their Individualized Education Plans (IEP)/504 Plans due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, instruction is differentiated based upon the student's needs. The IEP/504 Plan acts as a supplemental curriculum guide inclusive of

Advanced Learners

- Knowledge and Skill Standards in Gifted Education for All Teachers
- Pre-K-Grade 12 Gifted Programming Standards
- Gifted Programming Glossary of Terms

Potential Accommodations for Advanced Learners

- Use of high level academic vocabulary/texts
- Problem-based learning
- Pre-assess to condense curriculum
- Interest-based research

- Simplified / verbal instructions
- Frequent breaks
- Small group/One to one
- Additional time
- Review of directions
- Student restates information
- Extra visual and verbal cues and prompts
- Preferential seating
- Verbal and visual cues regarding directions and staying on task
- Checklists
- Immediate feedback

instructional strategies that support each specific learner.

Potential Accommodations for Special Education

Presentation accommodations:
- Listen to audio recordings instead of reading text
- Pre-teach unknown vocabulary through pictures or videos, and relate to prior knowledge
- Work with fewer items per page and/or materials in a larger print size
- Use a visual blocker
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instructions/picture cues

Response accommodations:
- Give responses in a form (oral or written) that's easier for him/her
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to give responses in class
- Use a calculator or table of "math facts"

Setting accommodations:
- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he/she learns best (for example, near the teacher)
- Take a test in small group setting

Timing accommodations:
- Take more time to complete a task or a test
- Have extra time to process oral information and directions
- Take frequent breaks, such as after completing a task

Assignment modifications:
- Complete fewer or different homework problems than peers
- Shorten assignment
- Answer fewer or different test questions

- Authentic problem-solving
- Homogeneous grouping opportunities

Students with 504 Plans

Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.

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	● Create alternate projects or assignments	

At Risk Learners / Differentiation Strategies

Alternative Assessments Choice Boards Games and Tournaments Group Investigations Guided Reading Learning Contracts Leveled Rubrics Literature Circles Multiple Texts Personal Agendas	Independent Research & Projects Multiple Intelligence Options Project-Based Learning Varied Supplemental Activities Varied Journal Prompts or RAFT Writing Tiered Activities/Assignments Tiered Products Graphic Organizers Choice of Books/Activities Mini-Workshops to Reteach or Extend Think-Pair-Share by readiness or interest Use of Collaboration of Various Activities	Jigsaw Think-Tac-Toe Cubing Activities Exploration by Interest Flexible Grouping Goal-Setting with Students Homework Options Open-Ended Activities Use of Reading Buddies Varied Product Choices Stations/Centers Work Alone/Together

CONTENT STANDARD	SUGGESTED MATHEMATICAL PRACTICES	CRITICAL KNOWLEDGE & SKILLS
● 3.OA.A.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. *(benchmarked)	● MP.1 Make sense of problems and persevere in solving them. ● MP.4 Model with mathematics.	*Students will be able to:* ● multiply to solve word problems involving equal groups and arrays. ● divide to solve word problems involving equal groups and arrays. ● represent a word problem with a drawing showing equal groups, arrays, equal shares, and/or total objects. ● represent a word problem with an equation.
● 3.OA.C.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3,	● MP 2 Reason abstractly and quantitatively. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	*Students will be able to:* ● multiply and divide within 100 with accuracy and efficiency.

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know from memory all products of two one-digit numbers. *(benchmarked)		
● 3.OA.D.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. *(benchmarked)	● MP.1 Make sense of problems and persevere in solving them. ● MP 2 Reason abstractly and quantitatively. ● MP.3 Construct viable arguments and critique the reasoning of others. ● MP 4. Model with mathematics ● MP.5 Use appropriate tools strategically. ● MP.6 Attend to precision.	*Students will be able to:* ● represent the solution to two-step word problems with equations. ● use a symbol to represent an unknown in an equation. ● use rounding as an estimation strategy. ● explain, using an estimation strategy, whether an answer is reasonable.
● 3.OA.D.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	● MP.3 Construct viable arguments and critique the reasoning of others. ● MP.6 Attend to precision. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	*Students will be able to:* ● explain arithmetic patterns using properties of operations.
● 3.MD.B.3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.	● MP.1 Make sense of problems and persevere in solving them. ● MP 2 Reason abstractly and quantitatively. ● MP.4 Model with mathematics.	*Students will be able to:* ● draw scaled picture graphs. ● draw scaled bar graphs. ● analyze, interpret and create bar graphs and pictographs in real world situations. ● solve “how many more” and “how many less” problems using scaled bar graphs.
● 3.MD.C.5. Recognize area as an attribute of plane figures and understand concepts of area measurement.	● MP 2 Reason abstractly and quantitatively. ● MP.4 Model with mathematics.	*Students will be able to:* ● count square units in order to measure the area of a figure. ● use unit squares of centimeters, meters, inches, feet, and other units to measure area.

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3.MD.C.5a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. 3.MD.C.5b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units. ● 3.MD.C.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and non-standard units).	● MP.5 Use appropriate tools strategically. ● MP.7 Look for and make use of structure.	
● 3.MD.C.7. Relate area to the operations of multiplication and addition. 3.MD.C.7a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. 3.MD.C.7b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	● MP.4 Model with mathematics. ● MP.5 Use appropriate tools strategically.	*Students will be able to:* ● tile a rectangle with unit squares. ● multiply side lengths of a rectangle to find its area and compare the result to that found by tiling the rectangle with unit squares. ● solve real world and mathematical problems involving measurement. ● represent a rectangular area as the product of whole-numbers.
● 3.MD.D.8. Solve real world and mathematical problems involving perimeters of polygons, including	● MP.1 Make sense of problems and persevere in solving them. ● MP 2 Reason abstractly and	*Students will be able to:* ● determine the perimeter of various plane shapes and irregular shapes given the side lengths.

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finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	quantitatively. ● MP.4 Model with mathematics. ● MP.5 Use appropriate tools strategically.	● determine the unknown side length give the perimeter and other sides. ● show rectangles having the same perimeter and different areas. ● show rectangles having different perimeters and the same area.

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UNIT 3 FOCUS
Fractions and Measurement

Unit Pacing: 3rd Marking Period - **Middle of January - End of March**

- **Topic 11: Use Operations with Whole Numbers to Solve Problems**
  - Solve problems involving the four operations, and identify and explain patterns in arithmetic
- **Topic 12: Understand Fractions as Numbers**
  - Develop understanding of fractions as numbers
- **Topic 13: Fraction Equivalence and Comparison**
  - Develop understanding of fractions as numbers
- **Topic 14: Solve Time, Capacity, and Mass Problems**
  - Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE
• *3.OA.D.8* (Topic 11) • **3.NF.A.1** (Topic 12) • **3.NF.A.2a. b** (Topic 12) • **3.NF.A.3a, b, c, d** (Topics 12, 13) • **3.MD.A.1** (Topic 14) • **3.MD.A.2** (Topic 14) • **3.MD.B.4** (Topic 12 • **3.G.A.2** (Topic 12)	**MP.1** Make sense of problems and persevere in solving them. **MP.2** Reason abstractly and quantitatively. **MP.3** Construct viable arguments and critique the reasoning of others. **MP.4** Model with mathematics. **MP.5** Use appropriate tools strategically. **MP.6** Attend to precision. **MP.7** Look for and make use of structure. **MP.8** Look for and express regularity in repeated reasoning.

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INTERDISCIPLINARY CONNECTIONS	UNIT 3 GENERAL ASSESSMENTS

21st Century Skills: Career Ready Practice Standards:
CRP1, CRP2, CRP4, CRP6, CRP8, CRP11
 	
Literature Connection:
Interactive Math Stories for each Topic from Pearson 2.0
The Warlord's Puzzle by Virginia Pilegard
Full House: An Invitation to Fractions by Dayle Ann Dodds
Picture Pie by Ed Emberley
Grandfather Tang's Story by Ann Tompert
 	
STEM Connection:
Math and Science Activities (Topic 11, 12, 13, 14)
	• enVision Topic 11 Assessment: Use Operations with Whole Numbers to Solve Problems
	  ○ 3.OA.D.8
	• enVision Topic 12 Assessment: Understand Fractions as Numbers
	  ○ 3.NF.A.1; 3.NF.A.2.a, b; 3.NF.A.3c; 3.MD.B.4; 3.G.A.2
	• enVision Topic 13 Assessment: Fraction Equivalence and Comparison
	  ○ 3.NF.A.3a, b, c, d
	• enVision Topic 14 Assessment: Solve Time, Capacity, and Mass Problems
	  ○ 3.MD.A.1; 3.MD.A.2
	
	• Possible Formative Assessments:
	  ○ Lesson's Diagnostic Questions: (indicated in Teacher's Edition - large pink check mark)
	  ○ Exit Ticket: Lesson Quick Check (Digital Resource)
	  ○ Topic Fluency Practice Activity (Student Textbook)
	  ○ Topic Vocabulary Review (Student Textbook)

RESOURCES	**TECHNOLOGY INTEGRATION**
EnVision Materials for Topic 11, 12, 13, 14 including student edition worksheets, problem solving mat, interactive math story, vocabulary cards, and center ideas which are listed in each topic 3.OA.D.8 The Class Trip 3.OA.D.8 The Stamp Collection 3.NF.A.1 Naming the Whole for a Fraction 3.NF.A.2 Closest to 1/2 3.NF.A.2 Find 1 Starting from 5/3 3.NF.A.2 Locating Fractions Greater than One on the Number Line 3.NF.A.3b, 3.G.A.2, 3.MD.C.6 Halves, thirds, and sixths 3.MD.A.1 Dajuana's Homework	**STANDARDS** 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose. 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums). **RESOURCES** • Animated Glossary • BrainPop • BrainPop Jr. • Educreations • enVisions 2.0 • Google Classroom • Ixl.com

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3.MD.A.2 How Heavy? 3.G.A.2 Representing Half of a Circle	• Kahoot • Khan Academy • Learn Zillion • Math Playground • Measuring Up Live • Popplet • Prodigy • Scholastic Study Jams • SeeSaw • That Quiz • XtraMath

KEY VOCABULARY

Topic 11: hundred, thousand, digits, place-value chart, expanded form, standard form, word form, compare, greater than, less than, equals, increase, decrease
Topic 12: No new vocabulary introduced
Topic 13: No new vocabulary introduced
Topic 14: estimate, inch (in), foot (ft), yard (yd), length, height, nearest inch, centimeter (cm), meter (m), nearest centimeter

GENERAL CONSIDERATIONS FOR DIVERSE LEARNERS

English Language Learners	Students Receiving Special Education Services	Advanced Learners
• WIDA Can Do Descriptors for Grades 2-3* • WIDA Essential Actions Handbook • FABRIC Paradigm • Wall Township ESL Grading Protocol *Use WIDA Can Do Descriptors in coordination with Student Language Portraits (SLPs). **Potential Accommodations for ELLs** • Personal glossary • Text-to-speech	• New Jersey Tiered System of Supports • National Center on Universal Design for Learning - About UDL • UDL Checklist • UDL Key Terms Students within this class receiving Special Education/Section 504 programming have specific goals and objectives, as well as accommodations and modifications outlined within their Individualized Education Plans (IEP)/504 Plans due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, instruction is differentiated based upon the student's needs. The IEP/504	• Knowledge and Skill Standards in Gifted Education for All Teachers • Pre-K-Grade 12 Gifted Programming Standards • Gifted Programming Glossary of Terms **Potential Accommodations for Advanced Learners** • Use of high level academic vocabulary/texts • Problem-based learning • Pre-assess to condense curriculum

Grade 3 Math Curricular Framework

- Extended time
- Simplified / verbal instructions
- Frequent breaks
- Small group/One to one
- Additional time
- Review of directions
- Student restates information
- Extra visual and verbal cues and prompts
- Preferential seating
- Verbal and visual cues regarding directions and staying on task
- Checklists
- Immediate feedback

Plan acts as a supplemental curriculum guide inclusive of instructional strategies that support each specific learner.

Potential Accommodations for Special Education

Presentation accommodations:
- Listen to audio recordings instead of reading text
- Pre-teach unknown vocabulary through pictures or videos, and relate to prior knowledge
- Work with fewer items per page and/or materials in a larger print size
- Use a visual blocker
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instructions/picture cues

Response accommodations:
- Give responses in a form (oral or written) that's easier for him/her
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to give responses in class
- Use a calculator or table of "math facts"

Setting accommodations:
- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he/she learns best (for example, near the teacher)
- Take a test in small group setting

Timing accommodations:
- Take more time to complete a task or a test
- Have extra time to process oral information and directions
- Take frequent breaks, such as after completing a task

Assignment modifications:
- Complete fewer or different homework problems than peers
- Shorten assignment

- Interest-based research
- Authentic problem-solving
- Homogeneous grouping opportunities

Students with 504 Plans

Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.

Grade 3 Math Curricular Framework

	• Answer fewer or different test questions • Create alternate projects or assignments	

At Risk Learners / Differentiation Strategies

Alternative Assessments Choice Boards Games and Tournaments Group Investigations Guided Reading Learning Contracts Leveled Rubrics Literature Circles Multiple Texts Personal Agendas	Independent Research & Projects Multiple Intelligence Options Project-Based Learning Varied Supplemental Activities Varied Journal Prompts or RAFT Writing Tiered Activities/Assignments Tiered Products Graphic Organizers Choice of Books/Activities Mini-Workshops to Reteach or Extend Think-Pair-Share by readiness or interest Use of Collaboration of Various Activities	Jigsaw Think-Tac-Toe Cubing Activities Exploration by Interest Flexible Grouping Goal-Setting with Students Homework Options Open-Ended Activities Use of Reading Buddies Varied Product Choices Stations/Centers Work Alone/Together

CONTENT STANDARD	SUGGESTED MATHEMATICAL PRACTICES	CRITICAL KNOWLEDGE & SKILLS
• 3.OA.D.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. *(benchmarked)	• MP.1 Make sense of problems and persevere in solving them. • MP 2 Reason abstractly and quantitatively. • MP.3 Construct viable arguments and critique the reasoning of others. • MP 4. Model with mathematics • MP.5 Use appropriate tools strategically. • MP.6 Attend to precision.	*Students are able to:* • represent the solution to two-step word problems with equations. • use a symbol to represent an unknown in an equation. • use rounding as an estimation strategy. • explain, using an estimation strategy, whether an answer is reasonable.
• 3.NF.A.1. Understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a*/*b* as the	• MP 2 Reason abstractly and quantitatively. • MP.5 Use appropriate tools strategically.	*Students are able to:* • partition rectangles, and other shapes, into halves, thirds, fourths, sixths and eighths. • identify the fractional name of each part.

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quantity formed by *a* parts of size 1/*b*. *[Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.] ● 3.G.A.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts having equal area and describe the area of each part as 1/4 of the area of the shape.*	● MP.6 Attend to precision. ● MP.7 Look for and make use of structure.	● model and explain that a fraction *a*/*b* is the quantity formed by *a* parts of size 1/*b* (For example, 10/2 is 10 parts and each part is of size ½).
● 3.NF.A.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram. 3.NF.A.2a. Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line. 3.NF.A.2b. Represent a fraction *a*/*b* on a number line diagram by marking off *a* lengths 1/*b* from 0. Recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line. *[Grade 3	● MP.5 Use appropriate tools strategically.	*Students are able to:* ● partition a number line into parts of equal sizes between 0 and 1 (halves, thirds, fourths sixths and eighths). ● plot unit fractions on the number line. ● identify multiple parts (of length 1/b) on the number line. ● plot a fraction on the number line by marking off multiple parts of size 1/b. ● plot fractions equivalent to whole numbers including 0 and up to 5.

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expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.]		
• 3.NF.A.3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size 3.NF.A.3a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. 3.NF.A.3b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model. 3.NF.A.3c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.* 3.NF.A.3d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when	• MP 2 Reason abstractly and quantitatively. • MP.3 Construct viable arguments and critique the reasoning of others. • MP.4 Model with mathematics. • MP.5 Use appropriate tools strategically. • MP.7 Look for and make use of structure.	*Students are able to:* • find equivalent fractions (limited to fractions with denominators 2, 3, 4, 6, and 8). • explain why two fractions are equivalent; use a visual fraction model to support explanation. • write whole numbers as fractions. • identify fractions that are equivalent to whole numbers. • compare two fractions having the same numerator by reasoning about their size. • compare two fractions having the same denominator by reasoning about their size. • explain why comparing fractions that do not have the same whole is not valid (reason about their size and support reasoning with a model). • use <, =, and > symbols to write comparisons of fractions and justify conclusions with a visual fraction model.

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the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. *[Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.]		
• 3.MD.A.1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes. (e.g., by representing the problem on a number line diagram)	• MP.1 Make sense of problems and persevere in solving them. • MP 2 Reason abstractly and quantitatively. • MP.4 Model with mathematics. • MP.5 Use appropriate tools strategically.	*Students are able to:* • tell time to the nearest minute using digital and analog clocks. • write time to the nearest minute using analog clocks. • choose appropriate strategies to solve real world problems involving time. • use the number line as a visual model to determine intervals of time as *jumps* on a number line. • measure time intervals.
• 3.MD.A.2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units.	• MP.1 Make sense of problems and persevere in solving them. • MP 2 Reason abstractly and quantitatively. • MP.4 Model with mathematics. • MP.5 Use appropriate tools strategically. • MP.6 Attend to precision.	*Students are able to:* • measure and read a scale to estimate volume. • measure and read a scale to estimate mass. • add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes.
• 3.MD.B.4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is	• MP 2 Reason abstractly and quantitatively. • MP.5 Use appropriate tools strategically.	*Students are able to:* • measure length using rulers marked with inch, quarter inch and half inch • generate measurement data by measuring length and create a line plot of the data

marked off in appropriate units— whole numbers, halves, or quarters.		● accurately measure several small objects using a standard ruler and display findings on a line plot ● display data on line plots with horizontal scales in whole numbers, halves, and quarters

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UNIT 4 FOCUS
Review of Shapes, Addition, Subtraction, and Multiplication

Unit Pacing: 4th Marking Period - **End of March - Middle of June**

- **Topic 15: Attributes of Two-Dimensional Shapes**
  - Reason with shapes and their attributes
- **Topic 8: Use Strategies and Properties to Add and Subtract**
  - Use place value understanding and properties of operations to perform multi-digit arithmetic
- **Topic 9: Fluently Add and Subtract Within 1,000**
  - Use place value understanding and properties of operations to perform multi-digit arithmetic
- **Topic 10: Multiply by Multiples of 10**
  - Use place value understanding and properties of operations to perform multi-digit arithmetic

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE
• *3.OA.D.9* (Topic 8) • **3.NBT.A.1** (Topic 8) • **3.NBT.A.2** (Topics 8, 9) • **3.NBT.A.3** (Topic 10) • *3.MD.C.5b* (Topic 15) • **3.G.A.1** (Topic 15)	**MP.1** Make sense of problems and persevere in solving them. **MP.2** Reason abstractly and quantitatively. **MP.3** Construct viable arguments and critique the reasoning of others. **MP.4** Model with mathematics. **MP.5** Use appropriate tools strategically. **MP.6** Attend to precision. **MP.7** Look for and make use of structure.

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	MP.8 Look for and express regularity in repeated reasoning.
INTERDISCIPLINARY CONNECTIONS	**UNIT 4 GENERAL ASSESSMENTS**

21st Century Skills: Career Ready Practice Standards:
CRP1, CRP2, CRP4, CRP6, CRP8, CRP11
 	
Literature Connection:
Interactive Math Stories for each Topic from Pearson 2.0
The Warlord's Puzzle by Virginia Pilegard
 	
STEM Connection:
Math and Science Activities (Topic 15, 8, 9 10)
	• enVision Grade 3 End-of-Year Benchmark Assessment
	• enVision Topic 15 Assessment: Attributes of Two-Dimensional Shapes
	  ○ 3.MD.C.5b; 3.G.A.1
	• enVision Topic 8 Assessment: Use Strategies and Properties to Add and Subtract
	  ○ 3.OA.D.9; 3.NBT.A.1; 3.NBT.A.2
	• enVision Topic 9 Assessment: Fluently Add and Subtract Within 1,000
	  ○ 3.NBT.A.2
	• enVision Topic 10 Assessment: Multiply by Multiples of 10
	  ○ 3.NBT.A.3
	
	• Possible Formative Assessments:
	  ○ Lesson's Diagnostic Questions: (indicated in Teacher's Edition - large pink check mark)
	  ○ Exit Ticket: Lesson Quick Check (Digital Resource)
	  ○ Topic Fluency Practice Activity (Student Textbook)
	  ○ Topic Vocabulary Review (Student Textbook)

RESOURCES	**TECHNOLOGY INTEGRATION**
EnVision Materials for Topic 15, 8, 9, and 10 including student edition worksheets, problem solving mat, interactive math story, vocabulary cards, and center ideas which are listed in each topic 3.OA.D.9 Addition Patterns 3.NBT.A.1 Rounding to 50 or 500 3.NBT.A.1 Rounding to the Nearest Ten and Hundred 3.NBT.A.2, 3.MD.B.3, 3.OA.A.3 Classroom Supplies 3.NBT.A.3 How Many Colored Pencils?	**STANDARDS** 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose. 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums). **RESOURCES** • Animated Glossary • BrainPop • BrainPop Jr. • Educreations

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KEY VOCABULARY

Topic 15: polygon, side, quadrilateral, angle, vertex, trapezoid, parallel sides, parallelogram, rectangle, right angle, rhombus, square, convex, concave
Topic 8: Associative (Grouping) Property of Addition, Commutative (Order) Property of Addition, Identify *Zero) Property of Addition, round, place value, compatible numbers
Topic 9: regroup
Topic 10: open number line

GENERAL CONSIDERATIONS FOR DIVERSE LEARNERS

English Language Learners	Students Receiving Special Education Services	Advanced Learners
• WIDA Can Do Descriptors for Grades 2-3* • WIDA Essential Actions Handbook • FABRIC Paradigm • Wall Township ESL Grading Protocol *Use WIDA Can Do Descriptors in coordination with Student Language Portraits (SLPs).	• New Jersey Tiered System of Supports • National Center on Universal Design for Learning - About UDL • UDL Checklist • UDL Key Terms Students within this class receiving Special Education/Section 504 programming have specific goals and objectives, as well	• Knowledge and Skill Standards in Gifted Education for All Teachers • Pre-K-Grade 12 Gifted Programming Standards • Gifted Programming Glossary of Terms **Potential Accommodations for Advanced Learners**

Grade 3 Math Curricular Framework

Potential Accommodations for ELLs

- Personal glossary
- Text-to-speech
- Extended time
- Simplified / verbal instructions
- Frequent breaks
- Small group/One to one
- Additional time
- Review of directions
- Student restates information
- Extra visual and verbal cues and prompts
- Preferential seating
- Verbal and visual cues regarding directions and staying on task
- Checklists
- Immediate feedback

as accommodations and modifications outlined within their Individualized Education Plans (IEP)/504 Plans due to an identified disability and/or diagnosis. In addition to exposure to the general education curriculum, instruction is differentiated based upon the student's needs. The IEP/504 Plan acts as a supplemental curriculum guide inclusive of instructional strategies that support each specific learner.

Potential Accommodations for Special Education

Presentation accommodations:

- Listen to audio recordings instead of reading text
- Pre-teach unknown vocabulary through pictures or videos, and relate to prior knowledge
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- Use a visual blocker
- Use visual presentations of verbal material, such as word webs and visual organizers
- Be given a written list of instructions/picture cues

Response accommodations:

- Give responses in a form (oral or written) that's easier for him/her
- Dictate answers to a scribe
- Capture responses on an audio recorder
- Use a spelling dictionary or electronic spell-checker
- Use a word processor to give responses in class
- Use a calculator or table of "math facts"

Setting accommodations:

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he/she learns best (for example, near the teacher)
- Take a test in small group setting

Timing accommodations:

- Take more time to complete a task or a test
- Have extra time to process oral information and directions

- Use of high level academic vocabulary/texts
- Problem-based learning
- Pre-assess to condense curriculum
- Interest-based research
- Authentic problem-solving
- Homogeneous grouping opportunities

Students with 504 Plans

Teachers are responsible for implementing designated services and strategies identified on a student's 504 Plan.

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	● Take frequent breaks, such as after completing a task **Assignment modifications**: ● Complete fewer or different homework problems than peers ● Shorten assignment ● Answer fewer or different test questions ● Create alternate projects or assignments	

At Risk Learners / Differentiation Strategies

Alternative Assessments Choice Boards Games and Tournaments Group Investigations Guided Reading Learning Contracts Leveled Rubrics Literature Circles Multiple Texts Personal Agendas	Independent Research & Projects Multiple Intelligence Options Project-Based Learning Varied Supplemental Activities Varied Journal Prompts or RAFT Writing Tiered Activities/Assignments Tiered Products Graphic Organizers Choice of Books/Activities Mini-Workshops to Reteach or Extend Think-Pair-Share by readiness or interest Use of Collaboration of Various Activities	Jigsaw Think-Tac-Toe Cubing Activities Exploration by Interest Flexible Grouping Goal-Setting with Students Homework Options Open-Ended Activities Use of Reading Buddies Varied Product Choices Stations/Centers Work Alone/Together

CONTENT STANDARD	SUGGESTED MATHEMATICAL PRACTICES	CRITICAL KNOWLEDGE & SKILLS
● 3.OA.D.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	● MP.3 Construct viable arguments and critique the reasoning of others. ● MP.6 Attend to precision. ● MP.7 Look for and make use of structure. ● MP.8 Look for and express regularity in repeated reasoning.	*Students will be able to:* ● explain arithmetic patterns using properties of operations.

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● 3.NBT.A.1. Round whole numbers to the nearest 10 or 100.	● MP 2 Reason abstractly and quantitatively.	*Students are able to:* ● use number lines and a hundreds charts to explain rounding numbers to the nearest 10 and 100. ● round a whole number to the nearest 10. ● round a whole number to the nearest 100.
● 3.NBT.A.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. *(benchmarked)	● MP 2 Reason abstractly and quantitatively.	*Students are able to:* ● add and subtract two 2-digit whole numbers <u>within 100</u> with accuracy and efficiency
● 3.NBT.A.3. Multiply one-digit whole numbers by multiples of 10 in the range of 10 to 90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	● MP 2 Reason abstractly and quantitatively.	*Students are able to:* ● multiply to determine the total number of groups of ten. ● multiply one-digit whole numbers by multiples of 10.
● 3.MD.C.5. Recognize area as an attribute of plane figures and understand concepts of area measurement. 3.MD.C.5b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.	● MP 2 Reason abstractly and quantitatively. ● MP.4 Model with mathematics. ● MP.5 Use appropriate tools strategically. ● MP.7 Look for and make use of structure.	*Students are able to:* ● count square units in order to measure the area of a figure. ● use unit squares of centimeters, meters, inches, feet, and other units to measure area.
● 3.G.A.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and	● MP.5 Use appropriate tools strategically. ● MP.6 Attend to precision.	*Students are able to:* ● classify and sort shapes by attributes.

others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals.	● MP.7 Look for and make use of structure.	● explain why rhombuses, rectangles, and squares are examples of quadrilaterals. ● draw examples of quadrilaterals.