### HILLSBOROUGH TOWNSHIP SCHOOL DISTRICT

### MATHEMATICS CURRICULUM

Grade 3

July, 2020

#### Course Overview Grade 3

The third grade mathematics program emphasizes the following content strands as they align with the New Jersey Student Learning Standards (NJSLS) in mathematics: operations and algebraic thinking, number and operations in base 10, number and operations in fractions, measurement and data, and geometry. The NJLS for Mathematical Practice: make sense of problems and persevere in solving them; reason abstractly and quantitatively; construct viable arguments and critique the reasoning of others; model with mathematics; use appropriate tools strategically; attend to precision; look for and make use of structure; and look for and express regularity in repeated reasoning are embedded in the daily teaching and learning. The content is presented using a problem solving approach designed to develop critical thinking skills while embedding the mathematical processes into the daily teaching and learning. Practice of basic skills is ongoing through a variety of program routines and activities. Topics are revisited regularly and practice is distributed over time to facilitate full concept development. Activities explore a wide variety of content with opportunities for students to apply basic fact skills, geometry, measurement and algebra. Program implementation and assessment offers enrichment and reinforcement based on individual student needs. The third grade mathematics program helps prepare students to take the New Jersey Student Learning Assessment or any other new generation assessment. Successful completion of the grade three mathematics program prepares students for entry into the grade four mathematics program.

Unit Title: Unit 1 Multiplication and Time	Time Frame/Pacing: 21
Essential Questions  How can measurements be used to solve problems?  How do operations affect numbers?	
<ul> <li>Enduring Understandings</li> <li>Numeric fluency includes both the understanding of and the ability to</li> <li>Computational fluency includes understanding the meaning and the a</li> <li>A quantity can be represented numerically in a variety of ways</li> </ul>	
Standards Taught and Assessed  3.OA.A Represent and solve problems involving multiplication an 3.MD.A Solve problems involving measurement and estimation of 3.NBT.A Use place value understanding and properties of operation	f intervals of time, liquid volumes, and masses of objects.
<ul> <li>Highlighted Interdisciplinary Connections</li> <li>ELA</li> <li>SL.3.1. Engage effectively in a range of collaborative discussions (on topics and texts, building on others' ideas and expressing their own of SL.3.3. Ask and answer questions about information from a speaker,</li> <li>W.3.2. Write informative/explanatory texts to examine a topic and conrelated information together; include text features (e.g.: illustrations, or RI.3.7. Use information gained from text features (e.g., illustrations, understanding of the text (e.g., where, when, why, and how key event)</li> </ul>	offering appropriate elaboration and detail.  nvey ideas and information clearly. A. Introduce a topic and group diagrams, captions) when useful to support comprehension.  maps, photographs) and the words in a text to demonstrate
<ul> <li>Highlighted Career Ready Practices and 21st Century Themes and Skill</li> <li>9.4.5.CT.3: Describe how digital tools and technology may be used t</li> <li>9.4.5.CT.4: Apply critical thinking and problem-solving strategies to and global (e.g., 6.1.5.CivicsCM.3).</li> </ul>	-

☐ Supporting Cluster

Major Cluster

Key:

#### **Social Emotional Learning Competencies**

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment  • 3.OA.A 3.MD.A 3.NBT.A		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504) Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/Accommod ations (ELL, Special Education, Gifted, At-Risk of Failure, 504)
3.OA.A Represent and solve problems involving multiplication and division	SMP4 Model with mathematics  SMP5 Use appropriate tools strategically	Show how you would represent groups in an array or other drawing and write the corresponding number model.	Practice pages with modeling number stories involving multiplication/division  Use counters, drawings, repeated addition and/or skip counting to solve equal groups number stories and record number models.	Small group support, manipulative tools, and specific other accommodations/modificati ons per a student's IEP or 504 plan
3.MD.A Solve problems involving	SMP4 Model with mathematics	Have students show a given time on their clock and find elapsed time	Practice pages with telling time to the nearest 5 minute	

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measurement and estimation of intervals of time, liquid volumes, and masses of objects.	SMP5 Use appropriate tools strategically	between two times.	Use an analog clock to tell time to the nearest minute and calculate elapsed time, represent and interpret data on a scaled bar graph, estimate and compare masses	
23.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic	SMP4 Model with mathematics  SMP5 Use appropriate tools strategically	Use the number grid to find the difference between two numbers.  Use a number grid to round a number to the nearest 10.	Practice pages with using a number grid to find the difference between two numbers  Use a number grid, a number line, counters and manipulatives to solve multi-digit operations.	
Benchmark Assessment  • Benchmark 1		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		time and specific other
Summative Assessment(s)  • Unit 1 Checking Progress • Unit 1 Open Constructed Response		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		time and specific other

Key: Major Cluster

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Unit Title: Unit 2 Multiplication and Division	Time Frame/Pacing: 20			
<ul> <li>Essential Questions</li> <li>How do operations affect numbers?</li> <li>How do mathematical ideas interconnect and build on one another to produce a coherent whole?</li> <li>What makes computational strategy both effective and efficient?</li> </ul>				
<ul> <li>Enduring Understandings</li> <li>Numeric fluency includes both the understanding of and the ability to appropriately</li> <li>Context is critical when using estimation</li> <li>Computational fluency includes understanding the meaning and the appropriate use</li> </ul>				
Standards Taught and Assessed  3.OA.A Represent and solve problems involving multiplication and division 3.OA.D Solve problems involving the four operations, and identify and explain and 3.NBT.A Use place value understanding and properties of operations to perform				
<ul> <li>Highlighted Interdisciplinary Connections</li> <li>ELA</li> <li>SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.</li> <li>SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.</li> <li>RL.3.1. Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</li> </ul>				
<ul> <li>Highlighted Career Ready Practices and 21st Century Themes and Skill</li> <li>9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving properties of individuals and resources (e.g., can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).</li> <li>9.4.5.CT.3: Describe how digital tools and technology may be used to solve problem 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different type and global (e.g., 6.1.5.CivicsCM.3).</li> </ul>	school, community agencies, governmental, online) that			

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#### **Social Emotional Learning Competencies**

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment  • 3.OA.A 3.OA.D 3.NBT.A		<ul> <li>Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)</li> <li>Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan</li> </ul>		
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/Acco mmodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)
and solve problems involving multiplication and division	SMP 1 Make sense of problems and persevere in solving them  SMP 2 Reason abstractly and quantitatively	Show how you would represent groups in an array or other drawing and write the corresponding number model.	Practice pages with modeling number stories involving multiplication/division.  Use number models, frame and arrows diagrams, and arrays to solve number stories.  Use arrays to practice division with and without remainders.	Small group support, manipulative tools, and specific other accommodations/mod ifications per a student's IEP or 504 plan
3.OA.D Solve problems involving	SMP 1 Make sense of problems and persevere in	Use diagrams or other drawings to solve addition	Practice pages with number stories involving four	

Key: Major Cluster

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the four operations, and identify and explain patterns in arithmetic	solving them  SMP 2 Reason abstractly and quantitatively	and subtraction problems.	operations.  Use counters, diagrams, arrays or other drawings to solve addition and subtraction problems.	
and and properties of operations to perform multi-digit arithmetic	SMP 1 Make sense of problems and persevere in solving them  SMP 2 Reason abstractly and quantitatively	Use basic addition and subtraction facts to solve problems with larger numbers.	Practice pages with basic addition and subtraction facts to solve problems with larger numbers.  Use basic addition and subtraction facts to solve extended facts.  Use question marks for the unknown, when solving number stories.	
Benchmark Assessment  • Unit 2 Cumulative Assessment		Failure, 504) • Small group support	tions (ELL, Special Education, G , manipulative tools, extended time odifications per a student's IEP or 50	and specific other
Summative Assessment(s)  • Unit 2 Checking Progress		Failure, 504) • Small group support	tions (ELL, Special Education, Go, manipulative tools, extended time odifications per a student's IEP or 50	and specific other

**Key**: ■ Major Cluster □ Supporting Cluster □ Additional Cluster

## Unit Title: Unit 3 Operations Time Frame/Pacing: 22 **Essential Questions** How can we decide when to use an exact answer and when to use an estimate? How do operations affect numbers? What makes computational strategy both effective and efficient? **Enduring Understandings** Context is critical when using estimation The magnitude of numbers affects the outcome of operations on them Computational fluency includes understanding the meaning and the appropriate use of numerical operations Standards Taught and Assessed **3.0A.** A Represent and solve problems involving multiplication and division **3.0A.C** Multiply and divide within 100 **3.0A.D** Solve problems involving the four operations and identify and explain patterns in arithmetic 3NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic **Highlighted Interdisciplinary Connections** ELA SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail. RI.3.7. Use information gained from text features (e.g., illustrations, maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). Highlighted Career Ready Practices and 21st Century Themes and Skill **9.4.5.CT.3**: Describe how digital tools and technology may be used to solve problems. 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3). 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process 9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental,

online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).

• 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

#### Social Emotional Learning Competencies

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment  • 3.OA.A 3.OA.C 3.OA.D		of Failure, 504)  • Small group suppor	t, manipulative tools, extended	time and specific
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/Acco mmodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)
■3.OA.A Represent and solve problems involving multiplication and division	SMP 2 Reason abstractly and quantitatively  SMP 7 Look for and make use of structure	Show how you would represent groups in an array or other drawing and write the corresponding number model.	Practice pages with modeling number stories involving multiplication/division.  Use number models, multiplication squares, frame and arrows diagrams, and arrays to	Small group support, manipulative tools, and specific other accommodations/mo difications per a student's IEP or 504 plan

Key: Major Cluster

Supporting Cluster

			solve number stories.	
3.OA.C Multiply and divide within 100	SMP 2 Reason abstractly and quantitatively  SMP 7 Look for and make use of structure	Solve a given multiplication or division problem using any fact strategy (picture, array, adding or subtracting a group).	Practice pages with representing and solving problems involving multiplication and division  Use counters, visuals, and arrays to solve multiplication and division problems.	P
3.OA.D Solve problems involving the four operations and identify and explain patterns in arithmetic	SMP 2 Reason abstractly and quantitatively  SMP 7 Look for and make use of structure	Develop strategies, such as add a group, subtract a group, partial addition, expand and trade, counting up to solve problems with the four operations.	Practice pages with problems involving all four operations.  Use diagrams, different solving strategies, and drawings to solve.	
23.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic	SMP 2 Reason abstractly and quantitatively  SMP 7 Look for and make use of structure	Use an estimation strategy to check whether an answer is reasonable when solving a multi-digit problem.	Practice pages with subtraction and addition problems and estimating.  Use an estimation strategy to help you solve multi-digit problems.	
Benchmark Assessment  • Benchmark 2		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)		
Summative Assessment(s)  Unit 3 Checking Pro  Unit 3 Open Constru	2	Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		

Key: Major Cluster

Supporting Cluster

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	Title: Unit 4 Geometry and Measurement	Time frame/Pacing: 20
Essent	tial Questions  How can measurements be used to solve problems?  How do geometric relationships help to solve problems and/or make sense of p  How can spatial relationships be described by careful use of geometric language	
Endur •	ring Understandings  Numeric fluency includes both the understanding of and the ability to appropri One representation may sometimes be more helpful than another; used togethe problem  Computational fluency includes understanding the meaning and the appropriate	r, multiple representations give a fuller understanding of a
■3.M	<b>ID.A</b> Solve problems involving measurement and estimation <b>ID.C</b> Geometric measurement: understand concepts of area and relate area to material measurement and interpret data	ultiplication and to addition
	AD.D Geometric measurement: recognize perimeter G.A Reason with shapes and their attributes	
□3.G		appropriate elaboration and detail.

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(e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

- 9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

#### **Social Emotional Learning Competencies**

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment 3.MD.A 3.MD.C 3.MD.D 3.G.A		<ul> <li>Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)</li> <li>Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan</li> </ul>			
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/Accommod ations (ELL, Special Education, Gifted, At-Risk of Failure, 504)	
<b>3.MD.A</b> Solve problems involving measurement and estimation	SMP 6 Attend to precision  SMP 7 Look for and make use of structure	Have students measure to the nearest ½ inch.	Practice pages involving measuring to the nearest half inch and centimeter.	Small group support, manipulative tools, and specific other accommodations/modificati ons per a student's IEP or	
<b>3.MD.</b> C Geometric measurement: understand concepts of area and relate area to multiplication and	SMP 6 Attend to precision  SMP 7 Look for and make	Have students find areas of rectangles and write matching number sentences.	Practice pages involving finding areas of rectangles with matching number sentences	504 plan	

Additional Cluster

to addition	use of structure			
3.MD.B Represent and interpret data	SMP 6 Attend to precision  SMP 7 Look for and make use of structure	Have students generate measurement data and represent the data on a line plot.	Practice pages for students to create scale, display accurate line plot data and interpret data displayed.	
3.MD.D Geometric measurement: recognize perimeter	SMP 6 Attend to precision  SMP 7 Look for and make use of structure	Have students identify and measure perimeters of rectangles and other polygons.	Practice pages for students to find the perimeter of rectangles.	a #1
<b>3.G.A</b> Reason with shapes and their attributes	SMP 6 Attend to precision  SMP 7 Look for and make use of structure	Have students identify and describe characteristics of quadrilaterals	Practice pages involving identifying quadrilaterals and naming the characteristics.	
Benchmark Assessment  • Mid-Year Assessment		Failure, 504) • Small group support	tions (ELL, Special Education, manipulative tools, extended odifications per a student's IEF	time and specific other
Summative Assessment(s)  • Unit 4 Checking Progress		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		

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## Unit Title: Unit 5 Fractions and Multiplication Time Frame/Pacing: 21 **Essential Questions** • How can measurements be used to solve problems? How do operations affect numbers? How do mathematical ideas interconnect and build on one another to produce a coherent whole? **Enduring Understandings** Numeric fluency includes both the understanding of and the ability to appropriately use numbers One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem Computational fluency includes understanding the meaning and the appropriate use of numerical operations Standards Taught and Assessed **3.0A.C** Multiply and divide within 100 **3.NF.A** Develop understanding of fractions as numbers **3.MD.C** Geometric measurement: understand concepts of area to multiplication and to addition **Highlighted Interdisciplinary Connections** ELA SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail. W.3.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. A. Introduce a topic and group related information together; include text features (e.g.; illustrations, diagrams, captions) when useful to support comprehension,

#### Highlighted Career Ready Practices and 21st Century Themes and Skill

- **9.4.5.CT.3**: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

Key:	Major Cluster	☐ Supporting Cluster	Additional Cluster
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- 9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

#### Social Emotional Learning Competencies

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment • 3.OA.C 3.NF.A 3.MD.C		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/Accommod ations (ELL, Special Education, Gifted, At-Risk of Failure, 504)
■3.OA.C Multiply and divide within 100	SMP 6 Attend to precision  SMP 7 Look for and make use of structure	Have students use helper facts and the doubling strategy to solve multiplication facts.	Practice pages for students using helper facts and the doubling strategy to solve multiplication facts.	Small group support, manipulative tools, and specific other accommodations/modificati ons per a student's IEP or 504 plan
3.NF.A Develop understanding of fractions as numbers	SMP 6 Attend to precision  SMP 7 Look for and make use of structure	Have students draw a square and shade in one part and label with the appropriate fraction.	Practice pages exploring equal parts or fractions of different wholes.	

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Supporting Cluster

<b>3.MD.C</b> Geometric measurement: understand concepts of area to multiplication and to addition	SMP 6 Attend to precision  SMP 7 Look for and make use of structure	Have students multiply side lengths to find the area of a shape	Practice pages for students to explore different shapes to find the area.	
Benchmark Assessment  Not applicable				
Summative Assessment(s)  • Unit 5 Checking Progress • Unit 5 Open Constructed Response		Failure, 504)  • Small group support	tions (ELL, Special Educati , manipulative tools, extended odifications per a student's IEF	I time and specific other

Key: Major Cluster

Supporting Cluster

Unit Title: Unit 6 More Operations	Time Frame/Pacing: 21	
<ul> <li>Essential Questions</li> <li>How can we decide when to use an exact answer and when to use an estimate?</li> <li>How do operations affect numbers?</li> <li>What makes a computational strategy both effective and efficient?</li> </ul>		
<ul> <li>Enduring Understandings</li> <li>Numeric fluency includes both the understanding of and the ability to appropria</li> <li>The magnitude of numbers affects the outcome of operations on them</li> <li>Computational fluency includes understanding the meaning and the appropriate</li> </ul>		
Standards Taught and Assessed  3.OA.B Understand properties of multiplication and the relationship between multiplication and division  3.OA.C Multiply and divide within 100  3.OA.D Solve problems involving the four operations and identify and explain patterns in arithmetic  3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic		
<ul> <li>Highlighted Interdisciplinary Connections</li> <li>ELA</li> <li>SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, 3 topics and texts, building on others' ideas and expressing their own clearly.</li> <li>SL.3.3. Ask and answer questions about information from a speaker, offering at W.3.2. Write informative/explanatory texts to examine a topic and convey ideas related information together; include text features (e.g.: illustrations, diagrams, explanation)</li> </ul>	opropriate elaboration and detail.  and information clearly. A. Introduce a topic and group	
<ul> <li>Highlighted Career Ready Practices and 21st Century Themes and Skill</li> <li>9.4.5.CT.3: Describe how digital tools and technology may be used to solve pro</li> <li>9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different and global (e.g., 6.1.5.CivicsCM.3). 9.4.5.CT.1: Identify and gather relevant (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).</li> </ul>	types of problems such as personal, academic, community	

9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online)

that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).

• 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

#### **Social Emotional Learning Competencies**

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment  • 3.OA.B 3.OA.C 3.OA.D 3.NBT.A		Failure, 504)  • Small group suppor	ations (ELL, Special Educations), manipulative tools, extended odifications per a student's IEI	d time and specific other
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/Accommod ations (ELL, Special Education, Gifted, At-Risk of Failure, 504)
<b>3.0A.B</b> Understand properties of multiplication and the relationship between multiplication and division	SMP1 Make sense of problems and persevere in solving them.  SMP3 Construct viable arguments and critique the reasoning of others.	Use multiplication strategies to solve equations.	Practice pages applying strategies with different fact strategies of multiplication and division (Ex: commutative, associative and distributive)	Small group     support,     manipulative tools,     and specific other     accommodations/m     odifications per a     student's IEP or
3.OA.C Multiply and divide within 100	SMP1 Make sense of problems and persevere in solving them.	Complete multiplication fact inventory with factors 1-10.	Practice pages and activities to build fact fluency.	504 plan

Key:

Major Cluster

Supporting Cluster

	SMP3 Construct viable arguments and critique the reasoning of others.			
<b>3.OA.D</b> Solve problems involving the four operations and identify and explain patterns in arithmetic	SMP1 Make sense of problems and persevere in solving them.  SMP3 Construct viable arguments and critique the reasoning of others.	Have students complete a problem including parentheses.	Practice pages including parentheses in number sentences and write two-step number stories.	
value understanding and properties of operations to perform multi-digit arithmetic	SMP1 Make sense of problems and persevere in solving them.  SMP3 Construct viable arguments and critique the reasoning of others.	Have students complete the trade-first method to solve subtraction problems.	Practice pages on trade first method to solve subtraction problems	e P
Benchmark Assessment  • Unit 6 Cumulative Assessment		Failure, 504)  • Small group support	tions (ELL, Special Educations, manipulative tools, extended odifications per a student's IEF	time and specific other
Summative Assessment(s)  • Unit 6 Checking Progress		Failure, 504)  • Small group support	tions (ELL, Special Education, manipulative tools, extended odifications per a student's IEF	time and specific other

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Kev:		Major	Cluster
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<sup>☐</sup> Supporting Cluster

<sup>Additional Cluster</sup> 

Unit Title: Unit 7 Fractions	Time Frame/Pacing: 21
Essential Questions  • How can we compare and contrast numbers?	
<ul><li>How can measurements be used to solve problems?</li><li>What makes a computational strategy both effective and efficient?</li></ul>	
<ul> <li>Enduring Understandings</li> <li>Numeric fluency includes both the understanding of and the ability to apprope</li> <li>One representation may sometimes be more helpful than another; used together</li> <li>A quantity can be represented numerically in a variety of ways</li> </ul>	•
Standards Taught and Assessed  3.NF.A Develop understanding of fractions as numbers  3.MD.A Solve problems involving measurement and estimation	

- SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on *grade* 3 topics and texts, building on others' ideas and expressing their own clearly.
- SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- W.3.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. A. Introduce a topic and group related information together; include text features (e.g.: illustrations, diagrams, captions) when useful to support comprehension.

#### Highlighted Career Ready Practices and 21st Century Themes and Skill

- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).• 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

Key:	Major Cluster	Supporting Cluster	Additional Cluster

#### **Social Emotional Learning Competencies**

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment  • 3.NF.A 3.MD.A		<ul> <li>Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)</li> <li>Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan</li> </ul>		d time and specific other
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/Accommod ations (ELL, Special Education, Gifted, At-Risk of Failure, 504)
3.NF.A Develop understanding of fractions as numbers	SMP4 Model with mathematics  SMP5 Use appropriate tools strategically	Students name, compare and order fractions using fraction strips, number lines and fraction circles.	Practice pages naming, comparing and ordering fractions by using fraction strips, number lines and fraction circles.	Small group support, manipulative tools, and specific other accommodations/modificati ons per a student's IEP or 504 plan
<b>3.MD.A</b> Solve problems involving measurement and estimation	SMP4 Model with mathematics  SMP5 Use appropriate tools strategically	Have students estimate area to solve a problem	Practice pages estimating and measuring liquid volume.	

Key: Major Cluster

Supporting Cluster

Benchmark Assessment  Not Applicable	
<ul> <li>Summative Assessment(s)</li> <li>Unit 7 Checking Progress</li> <li>Unit 7 Open Constructed Response</li> </ul>	Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan

Key:

Major Cluster

Supporting Cluster

Unit Title: Unit 8 Multiplication and Division	Time Frame/Pacing: 18			
<ul> <li>Essential Questions</li> <li>How can we compare and contrast numbers?</li> <li>How can measurements be used to solve problems?</li> <li>How do geometric relationships help to solve problems and/or make sense of problems.</li> </ul>	nenomena?			
<ul> <li>Enduring Understandings</li> <li>Numeric fluency includes both the understanding of and the ability to appropriately use numbers</li> <li>The magnitude of numbers affects the outcome of operations on them</li> <li>Computational fluency includes understanding the meaning and the appropriate use of numerical operations</li> </ul>				
Standards Taught and Assessed  3.OA.A Represent and solve problems involving multiplication and division  3.OA.C Multiply and divide within 100  3.MD.B Represent and interpret data  3.G.A Reason with shapes and their attributes				
<ul> <li>Highlighted Interdisciplinary Connections</li> <li>ELA</li> <li>SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, partners on grade 3 topics and texts, building on others' ideas and expressing the SL.3.3. Ask and answer questions about information from a speaker, offering as RL.3.1. Ask and answer questions, and make relevant connections to demonstrate to the text as the basis for the answers.</li> </ul>	eir own clearly. opropriate elaboration and detail.			
Highlighted Career Ready Practices and 21st Century Themes and Skill				
<ul> <li>9.4.5.CT.3: Describe how digital tools and technology may be used to solve pr</li> <li>9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different community and global (e.g., 6.1.5.CivicsCM.3).</li> </ul>				

**Key**: ■ Major Cluster □ Supporting Cluster □ Additional Cluster

- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).

#### **Social Emotional Learning Competencies**

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment • 3.OA.A 3.OA.C 3.G.A 3.MD.B		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/ Accommodati ons (ELL, Special Education, Gifted, At-Risk of Failure, 504)
■3.OA.A Represent and solve problems involving multiplication and division	SMP3 Construct viable arguments and critique the reasoning of others.	Students will use strategies to solve real world problems, justify claims and model equal	Practice pages using visuals, arrays and diagrams to solve real world number stories.	Small group support, manipulative tools, and

Key: Major Cluster

Supporting Cluster

	SMP8 Look for and express regularity in repeated reasoning.	sharing situations with \$10 and \$1 bills.	Use visuals, slates and model equal-sharing situations with \$10 and \$1 bills.	specific other accommodation s/modifications per a student's IEP or 504 plan
<b>3.0A.C</b> Multiply and divide within 100	SMP3 Construct viable arguments and critique the reasoning of others.  SMP8 Look for and express regularity in repeated reasoning.	Have students use basic facts to solve extended facts.	Practice pages with extended facts and the basic facts that helped them.	5
3.MD.B Represent and interpret data	SMP3 Construct viable arguments and critique the reasoning of others.  SMP8 Look for and express regularity in repeated reasoning.	Students use rulers to measure to the nearest 1/4 inch	Practice pages to measure to the nearest ¼ inch using a ruler.	
3.G.A Reason with shapes and their attributes	SMP3 Construct viable arguments and critique the reasoning of others.  SMP8 Look for and express regularity in repeated reasoning.	Students will identify the base, vertex, edges & faces of a rectangular prism.	Practice pages to explore the attributes of prisms using rectangular and non rectangular prisms.	
Benchmark Assessment      Benchmark 3     Cumulative Unit 8 Assessment		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP		

Key: Major Cluster

☐ Supporting Cluster

	or 504 plan
Summative Assessment(s)  • Unit 8 Checking Progress	Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan

Key:

Major Cluster

Supporting Cluster

## Time Frame/Pacing: 16 Unit Title: Unit 9 Multi-Digit Operations **Essential Questions** • How can we compare and contrast numbers? How do operations affect numbers? What makes a computational strategy both effective and efficient? **Enduring Understandings** • Numeric fluency includes both the understanding of and the ability to appropriately use numbers The magnitude of numbers affects the outcome of operations on them One representation may sometimes be more helpful than another; used together, multiple representations give a fuller understanding of a problem Computational fluency includes understanding the meaning and the appropriate use of numerical operations Standards Taught and Assessed **3.OA.B** Understand properties of multiplication and the relationship between multiplication and division **3.0A.C** Multiply and divide within 100 **3.MD.A** Solve problems involving measurement and estimation 3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic **Highlighted Interdisciplinary Connections** ELA • SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. • SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail. W.3.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. A. Introduce a topic and group

#### Highlighted Career Ready Practices and 21st Century Themes and Skill

- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).

related information together; include text features (e.g.: illustrations, diagrams, captions) when useful to support comprehension.

Key:	Major Cluster	Supporting Cluster	Additional Cluster
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- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

#### Social Emotional Learning Competencies

- 2.1.5.EH.1: Discuss the impact of one's feelings and thoughts that lead to healthy and unhealthy behaviors.
- 2.1.5.EH.2: Explain how to cope with rejection, loss, difficult learning situations and/or separation from family or others.
- 2.1.5.EH.3: Identify different feelings and emotions that people may experience and how they might express these emotions (e.g., anger, fear, happiness, sadness, hopelessness, anxiety).
- 2.1.5.EH.4: Identify behaviors that help to deal with difficult situations that can occur at home, in school, and/or in the community and where to go for assistance.

Pre-Assessment  • 3.OA.B 3.OA.C 3.MD.A 3.NBT.A		<ul> <li>Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)</li> <li>Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan</li> </ul>			
Student Learning Objectives: We are learning to/that	Student Strategies (Mathematical Practices)	Formative Assessment	Activities and Resources	Modifications/Accommod ations (ELL, Special Education, Gifted, At-Risk of Failure, 504)	
<b>3.OA.B</b> - Understand properties of multiplication and the relationship between multiplication and division	SMP 1 Make sense of problems and persevere in solving them  SMP 4 Model with mathematics	Have students complete multi digit multiplication problems using partition rectangles.	Practice pages involving multi digit multiplication.	Small group support, manipulative tools, and specific other accommodations/modificati ons per a student's IEP or 504 plan	

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<b>3.OA.C</b> Multiply and divide within 100	SMP 1 Make sense of problems and persevere in solving them  SMP 4 Model with mathematics	Have students complete multiplication & division problems using multiples of 10.	Practice pages involving mental computation to solve multiplying with larger factors.	
<b>3.MD.A</b> Solve problems involving measurement and estimation	SMP 1 Make sense of problems and persevere in solving them  SMP 4 Model with mathematics	Have students tell and write time to the nearest minute and measure time intervals in minutes	Practice pages involving elapsed time problems.	w v
value understanding and properties of operations to perform multi-digit arithmetic	SMP 1 Make sense of problems and persevere in solving them  SMP 4 Model with mathematics	Have students complete extended multiplication and division problems.	Practice pages involving extended multiplication and division problems.	
Benchmark Assessment  • End of the Year Assessment		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		
Summative Assessment(s)  • Unit 9 Checking Progress • Unit 9 Open Constructed Response		Modifications/Accommodations (ELL, Special Education, Gifted, At-Risk of Failure, 504)  • Small group support, manipulative tools, extended time and specific other accommodations/modifications per a student's IEP or 504 plan		

Key: Major Cluster

☐ Supporting Cluster

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#### **Digital Resources**

McGraw Hill ConnectEd - all hard copy materials are also available digitally