Table of Contents

Grade 3: Scope and Sequence for Math

Date Range and Number of Instructional Days	Chapters and Units	Number of Instructional Days
September 14th - September 29th *(11 Instructional Days)*	**Chapter 1: Numbers to 10,000** **Unit 1: Numbers and Operations in Base Ten: Addition and Subtraction**	**11**
September 30 - October 24th *(13 Instructional Days)*	**Chapter 2: Addition Within 10,000** **Unit 1: Numbers and Operations in Base Ten: Addition and Subtraction**	**13**
October 25th - November 8th *(11 Instructional Days)*	**Chapter 3: Subtraction Within 10,000** **Unit 1: Numbers and Operations in Base Ten: Addition and Subtraction**	**11**
November 9th-November 17th *(5 Instructional Days)*	**Chapter 8 (from grade 2 textbook): Multiplication and Division: Sections 8.2, 8.3 - how to divide, multiplication and division word problems** **Unit 2: Operations and Algebraic Thinking: Multiplication and Division**	**5**
November 18th - December 5th *(10 Instructional Days)*	**Chapter 9 (from Grade 2 textbook): Multiplication Tables** **Unit 2: Operations and Algebraic Thinking: Multiplication and Division**	**10**
December 6th - January 5th *(18 Instructional Days)*	**Chapter 4: Multiplication Tables** **Unit 2: Operations and Algebraic Thinking: Multiplication and Division**	**18**
January 6th- January 24th *(9 Instructional Days)*	**Chapter 6: Using Bar Models - The Four Operations** **Unit 2: Operations and Algebraic Thinking: Multiplication and Division**	**9**
January 25th - February 9th *(12 Instructional Days)*	**Chapter 7: Fractions** **Unit 4: Fractions**	**12**
February 10th - February 23rd *(9 Instructional Days)*	**Chapter 6 (from Grade 2 textbook): Mass** **Unit 3: Measurement**	**9**
February 24th - March 7th *(8 Instructional Days)*	**Chapter 8: Measurement** **Unit 3: Measurement**	**8**
March 8th - March 28th *(15 Instructional Days)*	**Chapter 9: Area and Perimeter** **Unit 3: Measurement**	**15**

Table of Contents

March 29th - April 18th *(8 instructional days)*	**Chapter 10: Telling Time - (10.1, 10.3 only)** **Unit 3: Measurement**	**8**
April 19th - May 1st *(9 Instructional Days)*	**Chapter 11: Graphs and Line Plots** **Unit 3: Measurement**	**9**
May 2nd - May 5th *(4 Instructional Days)*	**Chapter 12: Two Dimensional Figures (12.3 only)** **Unit 5: Geometry**	**4**
May 8th - May 12th *(5 Instructional Days)*	**Review of units and skills for NJSLA Test Prep**	**5**
May 18th - June 7th *(14 Instructional Days)*	**Chapter 4: Review of 3rd grade Multiplication, then 4th grade: Chapter 5: Multiplication and review of division and multiplication of word problems** **Unit 2: Operations and Algebraic Thinking: Multiplication and Division - 3rd grade** **Unit 1: Working with Whole Numbers - 4th grade**	**14**
June 8th - June 23rd *(12 Instructional Days)*	**Review of 3rd grade skills and Fractions for 3rd grade and 4th grade** **Unit 4: Fractions - 3rd grade** **Unit 2: Fractions and Decimals - 4th grade**	**12**

Math	**Grade: 3rd**

Unit 1: Number and Operations in Base Ten: Addition and Subtraction

Unit 1 starts the year with understanding numbers to 10,000. The unit expands on these understandings by introducing students to mental math calculations and estimation to support the requirement of the New Jersey Student Learning Standards for Mathematics that students be able to assess the reasonableness of results of operations. The unit expands addition and subtraction operations to include numbers up to 10,000 and incorporates the culminating addition/subtraction standard (3.NBT.2) for students requiring them to add and subtract fluently within 1000. The Operations and Algebraic Thinking standard relating to problem solving (3.OA.8) is also incorporated into this unit. The unit ends with students using bar models to solve problems involving addition and subtraction.

A firm grounding in the big picture of how operations with numbers interrelate and how they are vital tools in life can help students build the positive attitudes that will

help them become confident, efficient, and effective problem-solvers (McConnell, 2011)

Algebraic thinking develops problem-solving skills. Students must analyze what they know and don't know about a problem, determine a method for finding solutions, and check results for accuracy. Algebra provides students with resources for dealing with real-world situations in a "systematic, analytic manner." (McConnell, 2011)

McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.

NJ Student Learning Standards

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.
3.OA.D.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*
3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 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 additions and subtraction.

Enduring Understandings/Goals	Essential Questions
• The use and manipulation of symbols and expressions provide a variety of representations for solving problems and expressing mathematical concepts, relationships, and reasoning. (Hess, 2010) • Understandings of number – "how many" or "how much" – and number types extend applications of arithmetic properties, operations, and number systems and guide the use of computational strategies and algorithms (Hess, 2010) • Patterns, relations, and functions are used to represent and analyze change in various contexts, make predictions and generalizations, and provide models and explanations for real-world phenomena.(Hess, 2010) • Hess, Karin K., (Ed.) December 2010. *Learning Progressions Frameworks Designed for Use with the Common Core State Standards in Mathematics K-12.* National Alternate Assessment Center at the University of Kentucky and the National Center for the Improvement of Educational Assessment, Dover, N.H. (updated – v.3)	• **What are the different ways you can represent a 4-digit number?** • **How can math help us make sense of the world around us?** • **How can numbers be manipulated?** • **How can we show how numbers are related to each other?** • **How are mathematical operations related to each other?** • **Why is fluency in computing important in life?** • **How can we use algebra to solve real-world problems?** • **What skills are needed to effectively compute numbers?** • **How can we solve for the unknown?** • **How can change be represented mathematically?** • McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.

Chapters	Lessons

Table of Contents

Chapter 1: Numbers to 10,000	Recall Prior Knowledge 1.1 Counting to 10,000 1.2 Place Value 1.3 Comparing and Ordering Numbers 1.4 Rounding Numbers to the Nearest 10 1.5 Rounding Numbers to the Nearest 100 Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Chapter 2: Addition Within 10,000	Recall Prior Knowledge 2.1 Addition Patterns 2.2 Mental Addition 2.3 Adding Fluently Within 1,000 2.4 Adding Without Regrouping 2.5 Adding With Regrouping 2.6 Real World Problems - Addition Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Chapter 3: Subtraction Within 10,000	Recall Prior Knowledge 3.1 Mental Subtraction 3.2 Subtract Fluently Within 1,000 3.3 Subtraction Without Regrouping 3.4 Subtraction With Regrouping 3.5 Real World Problems - Subtraction Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment

Skills (Students will be able to…)

- Use base-ten blocks to count, read, and write numbers to 10,000.
- Count by 1s, 10s, 100s, and 1,000 to 10,000.
- Use a place-value chart to read, write, and represent numbers to 10,000.
- Read and write numbers to 10,000 in expanded form, standard form, and word form.
- Recognize the value of digits in each place value of a 4-digit number.
- Use base-ten blocks, place-value charts, and number lines to compare and order numbers
- Look for a pattern to complete a number sequence.
- Use number lines and place values to round numbers to the nearest ten.
- Use number lines and place values to round numbers to the nearest hundred.

Table of Contents

- Identify arithmetic patterns in addition.
- Add 2-digit numbers mentally using different strategies.
- Use addition strategies and algorithms to add numbers within 1,000.
- Add up to 4-digit numbers without regrouping
- Add up to 4-digit numbers with regrouping.
- Use bar models to solve up to two-step real-world problems involving addition.
- Estimate to check the reasonableness of answers by rounding the numbers in calculations involving addition.
- Subtract 2-digit numbers mentally using different strategies.
- Use subtraction strategies and algorithms to subtract numbers within 1,000.
- Subtract up to 4-digit numbers without regrouping
- Subtract up to 4-digit numbers with regrouping
- Use bar models to solve up to two-step real- world problems involving subtraction.
- Estimate to check the reasonableness of answers by rounding the numbers in calculations involving subtraction.

Evidence of Learning (Assessments)

Formative Assessments:

*The following are administered and done daily for each standard/skill for each section of each chapter:

- Quick Check - online*
- Try*
- Independent Practice - online *
- Exit tickets*
- Untimed skill drills*
- Open-ended questions/Math Journal*
- Communicators- Whiteboard Work*
- Math Station activities (Workshop model work)*
- Small groups/conferencing*
- Practice/homework workbook - Extra Practice and homework*
- Chapter Review - online
- Performance Tasks per chapter
- Chapter Tests
- Fact Fluency Practice/Fact Builder/Writing About Math*

Summative Assessments:

Accommodations and Modifications

Special Education

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*
- *Curricular Modifications and Guidance for Students Educated in Special Class Settings*

Differentiation:

- *Preview content and concepts*
- *Behavior management plan*
- *Highlight text*
- *Small group setting*

High-Prep Differentiation:

- *Alternative formative and summative assessments*
- *Guided Reading*
- *Personal agendas*
- *Project-based learning*
- *Problem-based learning*
- *Stations/centers*
- *Tiered activities/assignments*
- *Varying organizers for instructions*

Low-Prep Differentiation:

Table of Contents

- 3rd Grade Math in Focus Chapter Assessments
- 3rd Grade Math in Focus Cumulative Reviews
- 3rd Grade Math in Focus Mid-Year and End-of-Year Reviews

Benchmark Assessments:

- Initial LinkIt Benchmark: September
- Mid-year LinkIt Benchmark: December
- End of year LinkIt Benchmark: Last week in April
- Math in Focus Beginning of the Year, Mid-Year and End-of-Year Math Assessments

Alternative Assessments:

- G & T Assessments:Sages-2 Screening Assessment for Gifted Elementary: Mathematics/Science Language Arts/Social Studies
- Reasoning
- Dyslexia Screener
- PRIM checklist
- Computational Skills Grade Placement Test

- *Clubbing activities*
- *Exploration by interest*
- *Flexible groupings*

English Language Learners

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- Unit 1: Curriculum for ELL
- ***Subgroup Accommodations and Modifications***
- Multi-language glossary
- Pupil edition in Spanish
- Vocabulary flash cards

Students at Risk for Failure

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- ***Subgroup Accommodations and Modifications***

Gifted and Talented

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- ***Subgroup Accommodations and Modifications***
- *Math in Focus or Big Ideas G & T Activities*

Students with 504 Plans

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*

Core Instructional and Supplemental Materials Professional Resources:

Core Professional Resources:

Core Instructional, Supplemental, Instructional, and Intervention Resources

Core Instructional Resources:

- Math in Focus Teacher's Edition, Third Grade
- Third Grade Math in Focus Manipulatives
- Math in Focus Reteach 3A/3B
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Assessments 3
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice

Supplemental Professional Resources:

- *Math in Focus Curriculum*
- *Denis Sheeran Training Resources*
- http://www.corestandards.org/Math/Practice/
- https://www.state.nj.us/education/standards/math/Docs/2016NJSLS-M_Grade3.pdf
- *Link to NJDOE Digital Item Library*
- *Link to Specific standards questions for NJSLA examples*

- Math in Focus Teacher's Edition, Third Grade
- Math in Focus Student Textbook 3A/3B - working text
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice
- Math in Focus Assessments 3

Supplemental Resources:

- Math in Focus Student Edition - working text - problem solving questions per skill
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Fact Fluency Practice
- Reflex Math
- Mini Game: Chapter 1: Space Guardians: Numbers to 10,000 (G3)
- Mini Game: Chapter 2: Maze: Addition Within 10,000 (G3)
- Virtual Manipulatives - Represent Numbers to 9,999 Using Base-Ten Blocks
- Virtual Manipulatives: Make Number Bonds to Numbers Within 9
- Virtual Manipulatives: Make Number Bonds to Numbers Within 100
- Virtual Manipulatives: Count On in Steps Within 10,000 Using a Number Line
- Virtual Manipulatives: Count Back in Steps Within 10,000 Using a Number Line

Materials/Manipulatives:

- 1 copy of Place-Value Charts (Thousands, Hundreds, Tens, and Ones) (TR02) per pair
- 1 set of base-ten blocks per pair, per group, or set up as a station or center
- 1 copy of Place-Value Charts (Thousands,
- Hundreds, Tens, and Ones) (TR02) per pair
- 1 copy of a Number Line Template (TR03) per pair
- 1 set of paper money per pair
- 1 set of counters per pair
- 1 set of connecting cubes per group
- 2 copies of Double Ten Frames (TR06)
- 1 copy of Number Bonds Template (TR07)
- 1 copy of the Addition Table (TR08)

- 1 set of Numbered Cards (35 – 55) (TR09) per group
- 2 paper rectangles in 2 different colors per pair
- Launch Gizmos: Rounding Whole Numbers - Gizmos
- Play - https://pbskids.org/cyberchase/games/glowlas-estimation-contraption

Tasks: make a copy to edit:

- breaking It Down to Add It Up
- Put It Together
- Travel for Work
- Number Stories
- Incredible Equations
- Arcade
- Fun Math Games and Sites to Practice - Chapter 1, 2
- Fun Practice Games Online Sites to review -Chapter 3
- Additional test prep questions (to use here or for review or more assessment - click on the appropriate standards/skills:
  - https://docs.google.com/spreadsheets/d/18M5r1jk4P729fTpAlWAzrw1gE6tken233I-Yk0U712M/edit#gid=1650057329
- 3 Act Lessons
- Robert Kaplinsky Lessons
- Open Middle - Grade 3: Numbers & Operations in Base Ten
- Which One Doesn't Belong?
- Solve Me Puzzles
- Estimation 180
- Same or Different
- Visual Patterns
- Esti-Mysteries
- 51 Esti-Mysteries
- Splat Math

Intervention Resources:

- Math in Focus Extra Practice 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Task
- Chapter Wrap-up and Review
- Fact Fluency Practice
- Reflex Math
- iReady
- Linkit!
- IXL
- Classroom Manipulatives

	• Online Manipulatives • Content from previous grade levels • Touch Math
Interdisciplinary Connections	**Integration of Technology through NJSLS**
• Correlates to the Citizenship/Government/Holocaust and Native Americans units in Social Studies. • Correlates to the Traits unit in Science. **8.1 Educational Technology** 8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems. 8.1.5.C.3 Research how design modifications have led to new products. 8.1.5.D.2 Evaluate and test alternative solutions to a problem using the constraints and trade-offs identified in the design process to evaluate potential solutions. **8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming** 8.2.5.B.4 Research technologies that have changed due to society's changing needs and wants. 8.2.5.C.1 Collaborate with peers to illustrate components of a designed system. 8.2.5.D.3 Follow step by step directions to assemble a product or solve a problem.	• Listen to books on CDs, tapes, videos or podcasts if available. • Listen to books on websites (pbskids.org/lions/index.html, storylineonline.net, storyit.com, Elementary Connections Page) • Use document camera or overhead projector for shared reading of texts. • Use virtual manipulatives • Use Think Central • Use IXL.com • Xtramath.com • Prodigy
Integration of 21st Century Themes	**Media Literacy Integration**
Learning and Innovation Skills: **Critical Thinking & Problem Solving** • Reason Effectively • Use Systems Thinking • Making Judgements and Decisions • Solve Problems **Communication and Collaboration** • Communicate Clearly **Life and Career Skills** **Initiative and Self Direction** • Manage Goals and Time • Work Independently • Be Self-directed Learners	• Have students practice skills using IXL • Students create problems on the tablets and share them with classmates • Kahn Academy • Brain Pop
Career Education	**Global Perspectives**
9.1 Personal Finance Literacy	• National Hispanic-Latino Month

9.1.4.A.1 Explain the difference between a career and a job and identify various jobs in the community and the related earnings. 9.1.4.A.2 Identify potential sources of income. 9.1.4.B.4 Identify common household expense categories and sources of income. 9.1.4.D.3 Explain what it means to "invest". 9.1.4.G.1 Describe how valuable items might be damaged or lost and ways to protect them. **9.2 Career Awareness, Exploration, and Preparation** 9.2.4.A.1 Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals. 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.	• National Disability Employment Awareness Month • International Dot Day (September 16) • Week of Respect • Red Ribbon Week • National Italian American Heritage Month • National American Indian Heritage Month

Table of Contents

Math	Grade: 3rd

Unit 2: Operations and Algebraic Thinking: Multiplication and Division

In unit 2 the focus is on the properties of operations including the Distributive Property and the relationship between multiplication and division. The unit ends with students using bar models to solve problems involving multiplication and division.

A firm grounding in the big picture of how operations with numbers interrelate and how they are vital tools in life can help students build the positive attitudes that will help them become confident, efficient, and effective problem-solvers (McConnell, 2011)

Algebraic thinking develops problem-solving skills. Students must analyze what they know and don't know about a problem, determine a method for finding solutions, and check results for accuracy. Algebra provides students with resources for dealing with real-world situations in a "systematic, analytic manner." (McConnell, 2011)

Recognizing, analyzing and constructing patterns helps to build a "strong foundation of algebra readiness", and is central to both art and science. (McConnell, 2011)

Students will: represent and solve problems involving multiplication and division. • understand properties of multiplication and the relationship between multiplication and division. • multiply and divide within 100. • solve problems involving the four operations, and identify and explain patterns in arithmetic.

NJ Student Learning Standards

3.OA.A.1 Interpret products of whole numbers, e.g., interpret 5 × 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 × 7.*
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.*
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.
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 = ?*
3.OA.B.5 Apply properties of operations as strategies to multiply and divide.[2] *Examples: If 6 x 4 = 24, then 4 x 6 = 24 (Commutative property of multiplication); 3 x 5 x 2 can be found by 3 x 5 = 15, then 15 x 2 = 30, or by 5 x 2 = 10, then 3 x 10 = 30 (Associative property of multiplication). Knowing that 8 x 5 = 40 and 8 x 2 = 16, one can find 8 x 7 as 8 x (5 + 2) = (8 x 5) + (8 x 2) = 40 + 16 (Distributive property).*
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.*
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 x 5 = 40, one knows that 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.
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.[3]
3.OA.D.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*
3.NBT.A.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.
3.MD.C.7 Relate area to the operations of multiplication and addition.
3.MD.C.7c Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.
3.MD.C.7d Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Footnotes

Table of Contents

[1]A range of algorithms may be used.
[2]Students need not use formal terms for these properties.
[3]This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).

Enduring Understandings/Goals	Essential Questions
• Students will understand that… • The use and manipulation of symbols and expressions provide a variety of representations for solving problems and expressing mathematical concepts, relationships, and reasoning. (Hess, 2010) • Understanding of number – "how many" or "how much – and number types extend applications of arithmetic properties, operations, and number systems and guide use of computational strategies and algorithms. • Patterns, relations, and functions are used to represent and analyze change in various contexts, make predictions and generalizations, and provide models and explanations for real-world phenomena. • Hess, Karin K., (Ed.) December 2010. *Learning Progressions Frameworks Designed for Use with the Common Core State Standards in Mathematics K-12.* National Alternate Assessment Center at the University of Kentucky and the National Center for the Improvement of Educational Assessment, Dover, N.H. (updated – v.3)	• How can math help us make sense of the world around us? • How can numbers be manipulated? • How are mathematical operations related to each other? • Why is fluency in computing important in life? • How do we figure out and describe patterns? • How do patterns help us compare and contrast? • How can patterns help in making predictions? • How can change be represented mathematically? • How can we use algebra to solve real-world problems? • What skills are needed to effectively compute with numbers? • How can we solve for the unknown? • How do we analyze patterns? • When can tables be used to represent relationships? • How do we know where to begin solving a problem? • McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.

Chapters	Lessons
Chapter 8 (Grade 2 Textbook):	Recall Prior Knowledge 8.2 How to Divide 8.3 Real-World Problems: Multiplication and Division Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Chapter 9 (Grade 2 textbook): Multiplication Tables	Recall Prior Knowledge 9.1 Multiplying by 2 9.2 Multiplying by 5 9.3 Multiplying by 10 9.4 Multiplying by 3 9.5 Multiplying by 4 9.6 Multiplying Numbers in any Order 9.7 Dividing Using Multiplication Facts

	Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Chapter 4: Multiplication Tables	Recall Prior Knowledge 4.1 Multiplying by 6 4.2 Multiplying by 7 4.3 Multiplying by 8 4.4 Multiplying by 9 4.5 Multiplying by 11 4.6 Multiplying by 12 4.7 Multiplication Patterns 4.8 Dividing Using Multiplication Facts Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Chapter 6: Using Bar Models - The Four Operations	Recall Prior Knowledge 6.1 Real World Problems: Multiplication 6.2 Real World Problems - Division 6.3 Real World Problems - Four Operations Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment

Skills (Students will be able to…)

- Use objects or pictures to find the number of items in each group when sharing equally.
- Use objects or pictures to find the number of equal groups.
- Relate repeated subtraction to division.
- Make division sentences.
- Solve real-world problems involving multiplication and division.
- Skip count by 2s. - Use known multiplication facts to find other multiplication facts.
- Skip count by 5s - Use known multiplication facts to find other multiplication facts.
- Skip count by 10s - Use known multiplication facts to find other multiplication facts.
- Skip count by 3s. - Use known multiplication facts to find other multiplication facts.
- Skip count by 4s - Use known multiplication facts to find other multiplication facts.
- Understand that multiplication can be done in any order
- Use multiplication facts to find related division facts.
- Write fact families of multiplication and division.
- Skip count by 6s - Use known multiplication facts to find other multiplication facts.
- Skip count by 7s. - Use known multiplication facts to find other multiplication facts.

Table of Contents

- Skip count by 8s. - Use known multiplication facts to find other multiplication facts.
- Skip count by 9s. - Use known multiplication facts to find other multiplication facts.
- Skip count by 12s. - Use known multiplication facts to find other multiplication facts.
- Identify arithmetic patterns in multiplication.
- Write a multiplication equation and a related division equation.
- Work backwards.
- Guess and check.
- Use bar models to solve real-world problems involving multiplication.
- Use bar models to solve real-world division problems.
- Use bar models to solve real-world problems involving the four operations.

Evidence of Learning (Assessments)

Formative Assessments:

*The following are administered and done daily for each standard/skill for each section of each chapter:

- Quick Check - online*
- Try*
- Independent Practice - online *
- Exit tickets*
- Untimed skill drills*
- Open-ended questions/Math Journal*
- Communicators- Whiteboard Work*
- Math Station activities (Workshop model work)*
- Small groups/conferencing*
- Practice/homework workbook - Extra Practice and homework*
- Chapter Review - online
- Performance Tasks per chapter
- Chapter Tests
- Fact Fluency Practice/Fact Builder/Writing About Math*

Summative Assessments:

- 3rd Grade Math in Focus Chapter Assessments

Accommodations and Modifications

Special Education

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*
- *Curricular Modifications and Guidance for Students Educated in Special Class Settings*

Differentiation:

- *Preview content and concepts*
- *Behavior management plan*
- *Highlight text*
- *Small group setting*

High-Prep Differentiation:

- *Alternative formative and summative assessments*
- *Guided Reading*
- *Personal agendas*
- *Project-based learning*
- *Problem-based learning*
- *Stations/centers*
- *Tiered activities/assignments*
- *Varying organizers for instructions*

Low-Prep Differentiation:

- *Clubbing activities*
- *Exploration by interest*

- 3rd Grade Math in Focus Cumulative Reviews
- 3rd Grade Math in Focus Mid-Year and End-of-Year Reviews

Benchmark Assessments:

- Initial LinkIt Benchmark: September
- Mid-year LinkIt Benchmark: December
- End of year LinkIt Benchmark: Last week in April
- Math in Focus Beginning of the Year, Mid-Year and End-of-Year Math Assessments

Alternative Assessments:

- G & T Assessments:Sages-2 Screening Assessment for Gifted Elementary: Mathematics/Science Language Arts/Social Studies
- Reasoning
- Dyslexia Screener
- PRIM checklist
- Computational Skills Grade Placement Test

- *Flexible groupings*

English Language Learners

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- Unit 1: Curriculum for ELL
- ***Subgroup Accommodations and Modifications***
- Multi-language glossary
- Pupil edition in Spanish
- Vocabulary flash cards

Students at Risk for Failure

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- ***Subgroup Accommodations and Modifications***

Gifted and Talented

Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
Subgroup Accommodations and Modifications
Math in Focus or Big Ideas G & T Activities

Students with 504 Plans

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*

Core Instructional and Supplemental Materials Professional Resources:

Core Professional Resources:

Core Instructional, Supplemental, Instructional, and Intervention Resources

Core Instructional Resources:

- Math in Focus Teacher's Edition, Third Grade
- Third Grade Math in Focus Manipulatives
- Math in Focus Reteach 3A/3B
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Assessments 3
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice

Supplemental Professional Resources:

- *Math in Focus Curriculum*
- *Denis Sheeran Training Resources*
- http://www.corestandards.org/Math/Practice/
- https://www.state.nj.us/education/standards/math/Docs/2016NJSLS-M_Grade3.pdf
- *Link to NJDOE Digital Item Library*
- *Link to Specific standards questions for NJSLA examples*

- Math in Focus Teacher's Edition, Third Grade
- Math in Focus Student Textbook 3A/3B - working text
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice
- Math in Focus Assessments 3

Supplemental Resources:

- Math in Focus Student Edition - working text - problem solving questions per skill
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Fact Fluency Practice
- Reflex Math
- Mini Game: Chapter 4: Pop!: Multiplication Tables (G3)
- Virtual Manipulatives: Divide Objects into Equal Groups
- Virtual Manipulatives: Share Objects into Equal Groups
- 1 set of 30- 80 counters per small group
- 1 copy of Multiplication Cards (TR25) per pair
- 1 copy of Division Cards (TR26) per pair
- 10 cups per pair
- 8 paper plates per pair
- 1 set of 25-100 connecting cubes per small group
- 1 copy of Dot Paper of 10 (TR30) per pair
- 1 copy of Multiplication Worksheet (TR35)
- 1 copy of Multiplication by 2, 5, and 10 Cards (TR36) for each group
- 1 copy of a Number Line Template (TR03) per group
- Number Cards 2, 3, 4 (TR37) for each group
- Number Submarine (TR38) for each group
- Number cube for each group
- 2 copies of Multiplication Table (TR21) per student
- Multiplication Chart 10 by 10
- Plates and Counters Countdown Part 1
- Plates and Counters Countdown Part 2
- Multiplication Chart 0 to 10
- Patterns in Multiplication

- Flowers
- Multiplication by 3
- Gifts from Grandma
- Goldfish Bowls
- Analyzing Word Problems
- Spools of Ribbon
- What's Your Strategy?
- Which Way?
- Blueberry Muffins
- Bullseye
- Family Reunion
- My Special Day Planning Sheet
- How Many Pages?
- Math practice games and online practice
- Division Facts
- Division Worksheets (Printable)
- Word Problems by Topic
- Valid Equalities? (Part 2) - Illustrative Math task
- Making Groups
- How Many Groups?
- Rows and Columns
- Things That Come in Groups
- Writing Math Problems
- Problems with Unknowns
- Matching Problems with Equations
- Milestone Task
- 3 Act Lessons
- Robert Kaplinsky Lessons
- Open Middle - Grade 3: Numbers & Operations in Base Ten
- Which One Doesn't Belong?
- Solve Me Puzzles
- Estimation 180
- Same or Different
- Visual Patterns
- Esti-Mysteries
- 51 Esti-Mysteries
- Splat Math

Intervention Resources:

- Math in Focus Extra Practice 3A/3B

Table of Contents

	• Math in Focus Enrichment 3A/3B • Math in Focus Reteach 3A/3B • Math in Focus Problem of the Lesson • iReady • Linkit! • IXL • Reflex Math • Fact Fluency Practice • Classroom Manipulatives • Online Manipulatives • Content from previous grade levels • Touch Math
Interdisciplinary Connections	**Integration of Technology through NJSLS**
• Correlates to the First Settlers and Native Americans units in Social Studies. • Correlates to the Continuing the Cycle unit in Science. **8.1 Educational Technology** 8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems. 8.1.5.A.2 Format a document using a word processing application to enhance text and include graphics, symbols and/ or pictures. 8.1.5.A.5 Create and use a database to answer basic questions 8.1.5.F.1 Apply digital tools to collect, organize, and analyze data that support a scientific finding. **8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming** 8.2.5.A.5 Investigate and present factors that influence the development and function of a product and a system. 8.2.5.C.3 Research how design modifications have led to new products. 8.2.5.D.7 Explain the impact that resources such as energy and materials used in a process to produce products or system have on the environment.	• Listen to books on CDs, tapes, videos or podcasts if available. • Listen to books on websites (pbskids.org/lions/index.html, storylineonline.net, storyit.com, Elementary Connections Page) • Use document camera or overhead projector for shared reading of texts. • Use virtual manipulatives • Use Think Central • Use IXL.com • Xtramath.com • Prodigy
Integration of 21st Century Themes	**Media Literacy Integration**
Learning and Innovation Skills: **Critical Thinking & Problem Solving** • Reason Effectively • Use Systems Thinking • Making Judgements and Decisions • Solve Problems	• Have students practice skills using IXL • Students create problems on the tablets and share them with classmates • Kahn Academy • Brain Pop

Communication and Collaboration • Communicate Clearly **Life and Career Skills** **Initiative and Self Direction** • Manage Goals and Time • Work Independently • Be Self-directed Learners	
Career Education	**Global Perspectives**
9.1 Personal Finance Literacy 9.1.4.B.1 Differentiate between financial wants and needs 9.1.4.B.3 Explain what a budget is and why it is important. 9.1.4.D.2 Explain what it means to "invest". 9.1.4.G.1 Describe how valuable items might be damaged or lost and ways to protect them. **9.2 Career Awareness, Exploration, and Preparation** 9.2.4.A.3 Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes. 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.	• National American Indian Heritage Month

Math	**Grade: 3rd**

Unit 3: Measurement

In this unit, students solve problems with money, metric length, mass, and liquid volume, create bar graphs and line plots. Students also solve problems with customary units of length, weight and capacity. Students investigate angles as parts of geometric shapes. The unit culminates with the study of the geometric measurement of area and perimeter.

A firm grounding in the big picture of how operations with numbers interrelate and how they are vital tools in life can help students build the positive attitudes that will help them become confident, efficient, and effective problem-solvers (McConnell, 2011)

An accurate and consistent system of measurement is a foundation of our economy and necessary for interaction with others around the globe. Systems of measurement facilitate communication in all aspects of life. (McConnell, 2011)

Geometric shapes are essential to many facets of our lives, from art to architecture. Learning the mathematical principles that are the basis for "creating, describing, classifying, and manipulating shapes can open up new world for students." (McConnell, 2011, pg 82).

Algebraic thinking develops problem-solving skills. Students must analyze what they know and don't know about a problem, determine a method for finding solutions,

and check results for accuracy. Algebra provides students with resources for dealing with real-world situations in a "systematic, analytic manner." (McConnell, 2011)

McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.

NJ Student Learning Standards

3.NBT.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.
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
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, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
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. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets*.
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 marked off in appropriate units— whole numbers, halves, or quarters.
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).
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.
3.MD.C.7c Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.
3.MD.C.7d Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.
3.MD.D.8 Solve real world and mathematical problems involving perimeters of polygons, including 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.
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 quantity formed by a parts of size 1/b.
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.
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.
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* $8 \times ? = 48$, $5 = \_ \div 3$, $6 \times 6 = ?$
3.OA.B.5 Apply properties of operations as strategies to multiply and divide.2 *Examples: If* $6 \times 4 = 24$ *is known, then* $4 \times 6 = 24$ *is also known. (Commutative property of multiplication.)* $3 \times 5 \times 2$ *can be found by* $3 \times 5 = 15$, *then* $15 \times 2 = 30$, *or by* $5 \times 2 = 10$, *then* $3 \times 10 = 30$. *(Associative property of multiplication.) Knowing that* $8 \times 5 = 40$ *and* $8 \times 2 = 16$, *one can find* 8×7 *as* $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. *(Distributive property.)*
3.OA.B.6 Understand division as an unknown-factor problem. *For example, find* $32 \div 8$ *by finding the number that makes 32 when multiplied by 8*.
3.OA.C.7 Fluently multiply and divide within 100 using strategies such as the relationship between multiplication and division, or the properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Enduring Understandings/Goals	Essential Questions
Students will understand that… • The use and manipulation of symbols and expressions provide a variety of representations for solving problems and expressing mathematical concepts, relationships, and reasoning. (Hess, 2010) • Understandings of number – "how many" or "how much" – and number	• How can math help us make sense of the world around us? • How can numbers be manipulated? • How can we show how numbers are related to each other? • Why is it important to know what operation to use in different

types extend applications of arithmetic properties, operations, and number systems and guide the use of computational strategies and algorithms (Hess, 2010) • Measurement attributes, processes, and tools help us quantify, compare, and solve problems involving objects, situations, and events. (Hess, 2010) • Patterns, relations, and functions are used to represent and analyze change in various contexts, make predictions and generalizations and provide models and explanations for real-world phenomena. (Hess, 2010) • Visualizations, spatial reasoning, and properties of two- and three-dimensional figures can be used to analyze, represent, and model geometric concepts and relationships. (Hess, 2010) • Questions are posed and investigated by collecting data or retrieving existing data and representing, analyzing, and interpreting data. Investigations, inferences, and predictions are used to make critical and informed decisions. (Hess, 2010) ○ • Hess, Karin K., (Ed.) December 2010. *Learning Progressions Frameworks Designed for Use with the Common Core State Standards in Mathematics K-12.* National Alternate Assessment Center at the University of Kentucky and the National Center for the Improvement of Educational Assessment, Dover, N.H. (updated – v.3)	situations? • How does reasoning relate to mathematical operations? • Why is fluency in computing important in life? • How can pictures help us see how numbers are related? • What types of problems are solved with measurements? • Why is measurement important? • How can graphic representation of data help solve problems? • McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.

Chapter	Lessons
Chapter 6 (from Grade 2 textbook): Mass	Recall Prior Knowledge 6.1 Measuring in Kilograms 6.2 Measuring in Grams 6.3 Comparing Masses in Grams and Kilograms 6.4 Real World Problems: Addition and Subtraction of Masses Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Chapter 8: Measurement	Recall Prior Knowledge 8.1 Mass: Kilograms and Grams 8.2 Liquid Volume: Liters and Milliliters 8.3 Real World Problems: One Step Problems Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment

Chapter 9: Area and Perimeter	Recall Prior Knowledge 9.1 Area 9.2 Square Units (cm^2 and in^2) 9.3 Square Units (m^2 and ft^2) 9.4 Perimeter and Area 9.5 More Perimeter Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Chapter 10: Time	Recall Prior Knowledge 10.1 Telling Time 10.3 Elapsed Time Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Chapter 11: Graphs and Line Plots	Recall Prior Knowledge 11.1 Making Pictures with Scales 11.2 Making Bar Graphs With Scales 11.3 Reading and Interpreting Bar Graphs 11.4 Line Plots and Estimation Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment

Skills (Students will be able to…)

- Measure mass in kilograms.
- Measure mass in grams
- Compare and order masses in kilograms and grams
- Solve one-step and two-step real-world problems involving mass.
- Estimate and find actual masses of objects by using different scales.
- Convert units of measurements between kilograms and grams.
- Estimate and find the volumes of liquids and capacities of containers.
- Convert units of measurements between liters and milliliters
- Use bar models to solve one-step real-world problems involving measurement.
- Understanding the meaning of area.
- Use square units to find the area of plane figures made of squares and half squares.
- Use square centimeters and square inches to find and compare the area of plane figures.
- Use square meters and square feet to find and compare the area of plane figures.

- Understand the meaning of perimeter.
- Find the perimeter of plane figures formed using small squares.
- Find the area of rectangles using multiplication and addition.
- Compare the areas and perimeters of plane figures.
- Find the perimeter of a plane figure by adding its sides.
- Choose the appropriate tools and units of length to measure perimeter.
- Solve problems involving perimeter.
- Tell time to the minute.
- Use the terms "past" and "to" to tell time
- Convert hours and minutes to minutes and vice versa.
- Find end time, start time, or elapsed time.
- Solve real-world problems involving time.
- Make picture graphs with scales to present data.
- Read and interpret picture graphs with scales.
- Make bar graphs with scales to present data.
- Read and interpret data from bar graphs with scales.
- Use a ruler to estimate and measure given
- lengths to the nearest quarter, half, or whole inch.
- Show data on a line plot where the horizontal scale is marked off in whole numbers, halves, or quarters.

Evidence of Learning (Assessments)	Accommodations and Modifications
Formative Assessments: ***The following are administered and done daily for each standard/skill for each section of each chapter:** • Quick Check - online* • Try* • Independent Practice - online * • Exit tickets* • Untimed skill drills* • Open-ended questions/Math Journal*	**Special Education** • Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners) • *Subgroup Accommodations and Modifications* • *Curricular Modifications and Guidance for Students Educated in Special Class Settings* ***Differentiation:*** • *Preview content and concepts* • *Behavior management plan* • *Highlight text* • *Small group setting*

- Communicators- Whiteboard Work*
- Math Station activities (Workshop model work)*
- Small groups/conferencing*
- Practice/homework workbook - Extra Practice and homework*
- Chapter Review - online
- Performance Tasks per chapter
- Chapter Tests
- Fact Fluency Practice/Fact Builder/Writing About Math*

Summative Assessments:

- 3rd Grade Math in Focus Chapter Assessments
- 3rd Grade Math in Focus Cumulative Reviews
- 3rd Grade Math in Focus Mid-Year and End-of-Year Reviews

Benchmark Assessments:

- Initial LinkIt Benchmark: September
- Mid-year LinkIt Benchmark: December
- End of year LinkIt Benchmark: Last week in April
- Math in Focus Beginning of the Year, Mid-Year and End-of-Year Math Assessments

Alternative Assessments:

- G & T Assessments:Sages-2 Screening Assessment for Gifted Elementary: Mathematics/Science Language Arts/Social Studies
- Reasoning
- Dyslexia Screener
- PRIM checklist
- Computational Skills Grade Placement Test

High-Prep Differentiation:

- *Alternative formative and summative assessments*
- *Guided Reading*
- *Personal agendas*
- *Project-based learning*
- *Problem-based learning*
- *Stations/centers*
- *Tiered activities/assignments*
- *Varying organizers for instructions*

Low-Prep Differentiation:

- *Clubbing activities*
- *Exploration by interest*
- *Flexible groupings*

English Language Learners

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- Unit 1: Curriculum for ELL
- ***Subgroup Accommodations and Modifications***
- Multi-language glossary
- Pupil edition in Spanish
- Vocabulary flash cards

Students at Risk for Failure

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- ***Subgroup Accommodations and Modifications***

Gifted and Talented

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- ***Subgroup Accommodations and Modifications***
- *Math in Focus or Big Ideas G & T Activities*

Students with 504 Plans

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*

Table of Contents

Core Instructional and Supplemental Materials Professional Resources:

Core Professional Resources:

- Math in Focus Teacher's Edition, Third Grade
- Third Grade Math in Focus Manipulatives
- Math in Focus Reteach 3A/3B
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Assessments 3
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice

Supplemental Professional Resources:

- *Math in Focus Curriculum*
- *Denis Sheeran Training Resources*
- http://www.corestandards.org/Math/Practice/
- https://www.state.nj.us/education/standards/math/Docs/2016NJSLS-M_Grade3.pdf
- *Link to NJDOE Digital Item Library*
- *Link to Specific standards questions for NJSLA examples*

Core Instructional, Supplemental, Instructional, and Intervention Resources

Core Instructional Resources:

- Math in Focus Teacher's Edition, Third Grade
- Math in Focus Student Textbook 3A/3B - working text
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice
- Math in Focus Assessments 3

Supplemental Resources:

- Math in Focus Student Edition - working text - problem solving questions per skill
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Fact Fluency Practice
- Reflex Math
- 1 balance scale for demonstration or set up as a classroom center or station
- 1-gram mass (5) for demonstration or set up as a classroom center or station
- 1 copy of Gram Scales (TR18) per student
- 1 gram scale for the teacher (optional)
- 1-kilogram mass (2) for demonstration or set up as a classroom center or station
- 1 kilogram scale per group
- 1 balance scale per for demonstration or set up as a classroom center or station
- 1 large container of water per group
- Range of different-sized measuring tools (e.g. measuring cups, jugs, and plastic syringes)
- 1-liter measuring cylinder per group
- 1-liter water bottle per group

	• 4 empty household containers of different sizes per group
	• 1 copy of Square Grid 1 (TR35) per student
	• 1 copy of Square Dot Paper (TR36) per student
	• 1 meter stick per pair
	• 1 yardstick per pair
	• Meter Sticks
	• 1 geoboard and rubber bands per pair
	• 1 piece of 30-centimeter string per student
	• 1 student clock per pair
	• 2 pieces of ribbon between 1 and 5 inches in length per pair
	• 1 inch ruler per pair
	• Virtual Manipulatives:
	  ○ Measure Mass in Kilograms Using a Kilogram Scale
	  ○ Measure Mass in Grams Using a Balance Scale
	  ○ Measure Mass in Grams Using a Gram Scale
	  ○ Measure Capacity in Liters and Milliliters Using Beakers of Different Sizes
	  ○ Show Time to the Minute
	  ○ Find the Duration from a Start Time to an End Time in a.m./p.m.
	  ○ Complete a Pictogram
	• Online Games and Practice Sites - Measurement
	• Online practice review sites - Time and Measurement
	• Tasks: Making a Colorband Ruler
	• Creating a Line Plot with Measurement Data
	• The Perfect Granola Bar goes with: Granola Bars A through P
	• Kitchen Tiles
	• How Many In All?
	• Adding Rectangles to Multiply
	• The School Yard
	• Illustrative Math Task: Shapes and their Insides
	• Area and Perimeter Cards
	• Area and Perimeter Questions
	• GIZMOS - LAUNCH: https://www.explorelearning.com/index.cfm?method=cResource.dspView&ResourceID=1011
	• Online practice review games - Area and Perimeter
	• 3 Act Lessons
	• Robert Kaplinsky Lessons
	• Open Middle - Grade 3: Measurement & Data
	• Which One Doesn't Belong?
	• Solve Me Puzzles

- Estimation 180
- Same or Different
- Visual Patterns
- Esti-Mysteries
- 51 Esti-Mysteries
- Splat Math

Intervention Resources:

- Math in Focus Extra Practice 3A/3B
- Math in Focus Enrichment 3A/3B
- Math in Focus Reteach 3A/3B
- Math in Focus Problem of the Lesson
- iReady
- Linkit!
- IXL
- Reflex Math
- Fact Fluency Practice
- Classroom Manipulatives
- Online Manipulatives
- Content from previous grade levels
- Touch Math

Interdisciplinary Connections

- Correlates to the Geography and Black American History units in Social Studies.
- Correlates to the Measurement and Weather & Climate units in Science.

8.1 Educational Technology
8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
8.1.5.A.5 Create and use a database to answer basic questions
8.1.5.D.2 Analyze the resource citations in online materials for proper use.
8.1.5.D.3 Demonstrate an understanding of the need to practice cyber safety, cyber security, and cyber ethics when using technologies and social media.
8.1.5.E.1 Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.

8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming
8.2.5.A.5 Identify how improvement in understanding of materials science impacts technologies.
8.2.5.C.1 Collaborate with peers to illustrate components of a designed system.

Integration of Technology through NJSLS

- Listen to books on CDs, tapes, videos or podcasts if available.
- Listen to books on websites (pbskids.org/lions/index.html, storylineonline.net, storyit.com, Elementary Connections Page)
- Use document camera or overhead projector for shared reading of texts.
- Use virtual manipulatives
- Use Think Central
- Use IXL.com
- Xtramath.com
- Prodigy

8.2.5.D.1 Identify and collect information about a problem that can be solved by technology, generate ideas to solve the problem, and identify constraints and trade-offs to be considered.	
Integration of 21st Century Themes	**Media Literacy Integration**
Learning and Innovation Skills: **Critical Thinking & Problem Solving** • Reason Effectively • Use Systems Thinking • Making Judgements and Decisions • Solve Problems **Communication and Collaboration** • Communicate Clearly **Life and Career Skills** **Initiative and Self Direction** • Manage Goals and Time • Work Independently • Be Self-directed Learners	• Have students practice skills using IXL • Students create problems on the tablets and share them with classmates • Kahn Academy • Brain Pop
Career Education	**Global Perspectives**
9.1 Personal Finance Literacy 9.1.4.A.3 Explain how income affects spending and take-home pay. 9.1.4.B.4 Identify common household expense categories and sources of income.. 9.1.4.C.6 Summarize ways to avoid credit problems. 9.1.4.D.1 Determine ways to save. 9.1.4.E.2 Apply comparison shopping skills to purchasing decisions 9.1.4.F.1 Demonstrate an understanding of individual obligations and community financial obligations. 9.1.4.G.1 Describe how valuable items might be damaged or lost and ways to protect them. **9.2 Career Awareness, Exploration, and Preparation** 9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community. 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.	• Black History Month • Kindness Month • National Women's History Month • Irish-American Heritage Month

Math	**Grade: 3rd**
Unit 4: Fractions	

Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example, 1/2 of the paint in a small bucket could be less paint than 1/3 of the paint in a larger bucket, but 1/3 of a ribbon is longer than 1/5 of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.

Although students come to the topic of fractions with an understanding of what it means to share, fractions present difficulties for many students. Using their own experiences, students build conceptual knowledge of how numbers relate, how to divide a whole, how to manipulate fractions and how to "express and picture the same quantities in a variety of ways." (McConnell, 2011)

Geometric shapes are essential to many facets of our lives, from art to architecture. Learning the mathematical principles that are the basis for "creating, describing, classifying, and manipulating shapes can open up new world for students." (McConnell, 2011, pg 82).

McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.

NJ Student Learning Standards

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 quantity formed by a parts of size $1/b$.
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.
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 at 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 as 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point on a number line.*
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 the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.
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 with equal area, and describe the area of each part as 1/4 of the area of the shape.*

Enduring Understandings/Goals	Essential Questions
• Students will understand that… • The use and manipulation of symbols and expressions provide a variety of representations for solving problems and expressing mathematical concepts, relationships, and reasoning. (Hess, 2010) • Understandings of number – "how many" or "how much" – and number types extend applications of arithmetic properties, operations, and number systems and guide the use of computational strategies and algorithms (Hess, 2010)	• How can math help us make sense of the world? • How can we show how numbers are related to each other? • Why is fluency in computing important in life? • How are fractions used in real-world situations? • How can pictures help us see how numbers are related? • Why is it useful to compare numbers? • When is it helpful to break things into parts?

• Visualizations, spatial reasoning, and properties of two- and three-dimensional figures can be used to analyze, represent, and model geometric concepts and relationships. • Hess, Karin K., (Ed.) December 2010. *Learning Progressions Frameworks Designed for Use with the Common Core State Standards in Mathematics K-12.* National Alternate Assessment Center at the University of Kentucky and the National Center for the Improvement of Educational Assessment, Dover, N.H. (updated – v.3)	• How do we show relationships between numbers? • How can we prove that numbers are both the same and different? • McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.

Chapter	Lessons
Chapter 7: Fractions	Recall Prior Knowledge 7.1 Understanding Unit Fractions 7.2 Fractions as Part of a Whole 7.3 Fractions as Part of a Set 7.4 Understanding Equivalent Fractions 7.5 Comparing Fractions Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment

Skills (Students will be able to…)

- Read, write, and identify unit fractions for halves, thirds, fourths, sixths, and eighths.
- Show fractions and wholes using fraction models.
- Represent fractions using fraction circles and tiles.
- Read, write, and identify fractions of a whole.
- Show fractions as points or distances on a number line.
- Express whole numbers as fractions.
- Read, write, and identify fractions of a set.
- Find the number of items in a fraction of a set
- Use models to identify equivalent fractions.
- Use number lines to identify equivalent fractions.
- Compare fractions using models of the same size

Evidence of Learning (Assessments)	Accommodations and Modifications

Table of Contents

Formative Assessments:

*The following are administered and done daily for each standard/skill for each section of each chapter:

- Quick Check - online*
- Try*
- Independent Practice - online *
- Exit tickets*
- Untimed skill drills*
- Open-ended questions/Math Journal*
- Communicators- Whiteboard Work*
- Math Station activities (Workshop model work)*
- Small groups/conferencing*
- Practice/homework workbook - Extra Practice and homework*
- Chapter Review - online
- Performance Tasks per chapter
- Chapter Tests
- Fact Fluency Practice/Fact Builder/Writing About Math*

Summative Assessments:

- 3rd Grade Math in Focus Chapter Assessments
- 3rd Grade Math in Focus Cumulative Reviews
- 3rd Grade Math in Focus Mid-Year and End-of-Year Reviews

Benchmark Assessments:

- Initial LinkIt Benchmark: September
- Mid-year LinkIt Benchmark: December
- End of year LinkIt Benchmark: Last week in April
- Math in Focus Beginning of the Year, Mid-Year and End-of-Year Math Assessments

Alternative Assessments:

- G & T Assessments:Sages-2 Screening Assessment for Gifted Elementary: Mathematics/Science Language Arts/Social Studies
- Reasoning
- Dyslexia Screener
- PRIM checklist
- Computational Skills Grade Placement Test

Special Education

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*
- *Curricular Modifications and Guidance for Students Educated in Special Class Settings*

Differentiation:

- *Preview content and concepts*
- *Behavior management plan*
- *Highlight text*
- *Small group setting*

High-Prep Differentiation:

- *Alternative formative and summative assessments*
- *Guided Reading*
- *Personal agendas*
- *Project-based learning*
- *Problem-based learning*
- *Stations/centers*
- *Tiered activities/assignments*
- *Varying organizers for instructions*

Low-Prep Differentiation:

- *Clubbing activities*
- *Exploration by interest*
- *Flexible groupings*

English Language Learners

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- Unit 1: Curriculum for ELL
- ***Subgroup Accommodations and Modifications***
- Multi-language glossary
- Pupil edition in Spanish
- Vocabulary flash cards

Students at Risk for Failure

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- ***Subgroup Accommodations and Modifications***

Gifted and Talented

Table of Contents

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- ***Subgroup Accommodations and Modifications***
- *Math in Focus or Big Ideas G & T Activities*

Students with 504 Plans

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*

Core Instructional and Supplemental Materials Professional Resources:

Core Professional Resources:

- Math in Focus Teacher's Edition, Third Grade
- Third Grade Math in Focus Manipulatives
- Math in Focus Reteach 3A/3B
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Assessments 3
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice

Supplemental Professional Resources:

- *Math in Focus Curriculum*
- *Denis Sheeran Training Resources*
- http://www.corestandards.org/Math/Practice/
- https://www.state.nj.us/education/standards/math/Docs/2016NJSLS-M_Grade3.pdf
- *Link to NJDOE Digital Item Library*
- *Link to Specific standards questions for NJSLA examples*

Core Instructional, Supplemental, Instructional, and Intervention Resources

Core Instructional Resources:

- Math in Focus Teacher's Edition, Third Grade
- Math in Focus Student Textbook 3A/3B - working text
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice
- Math in Focus Assessments 3

Supplemental Resources:

- Math in Focus Student Edition - working text - problem solving questions per skill
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Fact Fluency Practice
- Reflex Math
- Frax Math

- 1 set of fraction tiles per pair
- 1 set of fraction circles per pair
- 3 paper circles per pair
- 1 copy of Number Line Templates (TR03) per student
- 1 copy of Fraction Comparison Cards (TR32)
- per pair
- Virtual Manipulatives:
    - Represent Proper Fractions Using Fraction Models
    - Find Two Proper Fractions That Make a Whole Using a Fraction Model
    - Represent and Compare Fractions and Mixed Numbers on a Number Line
    - Compare Proper Fractions Using Bar Models
- Mini Game: Pete the Plumber: Fractions
- Illustrative Math Tasks:
    - Halves, thirds, and sixths
    - Naming the Whole for a Fraction
- ReTeaching

TASKS:
Glenn and Maggie's Chocolate Bars
Exploring Equivalent Fractions
Equivalent Fractions Extra Practice

Illustrative Math Tasks:

- Comparing Fractions
- Comparing Fractions Game
- Ordering Fractions
- Snow Day
- Closest to 1/2
- Find 1
- Find 1/4 Starting from 1, Assessment Version
- Find 1 Starting from 5/3, Assessment Variation
- Find 2/3
- Locating Fractions Greater than One on the Number Line
- Locating Fractions Less than One on the Number Line
- Which is Closer to 1?
- Comparing Fractions Game
- Comparing Fractions with a Different Whole
- Comparing Fractions with the Same Denominator, Assessment Variation

- Comparing Fractions with the Same Numerators, Assessment Variation
- Fraction Comparisons With Pictures, Assessment Variation
- Online Practice Sites and Games - Fractions
  - 3 Act Lessons
  - Robert Kaplinsky Lessons
  - Open Middle - Grade 3: Numbers & Operations - Fractions
  - Which One Doesn't Belong?
  - Solve Me Puzzles
  - Estimation 180
  - Same or Different
  - Visual Patterns
  - Esti-Mysteries
  - 51 Esti-Mysteries
  - Splat Math

Intervention Resources:

- Math in Focus Extra Practice 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Task
- Chapter Wrap-up and Review
- Fact Fluency Practice
- Reflex Math
- Frax Math
- iReady
- Linkit!
- IXL
- Classroom Manipulatives
- Online Manipulatives
- Content from previous grade levels
- Touch Math

Interdisciplinary Connections

- Correlates to Geography and Black American History units in Social Studies.
- Correlates to the Electrical & Magnetic Forces unit in Science.

8.1 Educational Technology
8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.

Integration of Technology through NJSLS

- Listen to books on CDs, tapes, videos or podcasts if available.
- Listen to books on websites (pbskids.org/lions/index.html, storylineonline.net, storyit.com, Elementary Connections Page)
- Use document camera or overhead projector for shared reading of texts.
- Use virtual manipulatives
- Use Think Central

8.1.5.A.4 Graph data using a spreadsheet, analyze and produce a report that explains the analysis of the data. 8.1.5.C.1 Engage in online discussions with learners of other cultures to investigate a worldwide issue from multiple perspectives and sources, evaluate findings and present possible solutions, using digital tools and online resources for all steps. 8.1.5.D.1 Understand the need for and use of copyrights. **8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming** 8.2.5.A.1 Compare and contrast how products made in nature differ from products that are human made in how they are produced and used. 8.2.5.D.3 Follow step by step directions to assemble a product or solve a problem. 8.2.5.E.1 Identify how computer programming impacts our everyday lives.	• Use IXL.com • Xtramath.com • Prodigy
Integration of 21st Century Themes	**Media Literacy Integration**
Learning and Innovation Skills: **Critical Thinking & Problem Solving** • Reason Effectively • Use Systems Thinking • Making Judgements and Decisions • Solve Problems **Communication and Collaboration** • Communicate Clearly **Life and Career Skills** **Initiative and Self Direction** • Manage Goals and Time • Work Independently • Be Self-directed Learners	• Have students practice skills using IXL • Students create problems on the tablets and share them with classmates • Kahn Academy • Brain Pop
Career Education	**Global Perspectives**
9.1 Personal Finance Literacy 9.1.4.B.5 Identify ways to earn and save. 9.1.4.C.3 Compare and contrast credit cards and debit cards and the advantages and disadvantages of using each. 9.1.4.C.4 Determine the relationships among income, expenses, and interest. 9.1.4.C.5 Determine personal responsibility related to borrowing and lending. 9.1.4.D.3 Distinguish between saving and investing. 9.1.4.E.1 Determine factors that influence consumer decisions related to money. **9.2 Career Awareness, Exploration, and Preparation** 9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community.	• Black History Month • Kindness Month • National Women's History Month • Irish-American Heritage Month

Table of Contents

9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.	

Math	**Grade: 3rd**
Unit 5: Geometry Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole. Geometric shapes are essential to many facets of our lives, from art to architecture. Learning the mathematical principles that are the basis for "creating, describing, classifying, and manipulating shapes can open up new world for students." (McConnell, 2011, pg 82). McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.	
NJ Student Learning Standards	
3.G.A.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and 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 that do not belong to any of these subcategories.	
Enduring Understandings/Goals	**Essential Questions**
• Visualizations, spatial reasoning, and properties of two- and three-dimensional figures can be used to analyze, represent, and model geometric concepts and relationships. (Hess, 2010) • Hess, Karin K., (Ed.) December 2010. *Learning Progressions Frameworks Designed for Use with the Common Core State Standards in Mathematics K-12.* National Alternate Assessment Center at the University of Kentucky and the National Center for the Improvement of Educational Assessment, Dover, N.H. (updated – v.3)	• How can math help us make sense of the world around us? • What are the ways to describe shapes? • McConnell, Carolyn. *The Essential Questions Handbook*. New York: Scholastic, 2011. Print.

Chapter	Lessons
Chapter 12: Angles, Lines and Two Dimensional Figures* **Only 2 Dimensional Figures will be assessed*	Recall Prior Knowledge 12.3 Polygons Chapter Wrap-Up, Chapter Review, Performance Task Chapter Assessment
Skills (Students will be able to…)	
• Identify open and closed figures	

Table of Contents

- Identify and describe special polygons.
- Recognize polygons by their attributes.
- Identify and describe special quadrilaterals. (i.e. rectangles, rhombuses, squares)

Evidence of Learning (Assessments)

Formative Assessments:

***The following are administered and done daily for each standard/skill for each section of each chapter:**

- Quick Check - online*
- Try*
- Independent Practice - online *
- Exit tickets*
- Untimed skill drills*
- Open-ended questions/Math Journal*
- Communicators- Whiteboard Work*
- Math Station activities (Workshop model work)*
- Small groups/conferencing*
- Practice/homework workbook - Extra Practice and homework*
- Chapter Review - online
- Performance Tasks per chapter
- Chapter Tests
- Fact Fluency Practice/Fact Builder/Writing About Math*

Summative Assessments:

- 3rd Grade Math in Focus Chapter Assessments
- 3rd Grade Math in Focus Cumulative Reviews
- 3rd Grade Math in Focus Mid-Year and End-of-Year Reviews

Benchmark Assessments:

- Initial LinkIt Benchmark: September
- Mid-year LinkIt Benchmark: December
- End of year LinkIt Benchmark: Last week in April

Accommodations and Modifications

Special Education

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*
- *Curricular Modifications and Guidance for Students Educated in Special Class Settings*

Differentiation:

- *Preview content and concepts*
- *Behavior management plan*
- *Highlight text*
- *Small group setting*

High-Prep Differentiation:

- *Alternative formative and summative assessments*
- *Guided Reading*
- *Personal agendas*
- *Project-based learning*
- *Problem-based learning*
- *Stations/centers*
- *Tiered activities/assignments*
- *Varying organizers for instructions*

Low-Prep Differentiation:

- *Clubbing activities*
- *Exploration by interest*
- *Flexible groupings*

English Language Learners

Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
Unit 1: Curriculum for ELL
Subgroup Accommodations and Modifications
Multi-language glossary
Pupil edition in Spanish

Table of Contents

- Math in Focus Beginning of the Year, Mid-Year and End-of-Year Math Assessments

Alternative Assessments:

- G & T Assessments:Sages-2 Screening Assessment for Gifted Elementary: Mathematics/Science Language Arts/Social Studies
- Reasoning
- Dyslexia Screener
- PRIM checklist
- Computational Skills Grade Placement Test

Vocabulary flash cards

Students at Risk for Failure

Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
Subgroup Accommodations and Modifications

Gifted and Talented

Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
Subgroup Accommodations and Modifications
Math in Focus or Big Ideas G & T Activities

Students with 504 Plans

- Differentiation for All Students (Special Needs, ESL, Gifted Learners, & Mainstream Learners)
- *Subgroup Accommodations and Modifications*

Core Instructional and Supplemental Materials Professional Resources:

Core Professional Resources:

- Math in Focus Teacher's Edition, Third Grade
- Third Grade Math in Focus Manipulatives
- Math in Focus Reteach 3A/3B
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Assessments 3
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice

Supplemental Professional Resources:

- *Math in Focus Curriculum*

Core Instructional, Supplemental, Instructional, and Intervention Resources

Core Instructional Resources:

- Math in Focus Teacher's Edition, Third Grade
- Math in Focus Student Textbook 3A/3B - working text
- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Math in Focus Virtual Manipulatives and paper copies
- Math in Focus Fact Fluency Practice
- Math in Focus Assessments 3

Supplemental Resources:

- Math in Focus Student Edition - working text - problem solving questions per skill

- *Denis Sheeran Training Resources*
- http://www.corestandards.org/Math/Practice/
- https://www.state.nj.us/education/standards/math/Docs/2016NJSLS-M_Grade3.pdf
- *Link to NJDOE Digital Item Library*
- *Link to Specific standards questions for NJSLA examples*

- Math in Focus Extra Practice and Homework 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Tasks
- Fact Fluency Practice
- Reflex Math
- Frax Math
- 1 set of attribute blocks per group
- 6 craft sticks per pair
- 1 geoboard and 5 rubber band
- 1 copy of Flash Cards (TR47) per pair
- 1 copy of Square Dot Paper (TR36)
- Making Quadrilaterals
- Which Polygon?
- 3 Act Lessons
- Robert Kaplinsky Lessons
- Open Middle - Grade 3: Numbers & Operations - Fractions
- Which One Doesn't Belong?
- Solve Me Puzzles
- Estimation 180
- Same or Different
- Visual Patterns
- Esti-Mysteries
- 51 Esti-Mysteries
- Splat Math

Intervention Resources:

- Math in Focus Extra Practice 3A/3B
- Math in Focus Enrichment 3A/3B - Put on Your Thinking Cap!
- Math in Focus Reteach 3A/3B
- Math in Focus Performance Task
- Chapter Wrap-up and Review
- Fact Fluency Practice
- Reflex Math
- Frax Math
- iReady
- Linkit!
- IXL
- Classroom Manipulatives
- Online Manipulatives
- Content from previous grade levels
- Touch Math

Table of Contents

Interdisciplinary Connections	**Integration of Technology through NJSLS**
• Correlates to the Geography unit in Social Studies. • Correlates to the Force & Motion unit in Science. **8.1 Educational Technology** 8.1.5.A.1 Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems. 8.1.5.A.6 Export data from a database into a spreadsheet; analyze a produce a report that explains the analysis of the data. 8.1.5.C.1 Engage in online discussions with learners of other cultures to investigate a worldwide issue from multiple perspectives and sources, evaluate findings and present possible solutions, using digital tools and online resources for all steps. 8.1.5.D.3 Demonstrate an understanding of the need to practice cyber safety, cyber security, and cyber ethics when using technologies and social media. **8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming** 8.2.5.A.3 Investigate and present factors that influence the development and function of products and systems, e.g., resources, criteria and constraints. 8.2.5.B.6 Compare and discuss how technologies have influenced history in the past century. 8.2.5.C.5 Explain the functions of a system and subsystems. 8.2.5.C.7 Work with peers to redesign an existing product for a different purpose.	• Listen to books on CDs, tapes, videos or podcasts if available. • Listen to books on websites (pbskids.org/lions/index.html, storylineonline.net, storyit.com, Elementary Connections Page) • Use document camera or overhead projector for shared reading of texts. • Use virtual manipulatives • Use Think Central • Use IXL.com • Xtramath.com • Prodigy
Integration of 21st Century Themes	**Media Literacy Integration**
Learning and Innovation Skills: **Critical Thinking & Problem Solving** • Reason Effectively • Use Systems Thinking • Making Judgements and Decisions • Solve Problems **Communication and Collaboration** • Communicate Clearly **Life and Career Skills** **Initiative and Self Direction** • Manage Goals and Time • Work Independently • Be Self-directed Learners	• Have students practice skills using IXL • Students create problems on the tablets and share them with classmates • Kahn Academy • Brain Pop
Career Education	**Global Perspectives**

9.1 Personal Finance Literacy 9.1.4.A.1 Explain the difference between a career and a job and identify various jobs in the community and the related earnings. 9.1.4.B.2 Identify age-appropriate financial goals. 9.1.4.B.3 Explain what a budget is and why it is important. 9.1.4.C.1 Explain why people borrow money and the relationship between credit and debit. 9.1.4.E.1 Determine factors that influence consumer decisions related to money. 9.1.4.G.1 Describe how valuable items might be damaged or lost and ways to protect them. **9.2 Career Awareness, Exploration, and Preparation** 9.2.4.A.3 Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes. 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.	• National Women's History Month • National Irish-American Heritage Month • Asian Pacific American Heritage Month • Older Americans' Month • Jewish American Heritage Month