Kenilworth Public Schools

Curriculum Guide

Content Area: Math
Grade: 1
BOE Approved: 8/13/12

Revision Date: Fall 2018
Submitted by: Leslie Bedford
BOE Revision Approved: 11/12/18

Mathematics- Grade 1 Scope and Sequence

Unit 1- Addition and Subtraction Strategies to 20	Unit 2- Number and Operations in Base Ten	Unit 3- Measurement	Unit 4- Graphs/Data	Unit 5- Geometry	Unit 6- Money	Unit 7- Bridging the Gap
Weeks 1-12	Weeks 13-19	Weeks 20-23	Weeks 24-26	Weeks 26-31	Weeks 32-35	Weeks 36-38
Unit Description: Develop understanding of addition and subtraction within 20.	*Unit Description:* Develop understanding of whole number relationships and place value, including grouping in tens and ones.	*Unit Description:* Develop understanding of linear measurement and measuring lengths as iterating length units, including length and time.	*Unit Description:* Organize, represent, and interpret data with up to three categories.	*Unit Description:* Reason about attributes of, and composing and decomposing geometric shapes.	*Unit Description:* Identify currency.	*Unit Description:* Build on Grade 1 content and prepare for Grade 2 content.
Unit Targets: • Add and subtract to 20 in written form. • Fluently add and subtract to 12. • Identify key words to solving word problems. • Solve word problems with three addends to	*Unit Targets:* • Count to 120 by reading, writing, and demonstrating the numbers. • Count by 2s, 5s, and 10s. • Introduce counting by 3s. • Place value by showing tens and	*Unit Targets:* • Tell time to the hour and half hour. • Determine size order. • Measure length using nonstandard units. • Measure with inches and centimeters.	*Unit Targets:* • Interpret and read bar graphs, pictographs, tally charts, and Venn diagrams. • Identify key words to solving word problems.	*Unit Targets:* • Identify attributes of two-dimensional shapes. • Create own two-dimensional shapes. • Identify attributes of three-dimensional shapes.	*Unit Targets:* • Identify values of penny, nickel, dime, and quarter. • Introduce half-dollar. • Count mixed coins using penny, nickel, dime, and quarter. • Identify key words to solving	*Unit Targets:* • Identify Place Value. • Use addition and subtraction function tables. • Add 3 numbers. • Add a one-digit number and a two-digit number. • Add two-digit

20. • Complete fact families to 20. • Demonstrate the strategy of making 10. • Understanding the signs for operations.	ones. • Greater than or less than using symbols for numbers to 100. • Add and subtract 2 digit numbers in written form without carrying/ borrowing. • Identify ordinals. • Introduce 3 digit place value. • Identify key words to solving word problems.	• Introduce measuring with feet. • Identify key words to solving word problems.		• Create own three-dimensional shapes. • Identify fractions ½, 1/3, ¼. • Identify key words to solving word problems.	word problems.	numbers. • Perform repeated addition. • Use a non-standard ruler. • Compare lengths. • Take a survey. • Identify shapes and equal shares.

Mathematics- Grade 1 Unit One

Unit title: Addition and Subtraction Strategies to 20

Unit summary: Students will develop an understanding of addition, subtraction, and strategies for addition and subtraction within 20.

Primary Interdisciplinary Connections: Social Studies, Language Arts, and Technology

21st Century Themes: Financial, Economic, Business and Entrepreneurial Literacy

Learning Targets

NJSLS Standards: 1.OA.A1-2, 1.OA.B.3-4, 1.OA.C.5-6, 1.OA.D.7-8

Technology Standards: 8.1.5.A.1

Content Statements:

1	Represent and solve problems involving addition and subtraction
2	Understand and apply properties of operations and the relationship between addition and subtraction
3	Add and subtract within 20
4	Work with addition and subtraction equations

Big Idea: There is a relationship between addition and subtraction that enables one to solve computation problems.

Unit Essential Questions:

- How can addition be represented to sums of 10?
- How can subtraction be represented with numbers 10 or less?
- How are addition problems solved?
- How are subtraction problems solved?
- How can relating addition and subtraction help to learn and understand facts within 20?

Unit Enduring Understandings:

- Through modeling and drawing pictures, various adding sentences with sums inclusive of 10 can be represented.
- Through modeling and drawing pictures, various subtraction sentences with differences inclusive of 10 can be represented.
- A wide variety of strategies such as counting on, using doubles, making ten, and grouping numbers when adding three addends, can be utilized to solve addition problems.
- A wide variety of strategies such as counting back, using adding sentences, making ten, and breaking apart, can be utilized to solve subtraction problems.
- By identifying and manipulating related facts fluency and automaticity of facts within 20 can be obtained.

Unit Learning Targets
Students will…

- Use pictures to count on and find sums.
- Use concrete objects to solve counting on addition problems.
- Use concrete objects to solve "putting together" addition problems.
- Understand how to add zero.
- Explore and apply the Communicative Property of Addition within 20.
- Model and record all the ways to put together numbers within 10.
- Build fluency for addition within 10.
- Use pictures to show "counting back" and find differences.
- Use concrete objects to solve "counting back" subtraction problems.
- Use concrete objects to solve "taking apart" subtraction problems.
- Compare pictorial groups to understand subtraction.
- Identify how many are left when subtracting all or 0.
- Model and record all of the ways to take apart numbers within 10.
- Build fluency for subtraction within 10.
- Use count on 1, 2, or 3 as a strategy to find sums within 20.
- Use doubles as a strategy to solve addition facts with sums within 20.
- Use doubles plus 1 and doubles minus 1 as strategies to find sums within 20.
- Use a ten frame to add 10 and an addend less than 10.
- Use the Associative Property of Addition to add three addends.
- Solve adding situations with the strategy of draw a picture.
- Use count back 1, 2, or 3 as a strategy to subtract.
- Recall and use addition facts to subtract numbers within 20.
- Use make 10 as a strategy to subtract.
- Subtract by breaking apart to make a ten.
- Solve subtraction problem situations using the strategy "act it out".
- Solve addition and subtraction problems using the strategy "make a model".
- Identify related addition and subtraction facts within 20.
- Apply the inverse relationship of addition and subtraction.
- Use related facts to determine unknown numbers.
- Choose an operation and strategy to solve an addition or subtraction problem.
- Represent equivalent forms of numbers using sums and differences within 20.
- Determine if an equation is true or false.
- Add and subtract facts within 20 and demonstrate fluency for addition and subtraction within 12.

Evidence of Learning

Summative Assessment:

- Chapter 1, 2, 3, 4, and 5 Tests from Go Math! Series
- Weekly leveled computation quizzes

Formative Assessments:

- Conduct the "Show What You Know" assessment prior to each chapter.
- Using the introduction page of Chapter 2, have the students create subtraction stories based on the picture.
- Administer Performance Tasks at the end of each chapter.
- Complete the Review Project, Make a Math Facts Strategy book.
- Daily word problems from Read It! Draw It! Solve It!

Lesson Plans

Activities	*Timeframe*
• Begin a discussion about rules that children follow at school. Ask the children to name the kinds of jobs that people have at school who make and enforce the rules. Write the name of each job on the board. Children tell and act out addition stories about the school workers. • Children complete activity "Sum Sentences" on Activity Card 3 by reviewing the concept of addition and modeling addition sentences. *Coordinates with Lesson 1.3* • Children read the book Busy Bugs and add the different bugs found in the illustrations. *Coordinates with Lesson 1.5* • Children practice one-digit addition and review basic facts to 8 while playing the game Addition Bingo. *Coordinates with all lessons in Chapter 1.* • Children complete activity "Apples Away" on Activity Card 5 by reviewing the concept of subtraction and modeling subtraction sentences. *Coordinates with Lesson 2.4* • Children read the book The Class Party and learn to read addition and subtraction number sentences. *Coordinates with Lesson 2.5* • Children practice subtraction facts to 8 while playing the game Subtraction Slide. *Coordinates with Lesson 2.8* • Using a picture of the American flag, ask children to count and record the number of white stripes. Repeat with the red stripes. Have children add to find the total	One day for each Weeks 1-12

number of stripes. Ask them to change the order of the numbers and add again. • Children complete activity "Back and Forth" on blue Activity Card 7 by matching addition sentences to show the Communicative Property of Addition. *Coordinates with Lesson 3.1* • Children read the book Doubles Fun on the Farm and add equal groups to make doubles. *Coordinates with Lesson 3.3* • Children practice one-digit addition and review basic facts to 12 while playing the game Ducky Sums. *Coordinates with Lesson 3.4* • Children complete activity "Picture This" on blue Activity Card 9 by modeling subtraction. *Coordinates with Lesson 4.5* • Children read Miss Bumble's Garden and practice subtraction strategies. *Coordinates with Lesson 4.6* • Children practice subtraction facts to 12 by playing the game Under the Sea. *Coordinates with Lesson 4.5* • Children complete activity "Face Facts" on orange Activity Card 11 by modeling related facts for 11 and 12. *Coordinates with Lesson 5.2* • Children read Picture Puzzles and learn about addition and subtraction facts through 12. *Coordinates with Lesson 5.3* • Children practice naming related subtraction facts to 8 by playing the game Related Fact Race. *Coordinates with Lesson 5.6* Ongoing activities • Daily word problem practice • Math fact practice The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning	

Students with Disabilities, English Language Learners, and Gifted & Talented Students: Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students. Examples of Strategies and Practices that Support Students with Disabilities: • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments Examples of Strategies and Practices that Support Gifted & Talented Students: • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios Examples of Strategies and Practices that Support English Language Learners: • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding •Word walls •Sentence frames •Think-pair-share •Cooperative learning groups	

•Teacher think-aloud	
Teacher Resources	*Teacher Note*
• Go Math workbook and Teacher editions • Grab and Go Differentiated Centers Kit • Two- Color Counters • Student Math Boards • Unifix cubes • Work mats • Counting tape	*Modified versions of chapter tests 2-5 and Read It! Draw It! Solve It! daily word problems are in the First Grade Supplemental Activities binder.

Mathematics- Grade 1 Unit Two

Unit title: Numbers and Operations in Base 10

Unit summary: Students will develop an understanding of whole number relationships and place value, including grouping in tens and ones.

Primary Interdisciplinary Connections: Language Arts, Technology, Social Studies

21st Century Themes: Global Awareness

Learning Targets

NJSLS Standards: 1.NBT.A.1, 1.NBT.B.2-3, 1.NBT.C.4-6, 1.OA.A.1

Technology Standards: 8.1.5.A.1

Content Statements:

1	Extend the counting sequence
2	Understand place value
3	Use place value understanding and properties of operations to add and subtract

Big Idea: Understanding place value allows for the understanding of patterns and numeric relationships.

Unit Essential Questions:

- How is place value used to understand numerals?
- How can numbers be compared?
- How can addition and subtraction of two-digit numbers be represented?

Unit Enduring Understandings:

- Place value is understood through reading, writing, and modeling numbers.
- Place value can be a tool for determining which numbers are greater or lesser.
- Through such strategies as modeling, making ten, using a hundred chart, and others addition and subtraction of two-digit numbers can be represented.

Unit Learning Targets

Students will…

- Count by ones to extend a counting sequence up to 120.
- Count by tens from any number to extend a counting sequence up to 120.
- Use models and write to represent equivalent forms of tens and ones.
- Group objects to show numbers to 50 as tens and ones.
- Group objects to show numbers to 100 as tens and ones.
- Read and write numerals to represent a number of 100 to 110 objects.
- Model and compare two-digit numbers to determine which is greater.

- Model and compare two-digit numbers to determine which number is less.
- Use symbols for is less than "‹", is greater than "›" and is equal to "=" to compare numbers.
- Identify numbers that are 10 less or 10 more than a given number.
- Add and subtract within 20.
- Draw a model to add tens.
- Draw a model to subtract tens.
- Use a hundred chart to find sums.
- Use concrete models to add ones or tens to a two-digit number.
- Make a ten to add a two-digit number and a one-digit number.
- Use tens and ones to add two-digit numbers.
- Add and subtract within 100, including continued practice with facts within 20.
- Identify ordinal numbers.
- Introduce 3 digit place value.
- Count by 2s, 5s, 10s.
- Introduce counting by 3s.

Evidence of Learning

Summative Assessment:

- Chapter 6, 7, and 8 Tests from Go Math! Series
- Weekly leveled computation quizzes

Formative Assessments:

- Complete Review Project online, Numbers Around Us upon completion of the unit.
- Conduct the "Show What You Know" assessment prior to each chapter.
- Administer the Performance Task at the end of each chapter.
- Daily word problems from Read It! Draw It! Solve It!

Lesson Plans

Activities	*Timeframe*
• Children complete activity "Teen Time" on orange Activity Card by modeling numbers 11 to 19. *Coordinates with Lesson 6.1* • Show children pictures that illustrate patterns in objects from different cultures and discuss how the patterns can be extended. • Children read the book Strawberries and use place value to find the number of strawberries. *Coordinates with Lesson 6.2* • Children practice decomposing numbers into tens and	One day for each activity Weeks 13-19

ones by playing the game Tens and Ones Race. *Coordinates with Lesson 6.6* • Children complete "20 Through 50" on orange Activity Card 4 by modeling and comparing numbers. *Coordinates with Lesson 7.1* • Children read the book Name That Number and compare numbers to complete a hundred chart. *Coordinates with Lesson 7.2* • Children practice comparing numbers in the teens to move along a game path playing The Greater Game. *Coordinates with Lesson 7.4* • Children complete activity "Groups of Ten" on blue Activity Card 14 by modeling groups of 10. *Coordinates with Lesson 8.2* • Children read the book It's a Homerun!, and add baseball cards. *Coordinates with Lesson 8.3* • Children practice two-digit addition and subtraction with regrouping by playing the game Flying Along. *Coordinates with Lesson 8.8* • Explain that people sometimes put their money in a bank to save it. Have children solve word problems about saving money with two-digit numbers in order to practice addition of two-digit numbers. • **Use a hundred chart to skip count by 2s and 5s. • **Skip count to find the total number of items in arranged in sets of 10s, 5s, and 2s. • **Use a hundred chart to count by 3s. • **Use ordinals through twentieth to identify position. The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning **Students with Disabilities, English Language Learners,**	

and Gifted & Talented Students: Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students. Examples of Strategies and Practices that Support Students with Disabilities: • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments Examples of Strategies and Practices that Support Gifted & Talented Students: • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios Examples of Strategies and Practices that Support English Language Learners: • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding •Word walls •Sentence frames •Think-pair-share •Cooperative learning groups •Teacher think-aloud *Ongoing activities	

• Daily word problem practice • Math fact practice	
Teacher Resources	*Teacher Note*
• Math board • Counting cubes • Base-ten blocks • Hundred Chart • Counting Tape • Go Math! Teacher Resources	** These are objectives only for topics that need to be addressed not found in the Go Math! Series. Please use these objectives as guidelines in creating lessons for these objectives. Read It! Draw It! Solve It! Daily word problems can be found in the First Grade Supplemental Activities binder.

Mathematics- Grade 1 Unit Three

Unit title: Measurement

Unit summary: Students will develop an understanding of linear measurement by measuring lengths of objects and telling time.

Primary Interdisciplinary Connections: Language Arts, Technology, Science

21st Century Themes: Global Awareness

Learning Targets

NJSLS Standards: 1.MD.A.1-2, 1.MD.B.3, 1.OA.A.2

Technology Standards: 8.1.5.A.1

Content Statements:

1	Tell and write time
2	Measure lengths directly and by iterating length units
3	Solve measurement word problems

Big Idea: Measuring lengths of objects and time provides a means for interacting with the world.

Unit Essential Questions:	Unit Enduring Understandings:
• How is time measured? • How are objects measured?	• Using various clocks in different settings, time is measured in minutes and hours. • There are different units of measure such as inches, centimeters, and feet to measure an object's length.

Unit Learning Targets

Students will…

- Order objects by length.
- Compare the measurements of objects in order to determine if they are the same as a third object.
- Measure length using nonstandard units.
- Make a nonstandard measuring tool to measure length.
- Measure using inches.
- Measure using centimeters.
- Be introduced to measuring with feet.
- Write times to the hour on an analog clock.
- Write times to the half hour on an analog clock.

- Tell times to the hour and half hour using analog and digital clocks.
- Use the hour hand to draw and write times on analog and digital clocks.
- Solve measurement problems with the strategy “act it out”.

Evidence of Learning

Summative Assessment:

- Chapter 9 Test from Go Math! Series
- Weekly leveled computation quizzes

Formative Assessments:

- Conduct the “Show What You Know” assessment prior to each chapter.
- Administer the Performance Task at the end of the chapter.
- Daily word problems from Read It! Draw It! Solve It!

Lesson Plans

Activities	*Timeframe*
• Children complete “Half Past” on orange Activity Card 17 by modeling time to the hour and half hour on analog clocks. • Children read the book The Dog Show and measure length with non-standard units. *Coordinates with Lesson 9.2* • Children practice measuring classroom objects with non-standard units by playing the game Measure Up! *Coordinates with Lesson 9.3* • Explain that long ago, sundials were used to tell time by the angle of the shadow cast by the sun. Have children cut a circle out of poster board and push a pencil through at an angle to make a sun dial. Place the sundial outdoors in a sunny spot and record each hour where the shadow is and discuss. • **Estimate and measure the lengths of objects to the nearest inch using a ruler. • **Estimate and measure the length of objects to nearest foot using a 12-inch ruler. • **Estimate and measure the length of objects in centimeters suing a ruler. The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them.	One day for each activity Weeks 20-23

2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning **Students with Disabilities, English Language Learners, and Gifted & Talented Students**: Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students. Examples of Strategies and Practices that Support Students with Disabilities: • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments Examples of Strategies and Practices that Support Gifted & Talented Students: • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios Examples of Strategies and Practices that Support English Language Learners: • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling	

• Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding •word walls •sentence frames •think-pair-share •cooperative learning groups •teacher think-aloud *Ongoing activities • Daily word problem practice • Math fact practice	
Teacher Resources	*Teacher Note*
• Go Math! Teacher resources • Math Board • Objects around the classroom of varying sizes • Counting tape • Yarn • Analog clocks • Color tiles	** These are objectives only for topics that need to be addressed not found in the Go Math! Series. Please use these objectives as guidelines in creating lessons for these objectives. Read It! Draw It! Solve It! Daily word problems are in the First Grade Supplemental Activities binder.

Mathematics- Grade 1 Unit Four

Unit title: Graphs and Data

Unit summary: Students will organize, represent, and interpret data with up to three categories.

Primary interdisciplinary connections: Language Arts, Science, Social Studies, Technology

21st Century Themes: Global Awareness

Learning Targets

NJSLS Standards: 1.MD.C.4, 1.OA.A.2

Technology Standards: 8.1.5.A.1

Content Statements:

1	Represent and interpret data
2	Solve word problems using data

Big Idea: Information can be sorted and compared for analysis.

Unit Essential Questions:	Unit Enduring Understandings:
• How can information make sense?	• Information can be sorted and presented on various graphs in order to be saved for future compare and contrast activities.

Unit Learning Targets

Students will…

- Analyze and compare data shown in a picture graph where each symbol represents one.
- Make a picture graph where each symbol represents one and interpret the information.
- Analyze and compare data shown in a bar graph.
- Make a bar graph and interpret the information.
- Analyze and compare data shown in a tally chart.
- Make a tally chart and interpret the information.
- Solve problem situations using the strategy “make a graph”.

Evidence of Learning

Summative Assessment:

- Chapter 10 Test from Go Math! Series
- Weekly leveled computation quizzes

Formative Assessments:

- Conduct the “Show What You Know” assessment prior to each chapter.
- Administer the Performance Task at the end of each chapter.
- Complete Review Project online Measure and Graph upon completion of the unit.
- Daily word problems from Read It! Draw It! Solve It!

Lesson Plans	
Activities	*Timeframe*
• Children complete “Graph Math” on blue Activity Card 6 by making a real-object graph. *Coordinates with Lesson 10.1* • Children read book Miss B’s Class Makes Tables and Graphs and learn how to gather and compare data by making tally tables and graphs. *Coordinates with Lesson 10.2* • Record the weather daily during calendar and then each month turn that data into a bar graph. • Have the children list as a many jobs as they can and record the list. Survey the children as to what job they would like when they grow up and record on a pictograph. Have the class in groups create questions about the graph. • Children practice making and reading bar graphs by playing the Graph Game. *Coordinates with Lesson 10.3* • **Read a story such as The City Mouse and the Country Mouse. Compare the city and country as a pre-reading activity by using a Venn diagram. The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning **Students with Disabilities, English Language Learners, and Gifted & Talented Students:**	One day for each activity Weeks 24-26

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• Math fact practice	
Teacher Resources	*Teacher Note*
• Math boards • Counting Tape • Counting Cubes • Two-color counters • Go Math! Teacher Resources	** These are objectives only for topics that need to be addressed not found in the Go Math! Series. Please use these objectives as guidelines in creating lessons for these objectives. Read It! Draw It! Solve It! Daily word problems are in the First Grade Supplemental Activities binder.

Mathematics- Grade 1 Unit Five

Unit title: Geometry

Unit summary: Students will reason about attributes of two-dimensional and three-dimensional shapes. Students will analyze two-dimensional and three-dimensional shapes through composing and decomposing said shapes.

Primary interdisciplinary connections: Language Arts, Technology, Social Studies, Science

21st Century Themes: Health Literacy

Learning Targets

NJSLS Standards: NJSLS: 1.G.A.1-3, 1.OA.2

Technology Standards: 8.1.5.A.1

Content Statements:

1	Compose two-dimensional shapes
2	Compose three-dimensional shapes
3	Partition shapes into fractional parts
4	Reason with shapes and their attributes

Big Idea: Shapes are all around and are the foundation for everyday items.

Unit Essential Questions:	Unit Enduring Understandings:
• How can three-dimensional and two-dimensional shapes be manipulated?	• Shapes have attributes that define them and allow them to be constructed and deconstructed based on those attributes.

Unit Learning Targets

Students will…

- Identify three-dimensional shapes according to defining attributes.
- Compose a new shape by combining three-dimensional shapes.
- Use composite three-dimensional shapes to build new shapes.
- Identify two dimensional shapes on three-dimensional shapes.
- Use defining attributes to sort shapes.
- Describe attributes of two-dimensional shapes.
- Use objects to compose new two-dimensional shapes.
- Compose a new shape by combining two-dimensional shapes.
- Decompose two-dimensional shapes into parts.

- Identify equal and unequal parts in two dimensional shapes.
- Partition circles and rectangles into two, three, and four equal shares.

Evidence of Learning

Summative Assessment:

- Chapter 11 and Chapter 12 Tests from Go Math! Series
- Weekly leveled computation quizzes

Formative Assessments:

- Conduct the "Show What You Know" assessment prior to each chapter.
- Complete Review Project online Building Shapes.
- Administer the Performance Task at the end of each chapter.
- Daily word problems from Read It! Draw It! Solve It!

Lesson Plans

Activities	*Timeframe*
• Children complete "Building Blocks" on purple Activity card 10 by combining plane shapes and new shapes. *Coordinates with Lesson 11.2* • Children read Building a Mini- Park and learn about three-dimensional shapes. *Coordinates with Lesson 11.4* • Children practice describing the attributes of plane shapes by playing the game On the Water. *Coordinates with Lesson 11.5* • Discuss the idea that all citizens are responsible for taking care of the trash. Display objects that can be recycled, such as soup cans, paper towel rolls, and tissue boxes. Tell children that they can put these objects in recycling bins and sort the objects into different recycling bins based on attributes. • Children complete "On the Corner" on blue Activity Card 10 by showing the number of sides and vertices for various shapes. *Coordinates with Lesson 12.2* • Children read the book Signs Shape Up and learn about how to identify the shapes and signs. *Coordinates with Lesson 12.6* • Children practice describing the attributes of two-dimensional shapes by playing the game On the Water. *Coordinates with Lesson 12.3* • Discuss different fruits and vegetables and how they grow. Provide pictures of the fruits and vegetables and have the students "cut the fruits" to share with a friend. • **Partition shapes into thirds.	One day for each activity. Weeks 27-31

The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning **Students with Disabilities, English Language Learners, and Gifted & Talented Students:** Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students. Examples of Strategies and Practices that Support Students with Disabilities: • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments Examples of Strategies and Practices that Support Gifted & Talented Students: • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios Examples of Strategies and Practices that Support English Language Learners: • Pre-teaching of vocabulary and concepts	

• Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding •word walls •sentence frames •think-pair-share •cooperative learning groups •teacher think-aloud Ongoing activities • Daily word problem practice • Math fact practice	
Teacher Resources	*Teacher Note*
• Go Math! Teacher Resources • Math Board • Models of three-dimensional shapes • Counting Tape • Models of two-dimensional shapes • Pattern blocks	** These are objectives only for topics that need to be addressed not found in the Go Math! Series. Please use these objectives as guidelines in creating lessons for these objectives. Read It! Draw It! Solve It! Daily word problems are in the First Grade Supplemental Activities binder.

Mathematics- Grade 1 Unit Six

Unit title: Money

Unit summary: Students will identify currency. Students will make amounts represented by mixes amounts of coins.

Primary Interdisciplinary Connections: Language Arts, Social Studies, Technology

21st Century Themes: Financial, Economic, Business and Entrepreneurial Literacy

Learning Targets

NJSLS Standards: 2.MD.C.8

Technology Standards: 8.1.5.A.1

Content Statements:

1	Value of a penny, nickel, dime, and quarter
2	Value of a half-dollar
3	Mixed coins
4	Solving money word problems

Big Idea: In order to purchase items, money needs to be counted.

Unit Essential Questions:	Unit Enduring Understandings:
• How is the total value of a group of money determined?	• Through identification of coins and assigning values to those coins, groups of coins can be counted.

Unit Learning Targets

Students will…

- Discriminate between a penny and a nickel based on appearance and value.
- Identify the value of a dime and a penny up to 99.
- Identify the value of a group of dimes and nickels.
- Identify the value of a group of dimes, nickels, and pennies.
- Identify a quarter and various ways to make 25 in money.
- Count mixed groups of coins including the quarter.
- Identify a half-dollar coin.

Evidence of Learning

Summative Assessment:

- Administer end of unit test

- Weekly leveled computation quizzes

Formative Assessments:

- Have a class store and children purchase an item. Children make a representation of the different ways using different coins to make the same amount.
- Daily word problems from Read It! Draw It! Solve It!

Lesson Plans	
Activities	*Timeframe*
• **Identify the value of a group of nickels and pennies through 25¢. • **Identify the value of a group of dimes and pennies through 99¢. • **Identify the value of a group of dimes and nickels through 95¢. • **Identify the value of a group of dimes, nickels, and pennies through 99¢. • **Identify a quarter and find groups of coins that have the same value as a quarter. • **Count collections of coins including a quarter, dimes, nickels, and pennies. • **Identify a half-dollar coin and combinations of coins that have the same value as a half-dollar. The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning **Students with Disabilities, English Language Learners, and Gifted & Talented Students:** Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging	One day for each activity Weeks 32-35

learning, teachers can maximize success for all students. Examples of Strategies and Practices that Support Students with Disabilities: • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments Examples of Strategies and Practices that Support Gifted & Talented Students: • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios Examples of Strategies and Practices that Support English Language Learners: • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding •word walls •sentence frames •think-pair-share •cooperative learning groups •teacher think-aloud Ongoing activities • Daily word problem practice • Math fact practice	
Teacher Resources	*Teacher Note*
• Touch Math Money materials	** These are objectives only for topics that need to be addressed not

	found in the Go Math! Series. Please use these objectives as guidelines in creating lessons for these objectives. Read It! Draw It! Solve It! Daily word problems are in the First Grade Supplemental Activities binder.

Mathematics- Grade 1 Unit Seven

Unit title: Bridging the Gap- Getting Ready for Second Grade

Unit summary: In this unit students will build on Grade 1 skills to prepare for grade 2 content.

Primary Interdisciplinary Connections: Language Arts, Social Studies, Technology

21st Century Themes: Financial, Economic, Business and Entrepreneurial Literacy

Learning Targets

NJSLS Standards: 2.OA.A.1, 2.OA.B.2, 2.NBT.A.1, 2.MD.A.1

Technology Standards: 8.1.5.A.1

Content Statements:

1	Understand place value
2	Add and subtract within 20
3	Measure and estimate lengths in standard units
4	Reason with shapes and their attributes

Big Idea: To build upon and improve skills for next year's content.

Unit Essential Questions:	Unit Enduring Understandings:
• How can you further your knowledge of current skills to prepare for higher level content in the 2nd grade?	• Using different strategies can build current skills and advance students' knowledge to prepare for next year.

Unit Learning Targets

Students will…

- Identify Place Value.
- Use addition and subtraction function tables.
- Add 3 numbers.
- Add a one-digit number and a two-digit number.
- Add two-digit numbers.
- Perform repeated addition.
- Use a non-standard ruler.
- Compare lengths.
- Take a survey.
- Identify shapes and equal shares.

Evidence of Learning

Summative Assessment:

- Go Math End of Year assessment

- Weekly leveled computation quizzes

Formative Assessments:

- Exit slips
- Go Math lesson and homework pages
- Daily word problems from Read It! Draw It! Solve It!

Lesson Plans	
Activities	*Timeframe*
• See the end of year Go Math lesson pages and homework pages for "getting ready for second grade" activities The following Mathematical Practices are to be included in math activities: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning **Students with Disabilities, English Language Learners, and Gifted & Talented Students:** Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways. By providing appropriately challenging learning, teachers can maximize success for all students. Examples of Strategies and Practices that Support Students with Disabilities: • Use of visual and multisensory formats • Use of assisted technology • Use of prompts • Modification of content and student products • Testing accommodations • Authentic assessments Examples of Strategies and Practices that Support Gifted	One day for each activity Weeks 38-40

& Talented Students: • Adjusting the pace of lessons • Curriculum compacting • Inquiry-based instruction • Independent study • Higher-order thinking skills • Interest-based content • Student-driven instruction • Real-world problems and scenarios Examples of Strategies and Practices that Support English Language Learners: • Pre-teaching of vocabulary and concepts • Visual learning, including graphic organizers • Use of cognates to increase comprehension • Teacher modeling • Pairing students with beginning English language skills with students who have more advanced English language skills • Scaffolding •word walls •sentence frames •think-pair-share •cooperative learning groups •teacher think-aloud Ongoing activities • Daily word problem practice • Math fact practice	
Teacher Resources	*Teacher Note*
• Go Math materials • Grab-and-Go Differentiated Centers Kit • Think Central resources	Read It! Draw It! Solve It! Daily word problems are in the First Grade Supplemental Activities binder.