WEST LONG BRANCH
SCHOOL DISTRICT

West Long Branch School District

Curriculum Document

Grade 1

Mathematics

Board Approved: April 30, 2024
Revised: September 29, 2026

COURSE OVERVIEW

CURRICULUM WRITERS:	CURRICULUM WRITING WINDOW:	BOE APPROVAL DATE:
Maureen Beck	December 2023 - March 2024	April 30, 2024

Mathematics: Successful teaching and learning of mathematics play an important role in ensuring that students have the right skills required to compete in a 21st century global economy. When properly implemented and coupled with opportunities for students to engage in mathematical investigation, communication and problem solving, rigorous mathematics standards hold the promise of elevating the mathematical knowledge and skill of every learner to levels competitive with the best in the world, of preparing our college entrants to undertake advanced work in the mathematical sciences, and of readying the next generation for the jobs their world will demand. (NJ DOE website)

The West Long Branch School District Mathematics curriculum is:

- Aligned to the NJSLS Mathematics and is connected with the NJSLS Career Readiness, Life Literacies and Key Skills and Computer and Design Thinking Skills.

- Categorized into topics of study that are delineated by:
  - NJ Student Learning Standards, interdisciplinary standards, and applicable New Jersey statutory curriculum requirements aligned to the unit's topics
  - Enduring Understandings
  - Essential Questions
  - Student Learning Outcomes
  - Suggested Resources/Materials
  - Accommodations and Modifications (Multilingual Learners, Students with IEPs. 504 plans, at-risk students and gifted students)

- Supported by the following primary and secondary curricular resources:
  - Savvas enVisions Common Core program
  - Generation Genius digital platform
  - BrainPop digital platform

- Inclusive of the Standards for Mathematical Practice
  - The Standards for Mathematical Practice are embedded throughout all units of instruction and are developed in conjunction with the grade-level content standards: Make sense of problems and persevere in solving them; reason abstractly and quantitatively; construct viable arguments and critique the reasoning of others; model with mathematics; use appropriate tools strategically; attend to precision; look for and make use of structure; and look for and express regularity in repeated reasoning.

COURSE OVERVIEW

GRADE 1 MATHEMATICS			
PACING GUIDE			
TOPIC NUMBER	**TOPIC TITLE**	**PAGE NUMBER**	**RANGE OF DAYS**
1	Operations and Algebraic Thinking	4	50 - 55 days
2	Numbers and Operations in Base Ten	8	45 - 50 days
3	Measurement/Time	12	14 - 19 days
4	Data Literacy	16	7 - 12 days
5	Geometry	20	17 - 22 days

Climate Change Companion Standards:
-1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
-1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
-1.DL.A.1 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

TOPIC 1
TOPIC 4

COURSE OVERVIEW

The West Long Branch School district is committed to providing equal access to instruction and learning for ALL students. Below are identified accommodations and modifications that are utilized to meet the diverse needs of the students.

SUPPORT/ACCOMMODATIONS FOR ML LEARNERS	SUPPORT/ACCOMMODATIONS FOR STUDENTS WITH IEPs	SUPPORT/ACCOMMODATIONS FOR AT-RISK STUDENTS

-Use of visuals, pictures, images -Introduce/highlight key vocabulary before lesson -Teacher models Math concepts using manipulatives -Present topics using a multi-sensory approach -Provide peer tutoring -Utilize translation supports including bilingual dictionary, translation device, assistive technology, and peers -Use translated textbooks/workbooks; if available -Support recommended by the grade specific "can do" list outlined by WIDA -Use of technology platforms to support MLL learners -Scaffold instruction using graphic organizers and other Math tools -Provide math-specific reference tools and visual supports, such as number lines, ten frames, manipulatives, anchor charts, graphic organizers, and mathematics vocabulary supports, as appropriate.	-Allow extra time to complete assignments or tests -Modify materials and/or product; as needed -Guided notes and/or scaffold outline for written assignments -Introduce key vocabulary before lesson -Present topics using a multi-sensory approach -Work in a small group -Solidify and refine concepts through repetition -Allow answers to be given orally or dictated -Utilize assistive technology and materials -Use of technology platforms to support all learners -Follow all IEP modifications -Provide math-specific reference tools and visual supports, such as number lines, ten frames, manipulatives, anchor charts, graphic organizers, and mathematics vocabulary supports, as appropriate.	-Guided notes and/or scaffold outline for written assignments -Introduce key vocabulary before lesson -Present topics using a multi-sensory approach -Work in a small group -Lesson taught again using a differentiated approach -Allow answers to be given orally or dictated -Use visuals, anchor charts and Math tools -Frequent progress monitoring
SUPPORT/ACCOMMODATIONS FOR 504 STUDENTS	**SUPPORT/ACCOMMODATIONS FOR GIFTED STUDENTS**	
-Follow all the 504 plan modifications -Text to speech/audio recorded selections -Amplification system as needed -Fine motor skill stations embedded in rotation as needed -Modified activities, product expectations and/or scoring rubric -Provide math-specific reference tools and visual supports, such as number lines, ten frames, manipulatives, anchor charts, graphic organizers, and mathematics vocabulary supports, as appropriate.	-Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles) -Provide options, alternatives and choices to differentiate and broaden the curriculum -Organize and offer flexible small group learning activities -Provide whole group enrichment explorations -Teach cognitive and methodological skills -Use center, stations, or contracts -Organize integrated problem-solving simulations -Propose interest-based extension activities -Offer students advanced critical thinking and problem solving activities	

Topic 1: Operations and Algebraic Thinking	Duration
This topic focuses on representing and solving problems involving addition and subtraction, understanding and applying properties of operations and the relationship between addition and subtraction, adding and subtracting within 20 and working with addition and subtraction equations.	50 - 55 days

Enduring Understandings	Essential Questions
● You can make sense of addition and subtraction in many ways. ● A variety of strategies can be used to add and subtract. ● The equal sign indicates that both sides of an equation represent the same value.	● What are ways to think about addition and subtraction? ● What strategies can I use while adding and subtracting up to 20? ● How can adding and subtracting help you solve equations?

FIRST GRADE MATHEMATICS STANDARDS		
Operations and Algebraic Thinking		
-1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. **-1.OA.A.2** Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. **-1.OA.B.3** Apply properties of operations as strategies to add and subtract. **-1.OA.B.4** Understand subtraction as an unknown-addend problem. **-1.OA.C.5** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). **-1.OA.C.6** Add and subtract within 20, demonstrating accuracy and efficiency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., decomposing a number leading to a ten (e.g.,); using the relationship between addition and subtraction (e.g., knowing that , one knows ; and creating equivalent but easier or known sums (e.g., adding by creating the known equivalent) **-1.OA.D.7** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. **-1.OA.D.8** Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.		
Numbers in Base Ten		
N/A		
Measurement/Time	**Data Literacy**	**Geometry**

N/A	**N/A**	**N/A**

COMPANION LEARNING STANDARDS				
9.2 Career Awareness	**9.4 Life Literacies and Key Skills**	**9.4 Digital Citizenship**	**9.4 Critical Thinking**	**9.4 Technology Literacy**
-9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job.	**-9.4.2.CI.1:** Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **-9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	**-9.4.2.DC.7**: Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).	**-9.4.2.CT.1:** Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). **-9.4.2.CT.2:** Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). **-9.4.2.CT.3**: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	**-9.4.2.TL.1**: Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1). **-9.4.2.TL.6:** Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).

8.1 Computer and Design Thinking	**ELA/Sc/SS**
-8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats. Computers store data that can be retrieved later. Data can be copied, stored in multiple locations, and retrieved. **-8.1.2.DA.2:** Store, copy, search, retrieve, modify, and delete data using a computing device. Data can be used to make predictions about the world. • **-8.1.2.DA.3:** Identify and describe patterns in data visualizations. **- 8.1.2.DA.4**: Make predictions based on data using charts or graphs.	**L.VI.1.3.** With guidance and support from adults, demonstrate understanding of figurative language, word relationships and nuances in word meanings **D.** Identify real-life connections between words and their use (e.g., note places at home that are cozy). **SL.PE.1.1.** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. **SL.ES.1.3**. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood. **SL.UM.1.5.** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. **K-2-ETS1-1.** Ask questions, make observations, and gather information about a situation people want to change or define a simple problem that can be solved through the development of a new or improved object or tool.

Student Learning Outcomes	Student Learning Activities Aligned to Student Learning Outcome(s)	Suggested Materials & Resources
Students will… ● make sense of addition and subtraction by thinking about "add to," "put together," "take from," "take apart," and "compare." ● use a variety of strategies to add and subtract such as, use of manipulatives, drawing a picture, count on/back, doubles/near doubles, make a 10, and number lines. ● recognize that the equal sign means "the same value as" to solve for unknown parts of an equation.	The following lessons and activities support the learning outcomes for Operations and Algebraic Thinking. <u>Primary resource:</u> -Savvas Envision Math textbook lessons, learning activities, and independent practice activities associated with: -Topic 1: Understand Addition and Subtraction (pages 1 - 52) -Topic 2: Fluently Add and Subtract Within 10 (pages 53 - 104) -Topic 3: Addition Facts to 20: Use Strategies (pages 105 - 156) -Topic 4: Subtraction Facts to 20: Use Strategies (pages 157 - 208) -Topic 5: Work with Addition and Subtraction Equations (pages 209 - 248) <u>Secondary resources:</u> -BrainPop and Generation Genius videos to support addition and subtraction concepts. -IXL to practice grade specific addition and subtraction skills -Xtramath to build math fluency -Trade books focused on addition and subtraction (i.e. *Equal Shmequal* by Virginia Kroll about equity) <u>Suggested learning activities:</u> -Use cubes, counters, part-part-whole mats, ten frames, and number lines to add and subtract up to 20 -Use equations to show equality and to begin to see the relationship between addition and subtraction -Given a number of light bulb stickers, students may determine how many total stickers they and a partner have. With support, students may ask and answer questions about how turning off lights and unplugging electronics saves electricity. Students may then determine, with their partner, who saves more	-enVision Math textbook, workbook, and digital platform (Topic 1, Understand Addition and Subtraction, TM pages 1 - 52; Topic 2, Fluently Add and Subtract Within 10 TM pages 53 - 104; Topic 3, Addition Facts to 20: Use Strategies TM pages 105 - 156; Topic 4, Subtraction Facts to 20: Use Strategies TM pages 157 - 208; Topic 5, Work with Addition and Subtraction Equations TM pages 209 - 248) -Generation Genius digital platform -BrainPop digital platform -Xtramath digital platform -IXL digital platform -Math manipulatives (counters, blocks, number lines, ten frames) -Google classroom -Chromebooks -Dry erase whiteboards and markers -Flashcards for addition and subtraction up to 20 -Dice (roll and add; roll and subtract)

	electricity based on the number of light bulb stickers each has (Climate change connection). -Roll and add/roll and subtract dice activities -enVision 3-ACT Math activities in Topics 1-5	

Formative Assessment	Summative Assessment	Alternate Assessment	Benchmark Assessment
-Student response and performance -Observations -Student engagement -Oral and written responses -Exit tickets -Anecdotal notes -Homework	-Quizzes and formal enVision Topics 1-5 assessments -Fluency facts assessment -Xtra Math	-enVision topics Performance Tasks and Project with scoring rubrics	-Savvas enVision cumulative assessment Topics 1-4 (given after Topic 4)

Topic 2: Numbers and Operations in Base Ten	Duration
This topic focuses on extending the counting sequence, understanding place value, using place value understanding and properties of operations to add and subtract.	45 - 50 days

Enduring Understandings	Essential Questions
• There are a variety of strategies you can use to count and write numbers up to 120. • Two-digit numbers represent amounts of tens and ones and you can use strategies to help add and subtract tens and ones. • You can use symbols to compare numbers (greater than, less than, equal to) up to 120.	• How can you use what you already know about counting to count past 100? • How can you count, add, and subtract using tens and ones? • What are ways to compare numbers to 120?

FIRST GRADE MATHEMATICS STANDARDS

Operations and Algebraic Thinking

N/A

Numbers in Base Ten

-1.NBT.A.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
-1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

a. 10 can be thought of as a bundle of ten ones — called a "ten."
b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

-1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.
-1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
-1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
-1.NBT.C.6 Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Measurement/Time	Data Literacy	Geometry

N/A	**N/A**	**N/A**

COMPANION LEARNING STANDARDS				
9.2 Career Awareness	**9.4 Life Literacies and Key Skills**	**9.4 Digital Citizenship**	**9.4 Critical Thinking**	**9.4 Technology Literacy**
-9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job.	**-9.4.2.CI.1:** Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **-9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	**-9.4.2.DC.7**: Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).	**-9.4.2.CT.1:** Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). **-9.4.2.CT.2:** Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). **-9.4.2.CT.3**: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	**-9.4.2.TL.1**: Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1). **-9.4.2.TL.6:** Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).

8.1 Computer and Design Thinking	**ELA/Sc/SS**
-8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats. Computers store data that can be retrieved later. Data can be copied, stored in multiple locations, and retrieved. **-8.1.2.DA.2:** Store, copy, search, retrieve, modify, and delete data using a computing device. Data can be used to make predictions about the world. • **-8.1.2.DA.3:** Identify and describe patterns in data visualizations. **- 8.1.2.DA.4**: Make predictions based on data using charts or graphs.	**SL.PE.1.1.** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. **SL.ES.1.3**. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood. **SL.UM.1.5.** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

Student Learning Outcomes	**Student Learning Activities Aligned to Student Learning Outcome(s)**	**Suggested Materials & Resources**
Students will… ● Count, write, and model numbers to 120 by counting by 10s, 1s, using a number chart, open number line, and manipulatives.	The following lessons and activities support the learning outcomes for Numbers and Operations in Base Ten Primary resource:	-enVision Math textbook, workbook, and digital platform (Topic 7, Extend the Counting Sequence TM pages 281 - 320; Topic 8, Understand Place Value TM pages 321 - 360; Topic 9, Compare Two-Digit

• Add and subtract two-digit numbers using strategies like 100 chart, drawing models, open number lines, and using manipulatives like place-value blocks • Find numbers that are more or less than a given number • Compare numbers using <,>,= symbols	-Savvas Envision Math textbook lessons, learning activities, and independent practice activities associated with: -Topic 7: Extend the Counting Sequence (pages 281 - 320) -Topic 8: Understand Place Value (pages 321 - 360) -Topic 9: Compare Two-Digit Numbers (pages 361 -448) -Topic 10: Use Models and Strategies to Add Tens and Ones (pages 397- 449) -Topic 11: Use Models and Strategies to Subtract Tens (pages 449 - 488) <u>Secondary resources:</u> -BrainPop and Generation Genius videos to support addition and subtraction concepts. -IXL to practice grade specific place value skills -Trade books focused on place value (i.e *Earth Day-Hooray* by Stuart J. Murphy, *Alfie the Alligator* by Sandy Turley) <u>Suggested learning activities:</u> -Use place value blocks, 100 chart, models, and number lines to add and subtract two-digit numbers -Use manipulatives (alligator printable) to help students imagine which direction the symbol must go to compare numbers -enVision 3-ACT Math activities in Topics 7-11	Numbers TM pages 361 -448; Topic 10, Use Models and Strategies to Add Tens and Ones TM pages 397-449; Topic 11, Use Models and Strategies to Subtract Tens TM pages 449 - 488) -Generation Genius digital platform -BrainPop digital platform -IXL digital platform -Math manipulatives (place value blocks, 100 chart, number lines) -Google classroom -Chromebooks -Place value mats -Dry erase whiteboards and markers -Alligator printable symbols to compare numbers -Highlighters to highlight place value

Formative Assessment	Summative Assessment	Alternate Assessment	Benchmark Assessment
-Student response and performance -Observations -Student engagement -Oral and written responses -Exit tickets -Anecdotal notes -Homework	-Quizzes and formal enVision Topics 7-11 assessments	-enVision topics Performance Tasks and Project with scoring rubrics	-Savvas enVision cumulative assessment Topics 1-8 (given after Topic 8)

Topic 3: Measurement and Time	Duration
This topic focuses on measuring lengths indirectly and by iterating length units, telling and writing time and working with money.	14 - 19 days

Enduring Understandings	Essential Questions
● Objects and tools can be used to measure and compare how long an object is ● The value of each coin varies so you can use different combinations of coins to form one dollar ● Clocks can be digital or have hands (hour and minute) that help tell time to the hour and half hour	● What are ways to measure how long an object is? ● What are the values of coins? ● What are some different ways to tell time?

FIRST GRADE MATHEMATICS STANDARDS		
Operations and Algebraic Thinking		
N/A		
Numbers in Base Ten		
N/A		
Measurement/Time	**Data Literacy**	**Geometry**
-1.M.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. **-1.M.A.2** Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. **-1.M.B.3** Tell and write time in hours and half-hours using analog and digital clocks.	N/A	N/A

-1.M.C.4 Know the comparative values of coins and all dollar bills (e.g., a dime is of greater value than a nickel). Use appropriate notation (e.g., 69¢, $10). **1.M.C.5** Use dollars in the solutions of problems up to $20. Find equivalent monetary values (e.g., a nickel is equivalent in value to five pennies). Show monetary values in multiple ways.		

COMPANION LEARNING STANDARDS				
9.2 Career Awareness	**9.4 Life Literacies and Key Skills**	**9.4 Digital Citizenship**	**9.4 Critical Thinking**	**9.4 Technology Literacy**
-9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job.	**-9.4.2.CI.1:** Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **-9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	**-9.4.2.DC.7**: Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).	**-9.4.2.CT.1:** Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). **-9.4.2.CT.2:** Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). **-9.4.2.CT.3**: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	**-9.4.2.TL.1**: Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1). **-9.4.2.TL.6:** Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).

8.1 Computer and Design Thinking	**ELA/Sc/SS**
-8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats. Computers store data that can be retrieved later. Data can be copied, stored in multiple locations, and retrieved. **-8.1.2.DA.2:** Store, copy, search, retrieve, modify, and delete data using a computing device. Data can be used to make predictions about the world. • **-8.1.2.DA.3:** Identify and describe patterns in data visualizations. **- 8.1.2.DA.4**: Make predictions based on data using charts or graphs.	**SL.PE.1.1.** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. **SL.ES.1.3**. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood. **SL.UM.1.5.** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. **K-2-ETS1-1.** Ask questions, make observations, and gather information about a situation people want to change or define a simple problem that can be solved through the development of a new or improved object or tool.

Student Learning Outcomes	Student Learning Activities Aligned to Student Learning Outcome(s)	Suggested Materials & Resources
Students will… -use objects and tools to tell how long an object is -use phrases like “longer than” and “shorter than” to compare lengths of objects -tell the value of coins and add up a group of coins to tell its worth - tell time to the hour and half hour on a digital and analog clock	The following lessons and activities support the learning outcomes for Measurement and Time. <u>Primary resource:</u> -Savvas Envision Math textbook lessons, learning activities, and independent practice activities associated with: -Topic 12: Measure Lengths (pages 489 - 516) -Topic 13: Time and Money (pages 517 - 552) <u>Secondary resources:</u> -BrainPop and Generation Genius videos to support addition and subtraction concepts. -IXL to practice grade specific place value skills -Trade books focused on measurement and time (i.e *Telling Time* by Jules Older). <u>Suggested learning activities:</u> -Use objects and tools such as paper clips, thumb, and string to measure length. -Use play and real money to identify and sort coins -Use play clocks with minute/hour hand to practice telling time -enVision 3-ACT Math activities in Topics 12-13	-enVision Math textbook, workbook, and digital platform (Topic 12, Measure Lengths TM pages 489 - 516; Topic 13, Time and Money TM pages 517 - 552) -Generation Genius digital platform -BrainPop digital platform -IXL digital platform -Math manipulatives (cubes, paper clips, string, money, clocks) -Google classroom -Chromebooks -Dry erase whiteboards and markers

Formative Assessment	Summative Assessment	Alternate Assessment	Benchmark Assessment
-Student response and performance -Observations -Student engagement -Oral and written responses -Exit tickets -Anecdotal notes -Homework	-Quizzes and formal enVision Topics 12-13 assessments	-enVision topics Performance Tasks and Project with scoring rubrics	-Savvas enVision cumulative assessment Topics 1-12 (given after Topic 12)

Topic 4: Data Literacy	Duration
This topic focuses on representing and interpreting data.	7 - 12 days

Enduring Understandings	Essential Questions
• Data can be collected, organized, and presented in a variety of ways. • Data can be interpreted by making, reading and analyzing graphs.	• What are some ways you can collect, show, and understand data?

FIRST GRADE MATHEMATICS STANDARDS		
Operations and Algebraic Thinking		
N/A		
Numbers in Base Ten		
N/A		
Measurement/Time	**Data Literacy**	**Geometry**
N/A	**-1.DL.A.1** Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	**N/A**

COMPANION LEARNING STANDARDS				
9.2 Career Awareness	**9.4 Life Literacies and Key Skills**	**9.4 Digital Citizenship**	**9.4 Critical Thinking**	**9.4 Technology Literacy**
-9.1.2.CAP.1: Make a list of	**-9.4.2.CI.1:** Demonstrate	**-9.4.2.DC.7**: Describe actions	**-9.4.2.CT.1:** Gather information	**-9.4.2.TL.1**: Identify the basic

different types of jobs and describe the skills associated with each job.	openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **-9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).	about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). **-9.4.2.CT.2:** Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). **-9.4.2.CT.3**: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1). **-9.4.2.TL.6:** Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).

8.1 Computer and Design Thinking	**ELA/Sc/SS**
-8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats. Computers store data that can be retrieved later. Data can be copied, stored in multiple locations, and retrieved. **-8.1.2.DA.2:** Store, copy, search, retrieve, modify, and delete data using a computing device. Data can be used to make predictions about the world. • **-8.1.2.DA.3:** Identify and describe patterns in data visualizations. **- 8.1.2.DA.4**: Make predictions based on data using charts or graphs.	**RI.PP.1.5**. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.RI.MF.1.6. With prompting and support, use text features (e.g., diagrams, tables, animations) to describe key ideas. **SL.PE.1.1**. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. **SL.ES.1.3**. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood. **SL.UM.1.5.** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. **-1.DL.A.1** Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. **K-2-ETS1-1.** Ask questions, make observations, and gather information about a situation people want to change or define a simple problem that can be solved through the development of a new or improved object or tool.

Student Learning Outcomes	**Student Learning Activities Aligned to Student Learning Outcome(s)**	**Suggested Materials & Resources**
Students will… -organize data into categories by using tally graphs	The following lessons and activities support the learning outcomes for Data Literacy.	-enVision Math textbook, workbook, and digital platform (Topic 6, Represent and Interpret Data, TM

and picture graphs -interpret data in an organized graph	Primary resource: -Savvas Envision Math textbook lessons, learning activities, and independent practice activities associated with: -Topic 6: Represent and Interpret Data (pages 249 - 280) Secondary resources: -BrainPop and Generation Genius videos to support data literacy concepts. -IXL to practice grade specific place value skills -Trade books focused on data literacy (i.e. *The Best Vacation Ever* by Stuart J. Murphy). Suggested learning activities: -Use tally marks to organize and collect data in order to make a tally or picture graph. -Use charts to interpret data and gain information -1.DL.A.1 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. Climate Change: Saving Energy: Students collect or use simple data about classroom energy-saving actions, such as turning off lights or electronics, and organize and compare the results.	pages 249 - 280) -Generation Genius digital platform -BrainPop digital platform -IXL digital platform -Google classroom -Chromebooks -Dry erase whiteboards and markers

Formative Assessment	Summative Assessment	Alternate Assessment	Benchmark Assessment
-Student response and performance -Observations -Student engagement -Oral and written responses -Exit tickets -Anecdotal notes -Homework	-Quizzes and formal enVision Topics 6 assessments	-enVision topics Performance Tasks and Project with scoring rubrics	-Savvas enVision cumulative assessment Topics 1-8 (given after Topic 8)

Topic 5: Geometry	Duration
This topic focuses on identifying and reasoning with shapes and their attributes.	17 - 22 days

Enduring Understandings	Essential Questions
● Two-dimensional and three-dimensional shapes have distinguishing attributes that define them and can be combined to make new shapes. ● Shapes can be divided into equal shares such as halves, quarters (or fourths). ● More equal shares of the same whole create smaller shares.	● How can you define shapes and compose new shapes? ● What are some different names for equal shares?

FIRST GRADE MATHEMATICS STANDARDS		
Operations and Algebraic Thinking		
N/A		
Numbers in Base Ten		
N/A		
Measurement/Time	**Data Literacy**	**Geometry**
N/A	**N/A**	**-1.G.A.1** Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes. **-1.G.A.2** Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Clarification: Students do not need to learn formal names such as “right rectangular prism.”) **-1.G.A.3** Partition circles and rectangles into two and four equal shares, describe the shares using the words halves,

		fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

COMPANION LEARNING STANDARDS				
9.2 Career Awareness	**9.4 Life Literacies and Key Skills**	**9.4 Digital Citizenship**	**9.4 Critical Thinking**	**9.4 Technology Literacy**
-9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job.	**-9.4.2.CI.1:** Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2). **-9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	**-9.4.2.DC.7**: Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).	**-9.4.2.CT.1:** Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). **-9.4.2.CT.2:** Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). **-9.4.2.CT.3**: Use a variety of types of thinking to solve problems (e.g., inductive, deductive).	**-9.4.2.TL.1**: Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1). **-9.4.2.TL.6:** Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).

8.1 Computer and Design Thinking	**ELA/Sc/SS**
-8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats. Computers store data that can be retrieved later. Data can be copied, stored in multiple locations, and retrieved. **-8.1.2.DA.2:** Store, copy, search, retrieve, modify, and delete data using a computing device. Data can be used to make predictions about the world. • **-8.1.2.DA.3:** Identify and describe patterns in data visualizations. **- 8.1.2.DA.4**: Make predictions based on data using charts or graphs.	**SL.PE.1.1.** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. **SL.ES.1.3**. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood. **SL.UM.1.5.** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. **K-2-ETS1-2** Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Student Learning Outcomes	**Student Learning Activities Aligned to**	**Suggested Materials & Resources**

	Student Learning Outcome(s)	
Students will… -use attributes to describe and create two-dimensional and three-dimensional shapes -combine two-dimensional and three-dimensional shapes to make new shapes -determine if a shape is divided into equal shares -divide shapes into 2 and 4 equal shares and use words to describe those shares -recognize that the smaller the pieces, the greater number of pieces and the larger the pieces, the fewer number of pieces.	The following lessons and activities support the learning outcomes for Geometry. <u>Primary resource:</u> -Savvas Envision Math textbook lessons, learning activities, and independent practice activities associated with: -Topic 14: Reason with Shapes and Their Attributes(pages 553 -604) -Topic 15: Equal Shares (pages 605 - 632) <u>Secondary resources:</u> -BrainPop and Generation Genius videos to support geometry concepts. -IXL to practice grade specific place value skills -Trade books focused on Geometry (i.e. *The Greedy Triangle* by Marilyn Burns). <u>Suggested learning activities:</u> -Draw and use pattern blocks to create. two-dimensional and three-dimensional shapes -Draw and model equal shares by drawing lines to divide shapes. -Pass and describe wooden 3-d shapes. -Use charts to interpret data and gain information -enVision 3-ACT Math activities in Topics 14 and 15. -Students may connect shapes to real-world objects and describe the connection between the shape and successful function of the object	-enVision Math textbook, workbook, and digital platform (Topic 14, Reason with Shapes and Their Attributes, TM pages 553 -604; Topic 15, Equal Shares, TM pages 605-632) -Generation Genius digital platform -BrainPop digital platform -IXL digital platform -Math manipulatives (pattern blocks, 3-D shapes) -Google classroom -Chromebooks -Dry erase whiteboards and markers

Formative Assessment	Summative Assessment	Alternate Assessment	Benchmark Assessment
-Student response and performance -Observations -Student engagement -Oral and written responses -Exit tickets -Anecdotal notes -Homework	-Quizzes and formal enVision Topics 14 and 15 assessments	-enVision topics Performance Tasks and Project with scoring rubrics	-Savvas enVision cumulative assessment Topics 1-15 (given after Topic 15)