Mathematics Department

Grade 1

Developed by: Leann Martin, Amanda Greenfield, & Grade 1 Teachers
Effective Date: September 2024

Scope and Sequence

Month	Grade 1	
September	**Grade 1 Math Baseline Assessment** Chapter 1: Numbers to 10 ● *Counting to 10* ● *Comparing Numbers* ● *Number Patterns* **Strategies Interventions: Bridges** **Volume 1: Counting and Early Place Value** Chapter 2: Addition and Subtraction within 10 ● *Making Number Bonds* ● *Ways to Add* ● *Making Addition Stories* ● *Real-world Problems: Addition* ● *Ways to Subtract* ● *Making Subtraction Stories* ● *Real-World Problems: Subtraction* ● *Making Fact Families*	**Strategies Interventions: Bridges** **Volume 1: Counting and Early Place Value**
October	Finish Chapter 2 Chapter 3: Shapes and Patterns ● *Exploring Flat Shapes* ● *Exploring Solid Shapes* ● *Using Shapes to Make Pictures and Models* ● *Seeing Shapes Around Us* ● *Using Flat Shapes to Make Patterns* ● *Using Solid Shapes to Make Patterns* **Benchmark 1 (Chapters 1 through 3) by the end of October- prior to Parent- Teacher Conferences**	

November	Chapter 4: Numbers to 20 ● *Counting to 20* ● *Place Value* ● *Comparing and Ordering Numbers* ● *Number Patterns*	
December	Chapter 5: Addition & Subtraction within 20 ● *Ways to Add Fluently* ● *Ways to Subtract Fluently* ● *Real-World Problems: Addition and Subtraction* **Benchmark 2 (Chapters 4 and 5)**	
January	Chapter 6: Numbers to 40 ● *Counting to 20* ● *Place Value* ● *Comparing, Ordering, and Number Patterns* Chapter 7: Calendar and Time ● *Using a Calendar* ● *Telling Time to the Hour* ● *Telling Time to the Half Hour*	
February	Book B Chapter 8: Addition & Subtraction within 40 ● *Addition without Regrouping* ● *Addition with Regrouping* ● *Subtraction without Regrouping* ● *Subtraction with Regrouping* ● *Real-World Problems: Addition and Subtraction* **Benchmark 3 (Chapters 6, 7, 8)**	
March	Chapter 9: Length and Weight ● *Comparing Lengths* ● *Comparing More Lengths* ● *Using a Start Line* ● *Measuring Length* ● *Measuring Length in Units* ● *Comparing Weights* ● *Measuring Weight* ● *Measuring Weight in Units*	
April	Chapter 12: Graphs ● *Simple Picture Graphs* ● *Tally Charts and Picture Graphs*	

	Grade 1 Math Spring Summative Assessment Chapter 10: Numbers to 120 ● *Counting to 120* ● *Place Value* ● *Comparing, Ordering and Number Patterns* Chapter 11: Addition & Subtraction within 100 ● *Addition without Regrouping* ● *Addition with Regrouping* ● *Subtraction without Regrouping* ● *Subtraction with Regrouping*	
May	Finish Chapter 11 ***Note: The NJSLS does not require grade 1 students to master the paper-pencil algorithm for regrouping in addition and subtraction, however students are required to understand the concept of regrouping ten ones for one ten and vice versa. (Students should be able to add a two-digit number and a one-digit number that may or may not involve regrouping OR a two-digit number and a multiple of 10) (1.NBT.4)***	
June	Chapter 13: Money ● *Penny, Nickel, and Dime* ● *Quarter* ● *Counting Money* ● *Adding and Subtracting Money*	

Unit 1

Numbers to 20

Summary and Rationale

In this unit, students use countable objects to develop the association between the physical representation of the number, the number symbol, and the number word. Besides counting objects in a set, and creating a set within a given number of objects, students also differentiate between numbers of objects in sets, a skill that forms a basis for number comparison. They learn to recognize relationships between numbers, such as 1 *more than* and 1 *less than*. Using countable objects and a math balance, children are led to see how a given number can be made from two smaller numbers. The part-whole analysis through number bonds forms the basis for the concept of adding two numbers to give another number.

Students add by counting on and by using number bonds. They learn to construct "addition" stories from pictures and solve real-world problems by writing "addition" sentences. Children use strategies such as the take-away concept, number bonds, counting on, and counting back to identify and learn subtraction facts. They write subtraction sentences to represent familiar situations, and begin to see the inverse relationship between addition and subtraction by using number bonds.

As an introduction to the concept of place value, students count to 20 using pictorial representations of concrete objects. They recognize numbers 11 to 20 as one group of ten and a particular number of ones. This is a key stage and sets the foundation for developing the idea of tens and ones and being able to make sense of two-digit numbers. Students compare numbers and establish number relationships such as *greater than* and *less than*. They identify patterns from these number relationships and extend the patterns.

Students learn more strategies for addition and subtraction as they solve problems that include numbers between 10 and 20. These strategies include grouping into tens and ones, number bonds, and using double facts to add and subtract. Students use addition and subtraction sentences to solve real-world problems.

Recommended Pacing

Math In Focus Chapter 1: Numbers to 10: 2 weeks
*Math In Focus C*hapter 2:Addition & Subtraction Facts Within 10
Math In Focus Chapter 4: Numbers to 20
Math In Focus Chapter 5: Addition and Subtraction Facts Within 20

Standards

Number and Operations in Base Ten

1.NBT.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.2	Understand that the two digits of a two-digit number represent amounts of tens and ones.
1.NBT.2a	Understand that 10 can be thought of as a bundle of ten ones — called a "ten."
1.NBT.2b	Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
1.NBT.3	Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
1.NBT.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 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.
Operations & Algebraic Thinking	
1.OA.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]
1.OA.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.3	Apply properties of operations as strategies to add and subtract.[2] *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)*
1.OA.4	Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8. Add and subtract within 20.*
1.OA.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
1.OA.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., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

1.OA.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
1.OA.8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ – 3, 6 + 6 = _.*
Mathematical Practices	
K-12.MP.1	Make sense of problems and persevere in solving them.
K-12.MP.2	Reason abstractly and quantitatively.
K-12.MP.3	Construct viable arguments and critique the reasoning of others.
K-12.MP.4	Model with mathematics.
K-12.MP.5	Use appropriate tools strategically.
K-12.MP.6	Attend to precision.
K-12.MP.7	Look for and make use of structure.
K-12.MP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connections	
ELA	
Math journal, math vocabulary discussions, reading topic-related books, providing explanations	
SL.1.1.	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. C. Ask questions to clear up any confusion about the topics and texts under discussion.
SL.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.1.6.	Produce complete sentences when appropriate to task and situation.
Integration of Technology	
Use of SmartBoard, playing online games	

8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
Career Readiness, Life Literacies and Key Skills	
9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
9.2.2.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.
9.4.2.CI..2	Demonstrate originality and inventiveness in work.
9.4.2.CT.1	Gather information about an issue and collaboratively brainstorm ways to solve the problem.
9.4.2.CT.2	Identify possible approaches and resources to execute a plan.
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.

Instructional Focus

Enduring Understandings:	**Essential Questions:**
Numbers to 20 can be counted and compared. Numbers to 20 can be counted, ordered, and compared. Number bonds can be used to show parts and whole. Addition can be used to find how many in all. Subtraction can be used to find how many are left. Subtraction is the opposite of addition. Different strategies can be used to add and subtract.	What are some strategies for addition? What are some strategies for subtraction? Why and when do we add? Why and when do we subtract? How are addition and subtraction related?

Evidence of Learning (Assessments)

Math In Focus Assessment Guide Chapter 1: Numbers to 10
Math In Focus Assessment Guide Chapter 2: Addition & Subtraction Within 10
Math In Focus Cumulative Review 1: (Chapters 1 through 3)

Math In Focus Assessment Guide Chapter 4: Numbers to 20
Math In Focus Assessment Guide Chapter 5: Addition & Subtraction Within 20
Math In Focus Cumulative Review 2: (Chapters 4 & 5)

Benchmark Assessment #1
Benchmark Assessment #2
Benchmark Assessment #3
Math Spring Summative Assessment
Math Centers
Homework
Classwork
Class Participation

Objectives (SLO)

Students will know:

- Numbers to 20
- Comparative words: same, more, fewer, greater than, less than, more than
- Pattern
- Number bonds, part, whole
- Add, plus (+), equal to (=)
- Addition sentence, addition story
- Subtract, take away, minus (-)
- Subtraction sentence, subtraction story
- Fact family
- Counting to 20
- Place Value
- Comparing Numbers
- Making Patterns
- Ordering Numbers
- Addition and Subtraction Strategies
- Addition and Subtraction Facts

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Students will be able to:

- Count from 0 to 10 objects.
- Read and write 0 to 10 in numbers and words.
- Compare two sets of objects by using one-to-one correspondence.
- Identify the set that has more, fewer, or the same number of objects.
- Identify the number that is greater than or less than another number.
- Make number patterns.
- Use connecting cubes or a math balance to find number bonds.
- Find different number bonds for numbers to 10.
- Count on to add and to subtract.
- Take away to subtract.
- Count back to subtract.
- Use number bonds to add in any order and to subtract.
- Write and solve addition and subtraction sentences.
- Tell addition and subtraction stories about pictures.
- Recognize related addition and subtraction sentences.
- Write fact families and use them to solve real-world problems.
- Count on from 10 to 20.
- Read and write 11 to 20 in numbers and words.
- Use a place value chart to show numbers up to 20.
- Show objects up to 20 as tens and ones.
- Compare numbers to 20.
- Order numbers by making number patterns.
- Use different strategies to add one and two-digit numbers.
- Subtract a one-digit from a two-digit number with and without regrouping.
- Solve real world problems.

Suggested Resources/Technology Tools

Math In Focus Resources Chapter 1: Numbers to 10
Math In Focus Resources Chapter 2: Addition & Subtraction Within 10
Math In Focus Resources Chapter 4: Numbers to 20
Math In Focus Resources Chapter 5: Addition and Subtraction Facts to 20

Resources and Manipulatives
Teacher Activity Cards
White Boards
Counters
Counting Tape
Math Balance
Connecting Cubes
Number Cubes
Unit Cubes
Ten Frames
Number Bonds
Tens Rods
Place-Value Chart
Addition and Subtraction Boards

Online Resources
HMH Ed: Your Friend in Learning

https://www.ixl.com/math/grade-1 Grade 1 Concepts by Topic
http://www.abcya.com/guess_the_number.htm Guess the Number: Less Than/Greater Than
http://www.abcya.com/subtraction_game.htm Balloon Pop Subtraction
http://www.abcya.com/kindergarten_word_problems_add_subtract.htm Add and Subtract to 10
http://www.abcya.com/sum_of_all_dice.htm Add the Sum of the Dice
http://www.abcya.com/addition.htm Marble Addition
https://www.mathplayground.com/math_monster_addition.html Addition to 10
https://www.mathplayground.com/puzzle_pics_subtraction_facts_to_20.html Subtraction to 10
https://www.mathplayground.com/math_monster_subtraction.html Subtraction past 10
http://www.abcya.com/math_facts_game.htm Math Facts
http://www.abcya.com/base_ten_bingo.htm Place-Value Bingo
https://www.mathplayground.com/place_value_party.html Place-Value
https://www.mathplayground.com/wpdatabase/wpindex.html Word Problems of Varying Difficulties
https://jr.brainpop.com/math/additionandsubtraction/basicadding/ Basic Addition Video
https://jr.brainpop.com/math/additionandsubtraction/basicsubtraction/ Basic Subtraction Video
https://jr.brainpop.com/math/additionandsubtraction/doubles/ Doubles Facts Video
https://jr.brainpop.com/math/additionandsubtraction/makingten/ Making Ten Video
https://www.mathplayground.com/video_skip_counting.html Skip Counting and Hundred Chart Video

Tier 1 Modifications and Accommodations

Including special education students, Multilingual Language Learners (MLLs), students at risk of school failure, gifted and talented students, and students with 504 plans;

General Modifications for students struggling to learn:

Small group instruction within the classroom
Differentiation through content, process, product,and environment
Individual feedback and praise towards what is done correctly based upon effort, attitude and strategy.
Help students manage individual stressors for the student and plan alternate pathways for completion of assignments.

Special Education - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention

*These are only suggested ideas to modify instruction, modifications and accommodations should be tailored to each student's IEP and needs. Also, see textbook for Differentiated Instruction ideas in each chapter.

MLL - Using simplified language, modeling, visual aids, manipulatives, vocabulary with images and examples

504 - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention

Gifted and Talented - Enrichment book, Put on Your Thinking Cap pages and resources, higher-level questions, challenge packets, KenKen and other puzzles, leading group work

Career Readiness, Life Literacies, and Key Skills NJSLS

Please select all standards that apply to this unit of study:

Act as a responsible and contributing community members and employee
Attend to financial well-being
Consider the environmental, social and economic impacts of decisions
Demonstrate creativity and innovation
Utilize critical thinking to make sense of problems and persevere in solving them
Model integrity, ethical leadership and effective management
Plan education and career paths aligned to personal goals
Use technology to enhance productivity increase collaboration and communicate effectively
Work productively in teams while using cultural/global competence

Suggestions on integrating these standards can be found at: https://www.nj.gov/education/standards/clicks/

Unit 2

Numbers to 120: Place Value

Summary and Rationale

Counting on to 40 is a smooth progression from where children stopped, at 20, in previous units. The general form in the numbers in words from 20 to 40 gives students a sense of how the numbers beyond 40 may be written.

Students use place-value charts to show numbers to 40. The place-value chart enables them to make comparisons between two or more numbers, when tens are different or when tens are equal. In being able to compare two numbers, students apply this knowledge to ordering numbers in ascending and descending order. Since they are now familiar with the counting, comparing, and ordering of numbers to 40, students are then able to identify number patterns that occur through addition and subtraction. All of these activities build the foundation that students will rely on when they learn about numbers to 100.

In this unit, students learn to "count on" from 40 to 100. In knowing that a two-digit number is made up of tens and ones, students count in tens before counting the remaining ones when identifying a two-digit number. Students learn to represent numbers to 100 using place-value charts and strategies to compare and order them. Once they can order numbers, students will observe number patterns and identify missing numbers patterns with numbers to 100.

Recommended Pacing

Math in Focus Chapter 6: Numbers to 40
Math in Focus Chapter 10: Numbers to 120

Standards

Number and Operations in Base Ten	
1.NBT.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.2	Understand that the two digits of a two-digit number represent amounts of tens and ones.
1.NBT.2a	Understand that 10 can be thought of as a bundle of ten ones — called a "ten."
1.NBT.2c	Understand that 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.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.
Operations & Algebraic Thinking	
1.OA.4	Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8. Add and subtract within 20.*
1.OA.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
1.OA.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
1.OA.8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ – 3, 6 + 6 = _.*
Mathematical Practices	
K-12.MP.1	Make sense of problems and persevere in solving them.
K-12.MP.2	Reason abstractly and quantitatively.
K-12.MP3	Construct viable arguments and critique the reasoning of others.
K-12.MP.4	Model with mathematics.
K-12.MP.5	Use appropriate tools strategically.
K-12.MP.6	Attend to precision.
K-12.MP.7	Look for and make use of structure.
K-12.MP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connections	
ELA	
Math journal, math vocabulary discussions, reading topic-related books, providing explanations	
SL.1.1.	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). B.

	Build on others' talk in conversations by responding to the comments of others through multiple exchanges. C. Ask questions to clear up any confusion about the topics and texts under discussion.
SL.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.1.6.	Produce complete sentences when appropriate to task and situation.
Integration of Technology	
Use of SmartBoard, playing online games	
8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
Career Readiness, Life Literacies and Key Skills	
9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
9.2.2.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.
9.4.2.CI..2	Demonstrate originality and inventiveness in work.
9.4.2.CT.1	Gather information about an issue and collaboratively brainstorm ways to solve the problem.
9.4.2.CT.2	Identify possible approaches and resources to execute a plan.
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.

Instructional Focus

Enduring Understandings:	**Essential Questions:**
Place-value charts can be used to show numbers to 120. Numbers to 120 can be counted and compared. Numbers to 120 can be counted, ordered, and compared.	How does finding patterns help in counting? How are some patterns created?

Missing numbers in a number pattern can sometimes be identified by adding or subtracting.	

Evidence of Learning (Assessments)

Math in Focus Assessment Guide Chapter 6: Numbers to 40
Math In Focus Cumulative Review 3: (Chapters 6 & 7)
Math in Focus Assessment Guide Chapter 10: Numbers to 120
Math In Focus Cumulative Review 4: (Chapters 8 through 10)

Math Spring Summative Assessment
Math Centers
Homework
Classwork
Class Participation

Objectives (SLO)

Students will know:	Students will be able to:
● Numbers to 120 ● Comparative words: same, more, fewer, greater than, less than, more than ● Pattern ● Fact family ● Counting to 120 ● Place Value ● Comparing Numbers ● Making Patterns ● Ordering Numbers ● Use of Place-Value Chart ● Use of counting tape	● Count on from 21 to 40. ● Read and write 21 to 40 in numbers and words. ● Use a place-value chart to show numbers up to 40. ● Show objects up to 40 as tens and ones. ● Use a strategy to compare numbers to 40. ● Order numbers to 40. ● Count on from 41 to 120. ● Read and write 41 to 120 in numbers and in words. ● Use a place-value chart to show numbers up to 120. ● Show objects up to 120 as tens and ones. ● Use a strategy to compare numbers to 120 ● Order numbers to 120. ● Find the missing numbers in a number pattern.

Suggested Resources/Technology Tools

Math in Focus Resources Chapter 6: Numbers to 40
Math in Focus Resources Chapter 10: Numbers to 120

<u>Resources and Manipulatives</u>
Connecting Cubes
Place-Value Chart
Counting Tape
Number Lines
Hundred Chart
Number Cubes
Unit Cubes
Base Ten Blocks

Ten Rods
Counters

Online Resources
HMH Ed: Your Friend in Learning

https://www.ixl.com/math/grade-1 Grade 1 Concepts by Topic
http://www.abcya.com/guess_the_number.htm Guess the Number: Less Than/Greater Than
http://www.abcya.com/comparing_number_values.htm Comparing Numbers
http://www.abcya.com/base_ten_fun.htm Base Ten Fun
http://www.abcya.com/base_ten.htm Base Ten Blocks
http://www.abcya.com/base_ten_bingo.htm Base Ten Bingo
http://www.abcya.com/interactive_100_number_chart.htm Interactive Hundred Chart
https://www.mathplayground.com/place_value_party.html Place-Value
https://jr.brainpop.com/math/numbersense/placevalue/ Place Value Video
https://jr.brainpop.com/math/numbersense/onehundred/ One Hundred Video
https://jr.brainpop.com/math/numbersense/comparingnumbers/ Comparing Numbers Video
https://www.mathplayground.com/video_skip_counting.html Skip Counting and Hundred Chart Video

Tier 1 Modifications and Accommodations

Including special education students, Multilingual Language Learners (MLLs), students at risk of school failure, gifted and talented students, and students with 504 plans;

General Modifications for students struggling to learn:

Small group instruction within the classroom
Differentiation through content, process, product,and environment
Individual feedback and praise towards what is done correctly based upon effort, attitude and strategy.
Help students manage individual stressors for the student and plan alternate pathways for completion of assignments.

Special Education - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention

*These are only suggested ideas to modify instruction, modifications and accommodations should be tailored to each student's IEP and needs. Also, see textbook for Differentiated Instruction ideas in each chapter.

MLL - Using simplified language, modeling, visual aids, manipulatives, vocabulary with images and examples

504 - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention

Gifted and Talented - Enrichment book, Put on Your Thinking Cap pages and resources, higher-level questions, challenge packets, KenKen and other puzzles, leading group work

Career Readiness, Life Literacies, and Key Skills NJSLS

Please select all standards that apply to this unit of study:

- Act as a responsible and contributing community members and employee
- Attend to financial well-being
- Consider the environmental, social and economic impacts of decisions
- Demonstrate creativity and innovation
- Utilize critical thinking to make sense of problems and persevere in solving them
- Model integrity, ethical leadership and effective management
- Plan education and career paths aligned to personal goals
- Use technology to enhance productivity increase collaboration and communicate effectively
- Work productively in teams while using cultural/global competence

Suggestions on integrating these standards can be found at: https://www.nj.gov/education/standards/clicks/

Unit 3

Addition and Subtraction

(with and without Regrouping)

Summary and Rationale

In this unit, students progress to the standard vertical form of addition and subtraction of numbers based on place value. In teaching students to regroup, they are encouraged to use place-value charts to correctly align the digits and to record the regrouping process. The frequent use of place-value charts leads students away from a dependence on concrete representations which are not feasible when later dealing with larger numbers. Students are also reminded that addition can be used to check subtraction. They also solve real-world problems involving addition and subtraction.

Students use number bonds to add and subtract mentally. They add and subtract mentally by also using double facts, and using the strategies of *add the ones*, *add the tens, subtract the ones,* and *subtract the tens.*

Students extend the vertical form of addition and subtraction to numbers to 100 through two methods: *counting on/back* and *using place-value charts*. Through these methods, students add and subtract with and without regrouping using numbers to 100.

Recommended Pacing

Math in Focus Chapter 8 : Addition & Subtraction Within 40
Math in Focus Chapter 11: Addition & Subtraction Within 100

Standards

Number and Operations in Base Ten	
1.NBT.2	Understand that the two digits of a two-digit number represent amounts of tens and ones.
1.NBT.2a	Understand that 10 can be thought of as a bundle of ten ones — called a “ten.”
1.NBT.2c	Understand that 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.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 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.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.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.
Operations & Algebraic Thinking	
1.OA.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]
1.OA.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.3	Apply properties of operations as strategies to add and subtract.[2] *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)*
1.OA.4	Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8. Add and subtract within 20.*
1.OA.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
1.OA.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., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).
1.OA.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
1.OA.8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ – 3, 6 + 6 = _.*
Mathematical Practices	
K-12.MP.1	Make sense of problems and persevere in solving them.
K-12.MP.2	Reason abstractly and quantitatively.

K-12.MP3	Construct viable arguments and critique the reasoning of others.
K-12.MP.4	Model with mathematics.
K-12.MP.5	Use appropriate tools strategically.
K-12.MP.6	Attend to precision.
K-12.MP.7	Look for and make use of structure.
K-12.MP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connections	
ELA	
Math journal, math vocabulary discussions, reading topic-related books, providing explanations	
SL.1.1.	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. C. Ask questions to clear up any confusion about the topics and texts under discussion.
SL.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.1.6.	Produce complete sentences when appropriate to task and situation.
Integration of Technology	
Use of SmartBoard, playing online games	
8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
Career Readiness, Life Literacies and Key Skills	
9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
9.2.2.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.
9.4.2.CI..2	Demonstrate originality and inventiveness in work.

9.4.2.CT.1	Gather information about an issue and collaboratively brainstorm ways to solve the problem.
9.4.2.CT.2	Identify possible approaches and resources to execute a plan.
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.

Instructional Focus

Enduring Understandings:	**Essential Questions:**
Numbers to 100 can be added and subtracted with or without regrouping. Number bonds can help you add and subtract mentally. Regrouping is needed when the addition of ones exceeds nine, and when the subtraction of ones cannot be carried out because of insufficient ones.	What are some strategies for adding mentally? What are some strategies for subtracting mentally? What are some strategies for addition and subtraction within 100? When is regrouping necessary in addition? When is regrouping necessary in subtraction?

Evidence of Learning (Assessments)

Math in Focus Assessment Guide Chapter 8 : Addition & Subtraction Within 40
Math In Focus Cumulative Review 4: (Chapters 8 through 10)
Math in Focus Assessment Guide Chapter 11: Addition & Subtraction Within 100
Math In Focus Cumulative Review 5: (Chapters 11 through 13)

**Note: The NJSLS does not require grade 1 students to master the paper-pencil algorithm for regrouping in addition and subtraction, however students are required to understand the concept of regrouping ten ones for one ten and vice versa.*

Math Spring Summative Assessment
Math Centers
Homework
Classwork
Class Participation

Objectives (SLO)

Students will know:	Students will be able to:
● Regroup ● Mental math ● Doubles fact	● Add a two-digit number and a one-digit number without and with regrouping. ● Add two-digit numbers without and with regrouping. ● Subtract a one-digit number from a two-digit number without and with regrouping. ● Subtract a two-digit number from a two-digit number without and with regrouping. ● Add three one-digit numbers. ● Use addition and subtraction facts to solve real-world problems. ● Mentally add and subtract one-digit numbers. ● Mentally add a one-digit number to a two-digit number. ● Mentally add a two-digit number to tens. ● Mentally subtract a one-digit number from a two-digit number. ● Mentally subtract tens from a two-digit number.

Suggested Resources/Technology Tools

Math in Focus Resources Chapter 8 : Addition & Subtraction Within 40
Math in Focus Resources Chapter 11: Addition & Subtraction Within 100

<u>Resources and Manipulatives</u>
Number Lines
White Boards
Connecting Cubes
Hundred Chart
Number Cubes
Number Bonds
Place-Value Chart
Unit Cubes
Base Ten Blocks
Ten Rods
Counters
Counting Tape
Math Balance and Weights
Addition and Subtraction Boards

<u>Online Resources</u>
HMH Ed: Your Friend in Learning

https://www.ixl.com/math/grade-1 Grade 1 Concepts by Topic
http://www.abcya.com/math_facts_game.htm Math Facts
https://www.mathplayground.com/ASB_Canoe_Puppies.html Addition With and Without Regrouping
https://www.mathplayground.com/brain_workouts/brain_workout_01_addition.html Addition With and Without Regrouping
https://www.mathplayground.com/puzzle_pics_addition.html Addition to 100 with Missing Parts

https://www.mathplayground.com/puzzle_pics_subtraction.html Subtraction to 100 with Missing Parts
https://www.mathplayground.com/wpdatabase/wpindex.html Word Problems of Varying Difficulties
https://jr.brainpop.com/math/additionandsubtraction/addingwithregrouping/ Addition with Regrouping Video
https://jr.brainpop.com/math/additionandsubtraction/subtractingwithregrouping/ Subtraction with Regrouping Video
https://jr.brainpop.com/math/additionandsubtraction/addingandsubtractingtens/ Adding and Subtracting Tens Video
https://www.mathplayground.com/video_skip_counting.html Skip Counting and Hundred Chart Video

Tier 1 Modifications and Accommodations

Including special education students, Multilingual Language Learners (MLLs), students at risk of school failure, gifted and talented students, and students with 504 plans;

General Modifications for students struggling to learn:

Small group instruction within the classroom
Differentiation through content, process, product,and environment
Individual feedback and praise towards what is done correctly based upon effort, attitude and strategy.
Help students manage individual stressors for the student and plan alternate pathways for completion of assignments.

Special Education - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention

*These are only suggested ideas to modify instruction, modifications and accommodations should be tailored to each student's IEP and needs. Also, see textbook for Differentiated Instruction ideas in each chapter.

MLL - Using simplified language, modeling, visual aids, manipulatives, vocabulary with images and examples

504 - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention

Gifted and Talented - Enrichment book, Put on Your Thinking Cap pages and resources, higher-level questions, challenge packets, KenKen and other puzzles, leading group work

Career Readiness, Life Literacies, and Key Skills NJSLS

Please select all standards that apply to this unit of study:

Act as a responsible and contributing community members and employee
Attend to financial well-being
Consider the environmental, social and economic impacts of decisions
Demonstrate creativity and innovation
Utilize critical thinking to make sense of problems and persevere in solving them
Model integrity, ethical leadership and effective management
Plan education and career paths aligned to personal goals
Use technology to enhance productivity increase collaboration and communicate effectively
Work productively in teams while using cultural/global competence

Suggestions on integrating these standards can be found at: https://www.nj.gov/education/standards/clicks/

Unit 4

Measurement & Data

Summary and Rationale

As an introduction to measuring length, students compare the lengths of two objects both directly (by comparing them with each other) and indirectly (by comparing both with a third object), and they order several objects according to length. Students first use common objects as non-standard units to measure and compare length. Their spatial awareness is exercised by having tem recognize vertical length as height.

Counting skills are utilized in the collection of data. Students are led to see how the data collected can be compiled into picture graphs or bar graphs. The strategy of using tally marks is a way to organize data better. Students interpret and make sense of the data from the diagrams.

Students learn to read and show time to the hour and to the half hour on a clock. With the ability to read the clock, they are able to relate the notion of time to their everyday lives.

Recommended Pacing

Math in Focus Chapter 7 : Calendar and Time
Math in Focus Chapter 9: Length and Weight
Math in Focus Chapter 12: Graphs

Standards

Measurement	
1.M.1	Order three objects by length; compare the lengths of two objects indirectly by using a third object.
1.M.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.3	Tell and write time in hours and half-hours using analog and digital clocks.
Data Literacy	

1.DL.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 another.
Operations & Algebraic Thinking	
1.OA.8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ – 3, 6 + 6 = _.*
Mathematical Practices	
K-12.MP.1	Make sense of problems and persevere in solving them.
K-12.MP.2	Reason abstractly and quantitatively.
K-12.MP3	Construct viable arguments and critique the reasoning of others.
K-12.MP.5	Use appropriate tools strategically.
K-12.MP.6	Attend to precision.
K-12.MP.7	Look for and make use of structure.
Interdisciplinary Connections	
ELA	
Math journal, math vocabulary discussions, reading topic-related books, providing explanations	
SL.1.1.	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. C. Ask questions to clear up any confusion about the topics and texts under discussion.
SL.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.1.6.	Produce complete sentences when appropriate to task and situation.
Science	
K-2-ETS1-1	Ask questions, make observations, and gather information about a situation people want to change (e.g., climate change) to define a simple problem that can be solved through the development of a new or improved object or tool

K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs
1-PS4-4	Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.
1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
1-ESS1-2	Make observations at different times of year to relate the amount of daylight to the time of year
Integration of Technology	
Use of SmartBoard, playing online games	
8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
Career Readiness, Life Literacies and Key Skills	
9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
9.2.2.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.
9.4.2.CI..2	Demonstrate originality and inventiveness in work.
9.4.2.CT.1	Gather information about an issue and collaboratively brainstorm ways to solve the problem.
9.4.2.CT.2	Identify possible approaches and resources to execute a plan.
9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
9.4.2.IML2	Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10).
9.4.2.IML.4	Compare and contrast the way information is shared in a variety of contexts (e.g., social, academic, athletic

Instructional Focus

Enduring Understandings:	**Essential Questions:**
Using different nonstandard units may give different measurements for the same item.	Why do we measure?

Most measurements have some degree of uncertainty. Picture graphs, tally charts, and bar graphs can be used to display data. Clocks are used to read time of the day.	Why do we need standardized units of measurement? How does what we measure influence how we measure? What are the characteristics of morning, afternoon, and evening? Why do we need to know what time it is? How do we tell time to the hour?

Evidence of Learning (Assessments)

Math in Focus Assessment Guide Chapter 7 : Calendar and Time
Math In Focus Cumulative Review 3: (Chapters 6 & 7)
Math in Focus Assessment Guide Chapter 9: Length and Weight
Math In Focus Cumulative Review 4: (Chapters 8 through 10)
Math in Focus Assessment Guide Chapter 12: Graphs
Math In Focus Cumulative Review 5: (Chapters 11 through 13)

Benchmark Assessment #3 (Chapters 8, 9, 11)
Math Spring Summative Assessment
Math Centers
Homework
Classwork
Class Participation

Objectives (SLO)

Students will know: ● start line ● about ● Unit ● terms: *o'clock, minute hand, hour hand, half past, half hour*	Students will be able to: ● Compare two lengths using the terms tall/taller, long/longer, and short/shorter. ● Compare two lengths by comparing each with a third length. ● Compare more than two lengths using the terms tallest, longest, and shortest. ● Use a common starting point when comparing lengths. ● Use the term "unit" when measuring length. ● Measure lengths using nonstandard units. ● Explain why there is a difference in a measurement when using different nonstandard units. ● Count measurement units in a group of ten and ones. ● Collect and organize data. ● Show data as a picture graph. ● Draw picture graphs ● Make a tally chart. ● Show data in a bar graph. ● Interpret data shown in a picture graph and a bar graph.

- Use the term o'clock to tell the time to the hour.
- Read and show time to the hour on a clock.
- Read time to the half hour.
- Use the term *half past*
- Relate time to daily activities.

Suggested Resources/Technology Tools

Math in Focus Resources Chapter 7 : Calendar and Time
Math in Focus Resources Chapter 9: Length and Weight
Math in Focus Resources Chapter 12: Graphs

Resources and Manipulatives
Teacher Activity Cards
Connecting Cubes
Number Cubes
Demonstration Clock
Laminated Clock Worksheets
Paper Clips
Other Non-Standard Objects
Rulers
Picture and Bar Graph Worksheets

Online Resources
HMH Ed: Your Friend in Learning

https://www.ixl.com/math/grade-1 Grade 1 Concepts by Topic
http://www.abcya.com/telling_time.htm Telling Time
https://www.mathplayground.com/video_picture_graphs.html Picture Graphs Video
https://www.mathplayground.com/video_bar_graphs.html Bar Graphs Video
https://jr.brainpop.com/math/time/partsofaclock/ Parts of a Clock Video
https://jr.brainpop.com/math/time/timetothehour/ Time to the Hour Video
https://jr.brainpop.com/math/measurement/inchesandfeet/ Inches and Feet Video
https://jr.brainpop.com/math/data/tallychartsandbargraphs/ Tally Charts and Bar Graphs Video
https://jr.brainpop.com/math/data/pictographs/ Pictographs Video

Tier 1 Modifications and Accommodations

Including special education students, Multilingual Language Learners (MLLs), students at risk of school failure, gifted and talented students, and students with 504 plans;

General Modifications for students struggling to learn:

Small group instruction within the classroom
Differentiation through content, process, product,and environment
Individual feedback and praise towards what is done correctly based upon effort, attitude and strategy.
Help students manage individual stressors for the student and plan alternate pathways for completion of assignments

Special Education - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention

*These are only suggested ideas to modify instruction, modifications and accommodations should be tailored to each student's IEP and needs. Also, see textbook for Differentiated Instruction ideas in each chapter.

MLL - Using simplified language, modeling, visual aids, manipulatives, vocabulary with images and examples

504 - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention

Gifted and Talented - Enrichment book, Put on Your Thinking Cap pages and resources, higher-level questions, challenge packets, KenKen and other puzzles, leading group work

Career Readiness, Life Literacies, and Key Skills NJSLS

Please select all standards that apply to this unit of study:

Act as a responsible and contributing community members and employee
Attend to financial well-being
Consider the environmental, social and economic impacts of decisions
Demonstrate creativity and innovation
Utilize critical thinking to make sense of problems and persevere in solving them
Model integrity, ethical leadership and effective management
Plan education and career paths aligned to personal goals
Use technology to enhance productivity increase collaboration and communicate effectively
Work productively in teams while using cultural/global competence

Suggestions on integrating these standards can be found at: https://www.nj.gov/education/standards/clicks/

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Unit 5

Geometry

Summary and Rationale

Students have learned in kindergarten to identify, name, and describe a variety of plane and solid shapes. In this unit, students will now classify and compare plane and solid shapes based on the geometric properties, using the appropriate vocabulary for describing shapes. They make composite shapes, models, and patterns with these shapes. Mathematical concepts in geometry can be related to objects in the real world, so students are encouraged to use basic shapes and spatial reasoning to model objects in their environment.

Recommended Pacing

Math in Focus Chapter 3: Shapes and Patterns: 2 weeks

Standards

Geometry	
1.G.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.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.[1]
1.G.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.
Operations & Algebraic Thinking	
1.OA.8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = _ – 3, 6 + 6 = _.*
Mathematical Practices	
K-12.MP.1	Make sense of problems and persevere in solving them.

K-12.MP.2	Reason abstractly and quantitatively.
K-12.MP3	Construct viable arguments and critique the reasoning of others.
K-12.MP.4	Model with mathematics.
K-12.MP.5	Use appropriate tools strategically.
K-12.MP.6	Attend to precision.
K-12.MP.7	Look for and make use of structure.
K-12.MP.8	Look for and express regularity in repeated reasoning.
Interdisciplinary Connections	
ELA	
Math journal, math vocabulary discussions, reading topic-related books, providing explanations	
SL.1.1.	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. C. Ask questions to clear up any confusion about the topics and texts under discussion.
SL.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.1.6.	Produce complete sentences when appropriate to task and situation.
Integration of Technology	
Use of SmartBoard, playing online games	
8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
Career Readiness, Life Literacies and Key Skills	
9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
9.2.2.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.

9.4.2.CI..2	Demonstrate originality and inventiveness in work.
9.4.2.CT.1	Gather information about an issue and collaboratively brainstorm ways to solve the problem.
9.4.2.CT.2	Identify possible approaches and resources to execute a plan.
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.

Instructional Focus

Enduring Understandings:	**Essential Questions:**
Plane and solid shapes are found in the real-world and can be compared by their geometric attributes and properties. Patterns can be identified and compared by looking at the plane and solid shapes that are involved.	What is a pattern? Where are flat shapes found in the real-world? Where are solid shapes found in the real-world? Where are patterns found in the real-world?

Evidence of Learning (Assessments)

Math in Focus Assessment Guide Chapter 3: Shapes and Patterns
Math In Focus Cumulative Review 1: (Chapters 1 through 3)

Math Spring Summative Assessment
Math Centers
Homework
Classwork
Class Participation

Objectives (SLO)

Students will know:	Students will be able to:
● Flat and solid shape names ● Parts: side, corner ● Descriptive words: size, shape, color ● Comparative words: alike, different ● Sort ● Stack, slide, roll ● Repeating pattern ● Terminology: *same, groups, each, share, equally*	● Identify, classify, and describe plane and solid shapes. ● Make the same and different shapes. ● Combine and separate plane and solid shapes. ● Identify plane and solid shapes in real life. ● Use plane and solid shapes to identify, extend and create patterns. ● Use objects or pictures to find the total number of items in groups of the same size.

Suggested Resources/Technology Tools

Math In Focus Resources Chapter 3: Shapes and Patterns

Resources and Manipulatives
Teacher Activity Cards
Attribute Blocks (2D shapes)
Geometric Solids (3D shapes)

Online Resources
HMH Ed: Your Friend in Learning

https://www.ixl.com/math/grade-1 Grade 1 Concepts by Topic
https://www.mathplayground.com/tangrams.html Tangrams
http://www.abcya.com/fuzz_bugs_patterns.htm Patterns
https://www.mathplayground.com/patternblocks.html Composite Shapes
https://jr.brainpop.com/math/geometry/planeshapes/ Plane Shapes Video
https://jr.brainpop.com/math/geometry/solidshapes/ Solid Shapes Video
https://jr.brainpop.com/math/geometry/patterns/ Patterns Video

Tier 1 Modifications and Accommodations

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General Modifications for students struggling to learn:

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*These are only suggested ideas to modify instruction, modifications and accommodations should be tailored to each student's IEP and needs. Also, see textbook for Differentiated Instruction ideas in each chapter.

MLL - Using simplified language, modeling, visual aids, manipulatives, vocabulary with images and examples.

504 - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention.

Gifted and Talented - Enrichment book, Put on Your Thinking Cap pages and resources, higher-level questions, challenge packets, KenKen and other puzzles, leading group work.

Career Readiness, Life Literacies, and Key Skills NJSLS

Please select all standards that apply to this unit of study:

- Act as a responsible and contributing community members and employee
- Attend to financial well-being
- Consider the environmental, social and economic impacts of decisions
- Demonstrate creativity and innovation
- Utilize critical thinking to make sense of problems and persevere in solving them
- Model integrity, ethical leadership and effective management
- Plan education and career paths aligned to personal goals
- Use technology to enhance productivity increase collaboration and communicate effectively
- Work productively in teams while using cultural/global competence

Suggestions on integrating these standards can be found at: https://www.nj.gov/education/standards/clicks/

Unit 6

Selected Topics in Everyday Math

Summary and Rationale

Calendar

A mathematical concept that is associated with time is the ability to arrange events in order using a calendar. In this unit, students learn to read a calendar in terms of the days of the week and the months of a year and to write the date. With the ability to read a calendar, students are able to relate the notion of day, month, and year to their everyday lives.

Weight

Students extend their understanding of weight by learning to measure weight using a balance and use common objects as non-standard units to measure and compare weight.

Money

Students extend their knowledge of the penny, nickel, dime, and quarter as they count the value of different coins by applying the strategies of "counting on" from the coin of greatest value by first arranging the coins in order. Students use addition and subtraction in real-world situations that involve money. They first interpret the question, form addition and subtraction sentences accordingly, and then apply the strategies of mental calculation and place-value to find the solution.

Recommended Pacing

Math In Focus Chapter 7: Calendar and Time (Calendar can also be infused throughout the year- Daily Calendar Math)
Math in Focus Chapter 9: Length and Weight
Math in Focus Chapter 13: Money (can also be infused throughout the year)

Standards

Measurement	
1.M.4	Know the comparative values of coins and dollar bills (e.g., a dime is of greater value than a nickel). Uue appropriate notation (e.g., 69¢, $10).
1.M.5	Use dollars in teh solutions of problems up to $20. Find equivalent monetary values (e.g., a nickel is equivalent in value to five pennies). Shoe monetary values in multiple ways. For example, show 25¢ as two dimes and one nickel, and as five nickels. Show $20 as two tens and as 20 ones.
Mathematical Practices	

K-12.MP.1	Make sense of problems and persevere in solving them.
K-12.MP.2	Reason abstractly and quantitatively.
K-12.MP3	Construct viable arguments and critique the reasoning of others.
K-12.MP.5	Use appropriate tools strategically.
K-12.MP.6	Attend to precision.
K-12.MP.7	Look for and make use of structure.
Interdisciplinary Connections	
ELA	
Math journal, math vocabulary discussions, reading topic-related books, providing explanations	
SL.1.1.	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. C. Ask questions to clear up any confusion about the topics and texts under discussion.
SL.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.1.6.	Produce complete sentences when appropriate to task and situation.
Integration of Technology	
Use of SmartBoard, playing online games	
8.1.2.A.4	Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
Career Readiness, Life Literacies and Key Skills	
9.1.2.CR.1	Recognize ways to volunteer in the classroom, school and community.
9.1.2.FL.1	Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards).

9.1.2.FP.1	Explain how emotions influence whether a person spends or saves.
9.1.2.FP.2	Differentiate between financial wants and needs.
9.1.2.FP.3	Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society).
9.1.2.PB.1	Determine various ways to save and places in the local community that help people save and accumulate money over time.
9.1.2.PB.2	Explain why an individual would choose to save money.
9.2.2.CAP.1	Make a list of different types of jobs and describe the skills associated with each job
9.2.2.CAP.2	Explain why employers are willing to pay individuals to work.
9.4.2.CI.1	Demonstrate openness to new ideas and perspectives.
9.4.2.CI..2	Demonstrate originality and inventiveness in work.
9.4.2.CT.1	Gather information about an issue and collaboratively brainstorm ways to solve the problem.
9.4.2.CT.2	Identify possible approaches and resources to execute a plan.
9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
9.4.2.IML.4	Compare and contrast the way information is shared in a variety of contexts (e.g., social, academic, athletic

Instructional Focus

Enduring Understandings:	**Essential Questions:**
Calendars are used to show days, weeks, and months of a year. Numbers and words can be used to describe order and position.	What numbers can be used to describe order? What numbers can be used to describe position? Why do we measure? Why do we need standardized units of measurement?

The weight of things can be compared and measured with nonstandard units. Using different nonstandard units may give different measurements for the same item. Most measurements have some degree of uncertainty. Penny, nickel, dime, and quarter are coins that can be counted and exchanged. To count the value of different coins, arrange the coins in order, begin with the coin of the greatest value, and then count on or skip count from that coin to find the total value. Money values can be added and subtracted.	How does what we measure influence how we measure? When and why do we use money? How do we find the total value of a group of different coins? How do you calculate change?

Evidence of Learning (Assessments)

Math In Focus Assessment Guide Chapter 7: Calendar and Time
Math In Focus Cumulative Review 3: (Chapters 6 & 7)
Math in Focus Assessment Guide Chapter 9: Length and Weight
Math In Focus Cumulative Review 4: (Chapters 8 through 10)
Math in Focus Assessment Guide Chapter 13: Money
Math In Focus Cumulative Review 5: (Chapters 11 through 13)

Math Spring Summative Assessment
Math Centers
Homework
Classwork
Class Participation

Objectives (SLO)

Students will know: ● calendar ● seasons ● ordinal Numbers ● position Words ● about ● unit ● as heavy as ● New money terms*: value, exchange*	Students will be able to: ● Read a calendar. ● Name the days of the week, months of the year, and seasons. ● Write the date. ● Use ordinal numbers. ● Use position words to name relative positions. ● Compare the weight of two things using the terms heavy, heavier, light, lighter, and as heavy as. ● Compare the weight of more than two objects using the terms lightest and heaviest. ● Use a nonstandard object to find the weight of things (such as a balance).

	● Compare weight using a nonstandard object as a unit of measurement. ● Use the term "unit" when writing the weight of things. ● Explain why there is a difference in a measurement when using different nonstandard units. ● Recognize and name penny, nickel, dime, quarter, and the cents symbol. ● Skip-count to find the value of a collection of coins. ● Exchange one coin for a set of coins of equal value. ● Use different combinations of coins less than 25 cents to buy things. ● Count money in cents up to $1 using the "count on" strategy. ● Choose the value of coins when buying items. ● Use different combinations of coins to show the same value. ● Add to find the cost of items. ● Subtract to find the change. ● Add and subtract money in cents (up to $1). ● Solve real world problems involving addition and subtraction of money.

Suggested Resources/Technology Tools

Math In Focus Resources Chapter 7: Calendar and Time
Math in Focus Resources Chapter 9: Length and Weight
Math in Focus Resources Chapter 13: Money

<u>Resources and Manipulatives</u>
Calendar
Balance Scale
Plastic Coins
Hundred Chart

<u>Online Resources</u>
HMH Ed: Your Friend in Learning

https://www.ixl.com/math/grade-1 Grade 1 Concepts by Topic
http://www.abcya.com/learning_coins.htm Learning and Sorting Coins
https://jr.brainpop.com/math/money/countingcoins/ Counting Coins Video
https://jr.brainpop.com/math/money/dollarsandcents/ Dollars and Cents Video
https://www.youtube.com/watch?v=RVpcZ5obmsM&list=PLQK2XiUY9C2gXua-_3AB_nI49hpPVq01y&index=12&t=0s Adding Money Video
https://jr.brainpop.com/math/time/calendaranddates/ Calendar Video
https://jr.brainpop.com/math/measurement/ouncespoundsandtons/ Ounces, Pounds and Tons Video

Tier 1 Modifications and Accommodations

Including special education students, Multilingual Language Learners (MLLs), students at risk of school failure, gifted and talented students, and students with 504 plans;

General Modifications for students struggling to learn:

Small group instruction within the classroom
Differentiation through content, process, product,and environment
Individual feedback and praise towards what is done correctly based upon effort, attitude and strategy.
Help students manage individual stressors for the student and plan alternate pathways for completion of assignments

Special Education - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention.

*These are only suggested ideas to modify instruction, modifications and accommodations should be tailored to each student's IEP and needs. Also, see textbook for Differentiated Instruction ideas in each chapter.

MLL - Using simplified language, modeling, visual aids, manipulatives, vocabulary with images and examples.

504 - Reteach/Extra practice pages, anchor charts, scaffolded explanations of topics, manipulatives, extra time for work, group work, visual aids, modeling, hands-on learning activities, small group work for more individualized attention.

Gifted and Talented - Enrichment book, Put on Your Thinking Cap pages and resources, higher-level questions, challenge packets, KenKen and other puzzles, leading group work.

Career Readiness, Life Literacies, and Key Skills NJSLS

Please select all standards that apply to this unit of study:

Act as a responsible and contributing community members and employee
Attend to financial well-being
Consider the environmental, social and economic impacts of decisions
Demonstrate creativity and innovation
Utilize critical thinking to make sense of problems and persevere in solving them
Model integrity, ethical leadership and effective management
Plan education and career paths aligned to personal goals
Use technology to enhance productivity increase collaboration and communicate effectively
Work productively in teams while using cultural/global competence

Suggestions on integrating these standards can be found at: https://www.nj.gov/education/standards/clicks/