CAPE MAY CITY
ELEMENTARY SCHOOL

Grade 1 Mathematics Curriculum

This curricula and accompanying instructional materials have been developed to align with the NJSLS and in accordance with the NJ Department of Education's guidelines to include: Curriculum designed to meet grade level expectations, integrated accommodations and modifications for students with IEPs, 504s, ELLs, and gifted and talented students, assessments including benchmarks, formative, summative, and alternative assessments, a list of core instructional and supplemental materials, pacing guide, interdisciplinary connections, integration of 21st century skills, integration of technology, and integration of 21st Century Life and Career standards.

About the Standards

In 1996, the New Jersey State Board of Education adopted the state's first set of academic standards called the Core Curriculum Content Standards. The standards described what students should know and be able to do upon completion of a thirteen-year public school education. Over the last twenty years, New Jersey's academic standards have laid the foundation for local district curricula that is used by teachers in their daily lesson plans.

Revised every five years, the standards provide local school districts with clear and specific benchmarks for student achievement in nine content areas. Developed and reviewed by panels of teachers, administrators, parents, students, and representatives from higher education, business, and the community, the standards are influenced by national standards, research-based practice, and student needs. The standards define a "Thorough and Efficient Education" as guaranteed in 1875 by the New Jersey Constitution. Currently the standards are designed to prepare our students for college and careers by emphasizing high-level skills needed for tomorrow's world.

The New Jersey Student Learning Standards include Preschool Teaching and Learning Standards, as well as nine K-12 standards for the following content areas: **21st Century Life and Careers, Comprehensive Health and Physical Education, English Language Arts, Mathematics, Science, Social Studies, Technology, Visual and Performing Arts, World Languages**

The most recent review and revision of the standards occurred in 2014. However, the standards in language arts and math underwent an additional review in 2015 with adoption by the New Jersey State Board of Education in May 2016.

Cape May City Elementary School District Grade 1 Mathematics Curriculum	
Content Area: Mathematics	
Course Title: Grade 1 Mathematics	Grade level: 1
Unit 1: Quarter I	Dates for Unit: September to November
Unit 2: Quarter II	Dates for Unit: November to February
Unit 3: Quarter III	Dates for Units: February to April
Unit 4: Quarter IV	Dates for Units: April to June
Date Created: 09/17/19	Board Approved On: 10/10/19

Cape May City Elementary School District Grade 1 Mathematics Curriculum Unit I Overview
Content Area: Mathematics
Unit Title: Quarter I
Target Course/Grade Level: 1

Unit Summary:

Students will be able to:

- Represent and solve problems involving addition and subtraction
- Understand and apply properties of operations and the relationship between addition and subtraction
- Add and subtract within 10
- Work with addition and subtraction equations
- Extend the counting sequence

Interdisciplinary Connections:

- Science, Technology, Social Studies, Health, Social Emotional Learning, English Language/ Arts

21st Century Themes, Skills, and Standards:

- http://www.state.nj.us/education/cccs/2014/career/
- 21st Century Life and Career Standard 9.1, including critical thinking, problem solving, creativity, innovation, collaboration, teamwork and leadership, cross-cultural understanding and interpersonal communication and science.
- Incorporation of relevant technologies as tools as part of instruction (i.e. Chromebooks, Touch screen devices, manipulatives, certified assistive technologies for students with special needs, etc.)
- Developing effective communication
- Developing Independent Learning Strategies
- Incorporating Science, Technology, Engineering, and English themes into daily lessons

Learning Targets:

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. *(benchmarked)

1.OA.B.3. Apply properties of operations as strategies to add and subtract. 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.) (Students need not use formal terms for these properties) *(benchmarked)

1.OA.B.4. Understand subtraction as an unknown- addend problem.
   For example, subtract 10 - 8 by finding the number that makes 10 when added to 8

1.OA.C.5. Relate counting to addition and subtraction (e.g., by counting 2 to add 2).

1.OA.D.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.D.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 = _. *(benchmarked)

1.OA.D.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 = _.*
    *(benchmarked)

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

*(benchmarked)

CPI #	Cumulative Progress Indicators (CPI) for Unit
Performance Task 1	**You are in charge of getting the apples from the cafeteria for your class. There are 13 students in the class now. The teacher says that 4 more students will be arriving later.** **You must figure out how many apples to get from the cafeteria. Draw a picture that shows how many apples you need altogether. Write a number sentence to show how many are needed.** **The teacher has asked you to sharpen 18 pencils before lunch break. So far you have sharpened 12 pencils. How many pencils still need to be sharpened? Draw a picture to show how many are left to be sharpened. Write a number sentence to show how many pencils still need to be sharpened.** 4- 4 of the 4 tasks are represented 3- 3 of the 3 tasks are represented 2- 2 of the 2 tasks are represented 1- 1 of the tasks are represented 0- Does not attempt.

Unit Enduring Questions:	**Unit Enduring Understandings:**
Questions that will foster inquiry, understanding and transfer of learning. ● What is the relationship between addition and subtraction? ● What strategies can be used to add and subtract? ● How does understanding place value help you solve addition and subtraction problems?	*Students will understand that…* ● Numbers are sequential ● Addition and subtraction problems can be solved using different strategies (counting on , number lines, joining, separating) ● Two-digit numbers represent amounts of tens and ones

Knowledge:
Students will know how to/that….

- Numbers can be added in any order
- Strategy of counting forward to solve addition problems
- Strategy of counting backwards to solve subtraction problems
- Joining and separating groups are concepts for addition and subtraction
- Using Number Lines, Counters, drawings are strategies to add and subtract
- Numbers are organized in groups of tens and ones
- The meaning of the equal sign
- The expression can be on the right side of the equal sign (e.g. 7 = 8 − 1).
- Both the left and right side of the equal sign may contain expressions (e.g. 5 + 2 = 1 + 4).
- Numbers up to 120 can be represented by numbers, words and place value blocks

Skills:
Students will be able to show or display...

- Count utilizing written or verbal numerals starting at any number less than 100.
- Count forward and backward within any number from 20 to solve addition and subtraction problems.
- Solve equations with the equal sign on the left or the right side
- Evaluate True and false statements for addition and subtraction equations
- Determine the unknown number that makes an equation true.
- Solve addition or subtraction equations by finding the missing whole number.

Pacing Guide:

PreTest	1-2 Days
Math Routines/15 Math Routines/15 Minute Math	3 Days
Counting and Representing numerals to 120	Entire Unit
Reading, Writing Numbers	1 ½ Weeks
Strategies to Add	2 Weeks
Strategies to Subtract	2 Weeks
Part/Whole Relationships utilizing Ten Frames	1 ½ Weeks
Benchmark Testing & Reteaching	2 Weeks

Week 1: MAPs / Pre-Assessment / GoMath Chapter 1

Week 2: GoMath Chapter 1

Week 3: GoMath Chapter 1

Week 4: GoMath Chapter 1 & 2

Cape May City Elementary School District Grade 1 Mathematics Curriculum Unit II Overview
Content Area: Mathematics
Unit Title: Quarter II
Target Course/Grade Level: 1
Students will be able to: ● Represent and solve problems involving addition and subtraction ● Work with addition and subtraction equations ● Understand and apply properties of operations and the relationship between addition and subtraction ● Add and subtract within 20 ● Represent and interpret data ● Understand place value and compare 2 Digit Numbers
Interdisciplinary Connections: ● Science, Technology, Social Studies, Health, Social Emotional Learning, English Language/ Arts
21st Century Themes, Skills, and Standards: ● http://www.state.nj.us/education/cccs/2014/career/ ● 21st Century Life and Career Standard 9.1, including critical thinking, problem solving, creativity, innovation, collaboration, teamwork and leadership, cross-cultural understanding and interpersonal communication and science. ● Incorporation of relevant technologies as tools as part of instruction (i.e. Chromebooks, Touch screen devices, manipulatives, certified assistive technologies for students with special needs, etc.) ● Developing effective communication ● Developing Independent Learning Strategies ● Incorporating Science, Technology, Engineering, and English themes into daily lessons
Learning Targets

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. *(benchmarked)

1.OA.A.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20

1.OA.B.3. Apply properties of operations as strategies to add and subtract. 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.) (Students need not use formal terms for these properties) *(benchmarked)

1.OA.B.4. Understand subtraction as an unknown- addend problem. For example, subtract 10 - 8 by finding the number that makes 10 when added to 8

1.OA.C.5. Relate counting to addition and subtraction (e.g., by counting 2 to add 2).

1.OA.D.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.D.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 $+ ? = 11$, $5 = \_ - 3$, $6 + 6 = \_$. *(benchmarked)

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 *(benchmarked)

1.NBT.B.2. Understand that the two digits of a two-digit number represent amounts of tens and 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.MD.C.4. 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

CPI #	Cumulative Progress Indicators (CPI) for Unit
2	Performance Assessment Task 2 You have been selected to be the teacher for a day. Show how you would teach the class how to solve the following problems. Include pictures and a number sentence for each. Solve the number sentences. a) Bob has 5 toy cars. Jim has 8 toy cars. How many toy cars do Bob and Jim have altogether? b) Jane came to school with 12 cookies. She gave 7 cookies to her friends. How many cookies does Jane have left? c) The farm had 2 horses, 5 cows, and 4 pigs. How many animals are at the farm altogether? d) Mary had some pencils. She gave 8 of her pencils to Bill and the other 7 pencils to Sue. How many pencils did she have at first? Rubric 5 - The student completed all of the tasks and questions correctly. (8 tasks) 4 – The student completed 80% of the tasks and questions correctly. 3 – The student completed 60% of the tasks and questions correctly. 2 – The student completed 40% of the tasks and questions correctly. 1 – The student completed 20% of the tasks and questions correctly. 0 – Student does not attempt and/or 0% of the tasks are correct.

Unit Enduring Questions:

Questions that will foster inquiry, understanding and transfer of learning.
- How can we represent and solve word problems involving addition and subtraction?
- How do we manipulate addition and subtraction equations?
- How can we extend the counting sequence?
- How can knowing the value of tens and ones help to compare numbers?

Unit Enduring Understandings:

Students will understand that…
- An equation must be equal on both sides
- The sequence of numbers remains the same regardless of where one begins
- There are several strategies to use when adding and subtracting numbers
- The number of objects displayed can be represented with a written numeral.
- Knowing the value of tens and ones helps to compare numbers
- Graphs help us organize information

Knowledge:

Students will know how to/that…
- Knowing 4 + 3 means that 3 + 4 is also known (commutative property/fact families).
- When adding, the numbers need not be added in any particular order.
- Subtraction can be represented as an unknown- addend problem.
- Finding 9 minus 3 means solving ? + 3 = 9 or 3 + ? = 9 (fact families).
- The meaning of the equal sign
- True and false statements
- The expression can be on the right side of the equal sign (e.g. 7 = 8 – 1).
- Both the left and right side of the equal sign may contain expressions (e.g. 5 + 2 = 1 + 4).
- Graphs help us organize information

Skills:

Students will be able to show or display...
- Symbol (unknowns) can be in any position.
- Add or Subtract using objects and drawings
- Solve word problems involving situations of adding to and putting together
- Solve subtraction problems, within 10, using unknown addends.
- Determine if addition or subtraction equations are true or false.
- Count orally by ones up to 100.
- Count up to 120 beginning at any number less than 120.
- Read and write numerals up to 120.
- Represent a number of objects up to 120 with a written number
- Read and Interpret Tally Charts/Pictographs and Bar Graphs

Pacing Guide:

Addition Strategies and Subtraction Strategies	3 ½ Weeks
True/False Statements in Addition and Subtraction Equations	Entire Unit
Working with Unknowns in Add/Subtraction Equations	1 Week
Understand Place Value of Tens and Ones	1 ½ Weeks
Solving Word Problems with Addition and Subtraction within 20	Entire Unit
Represent and Interpret Data	1 Week
Read /Write/Count numbers up to 120	1 Week
Benchmark Testing & Reteaching	2 Weeks

Week 9: GoMath Chapter 3

Week 10: GoMath Chapter 3

Cape May City Elementary School District Grade 1 Mathematics Curriculum Unit III Overview
Content Area: Mathematics
Unit Title: Quarter III
Target Course/Grade Level: 1
Unit Summary: *Students will be able to:* ● Understand place value ● Use place value understanding and properties of operations to add and subtract ● Measure lengths indirectly by iterating length units ● Add and subtract within 20 ● Tell and write time
Interdisciplinary Connections: ● Science, Technology, Social Studies, Health, Social Emotional Learning, Mathematics
21st Century Themes, Skills, and Standards: ● http://www.state.nj.us/education/cccs/2014/career/ ● 21st Century Life and Career Standard 9.1, including critical thinking, problem solving, creativity, innovation, collaboration, teamwork and leadership, cross-cultural understanding and interpersonal communication and science. ● Incorporation of relevant technologies as tools as part of instruction (i.e. Chromebooks, Touch screen devices, manipulatives, certified assistive technologies for students with special needs, etc.) ● Developing effective communication ● Developing Independent Learning Strategies

Learning Targets

1.NBT.B.2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand thefollowing as special cases:

1.NBT.B.2.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). ***(benchmarked)**

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. ***(benchmarked)**

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.

1.MD.A.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object

1.MD.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.

1.MD.B.3. Tell and write time in hours and half-hours using analog and digital clocks

1.OA.C.6. Add and subtract within 20, demonstrating fluency 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 $6 + 6 + 1 = 12 + 1 = 13$). ***(benchmarked)**

CPI #	Cumulative Progress Indicators (CPI) for Unit
3	Students will be presented with five different clock faces without minute or hour hands. Students will be presented with six different word problems. Students must write both the correct time on the space provided underneath the clock faces and properly draw the minute and hour hand on the blank face of the clock. Rubric: 5 - The student completed all of the tasks and questions correctly. (8 tasks) 4 – The student completed 80% of the tasks and questions correctly. 3 – The student completed 60% of the tasks and questions correctly. 2 – The student completed 40% of the tasks and questions correctly. 1 – The student completed 20% of the tasks and questions correctly. 0 – Student does not attempt and/or 0% of the tasks are correct.

Unit Enduring Questions:	**Unit Enduring Understandings:**
Questions that will foster inquiry, understanding and transfer of learning. ● How does grouping by ten help us understand place value? ● How can we use tens and ones to add and subtract two-digit number? ● How can objects be measured, compared and ordered by length?	*Students will understand that…* ● The decade numbers to 100 can be separated into sets of ten ● Numbers greater than 10 can be represented as the sum of tens and ones. ● Place value can be used to compare and order numbers. ● Objects are measured in units ● When adding and subtracting ten to a two-digit number only the ten changes. ● Traditional algorithm when adding and subtracting a two-digit number by a two-digit number stars with the ones. two digits of a two-digit number represent amounts of tens and ones. ● Time is measured in units
Knowledge: ***Students will know how to/that…*** ● Meaning of tens and ones in a 2-digit number. ● Comparison of numbers uses greater than, less than or equals to symbols. ● Concrete models and drawings can be used to add two ● digit and 1- digit numbers and 2-digit multiples of 10. ● Decomposing a 2-digiot number is an addition strategy. ● Counting by tens is a mental math strategy used for addition. ● Basic Facts ● Describe length compared to the length of the other two ● items ● Compare and order item lengths. e.g. (Compare unifix trains, sharpened pencils, chalk pieces ● Record findings of items measured	**Skills:** ***Students will be able to show or display...*** ● Group objects into tens and ones. ● Compare two-digit numbers by using models to determine which number is greater or less than the other number. ● Add or subtract two-digit numbers by modeling with cubes to compose and decompose numbers. ● Add or subtract two-digit numbers using a numbers charts ● To show how numbers are related ● Estimating measurement ● Use non-standard units of measure ● Compare units of measure ● Tell time to the hour and half hour ● Measure classroom objects

Pacing Guide:

Counting & Number Patterns	1 Week
Place Value	2 Weeks
Comparing Numbers Greater/Less Than	2 Weeks
Telling Time to the hour and half hour	1 ½ Weeks
Measurement	1 ½ Weeks
100 Day Celebration	1 Day
Benchmark Testing & Reteaching	2 Weeks

Week 17: GoMath Chapter 6

Week 18: GoMath Chapter 6 & 7

Week 19: GoMath Chapter 7

Week 20: GoMath Chapter 7 & 8

Week 21: GoMath Chapter 8

Week 22: GoMath Chapter 8 & 9

Week 23: GoMath Chapter 9

Week 24: Performance Benchmark and review.

Cape May City Elementary School District Mathematics Grade 1 Curriculum Unit IV Overview
Content Area: Mathematics
Unit Title: Quarter IV
Target Course/Grade Level: 1
Unit Summary: *Students will be able to:* · Reason with shapes and their attributes · Represent and solve problems involving addition and subtraction. · Add and subtract within 20 · Extend the counting sequence · Use place value understanding and properties of operations to add and subtract
Interdisciplinary Connections: ● Science, Technology, Social Studies, Health, Social Emotional Learning, Mathematics

Learning Targets

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.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

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. *(benchmarked)

1.OA.C.6. Add and subtract within 20, demonstrating fluency 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 $6 + 6 + 1 = 12 + 1 = 13$) *(benchmarked)

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. *(benchmarked)

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. *(benchmarked)

CPI #	Cumulative Progress Indicators (CPI) for Unit
4	**Create a Geo-Bot** • **Students will cut out several large and small plane shapes squares, rectangles, triangles, trapezoids, circles etc., (or they can be pre-cut).** • **Students will create a Geo-Bot (Geometric Robot) out of all of the shapes.** • **Students may combine and connect the plane shapes to create all of the parts of the Geo-bot.** • **Students will name their Geo-bot then make a list and chart of all of the shapes used or combined to create their Geo-bot.** • **Students can present their Geo-bots to the class (optional)** **Geo-bot Name_____ Student Name_____**

Geometric Shape or Shapes Used

Body Part	Geometric Shape or Shapes Used
Head	
Body	
Arms	
Hands	
Legs	
Feet	

<u>RUBRIC</u>

Geo-bots will vary

3 – Geo-bot body is complete w ith all parts, all body parts are named w ith correct geometric shape. Chart is filled out correctly.

2- Geo-bot body is complete with all parts; some body parts are named w ith correct geometric shape (1 mistake). Some of the chart is filled out correctly (1

Mistake)

1 – Geo-bot is missing body parts. There are 2 or more mistakes w ith naming and charting the shapes.

0 – No Response

Unit Enduring Questions:

Questions that will foster inquiry, understanding and transfer of learning.

- What is the difference between a plane shape and a solid shape?
- What plane shapes can be combined to make new shapes?
- What solid shapes can be combined to make new solid shapes?
- Can I find shapes in the real world and name them?
- How can I tell if I have divided a shape into equal halves? Quarters?
- How will I know when to regroup in a 2 Digit addition or subtraction problem?
- How can tally charts and bar graphs help me organize a lot of information?

Unit Enduring Understandings:

Students will understand that…

- Many everyday objects in the real world are plane shapes
- Plane shapes have many properties that make them different
- Plane shapes can be described by their sides and vertices
- Plane shapes can be combined to make new plane shapes
- Many everyday objects can be compared to a plane and solid shapes
- Many solid figures are made up of flat surfaces and vertices
- Attributes can be used to sort plane and solid shapes
- Problems can be solved using organized lists, charts or tables
- Divide shapes into equal parts
- Describe equal parts of a whole Identify halves and

	quarters ● Solve problems by drawing pictures ● Determine when regrouping is needed in Add/Sub of 2
Knowledge: ***Students will know how to/that…*** ● Analyze shapes and solids in the real world ● Connect Geometric shapes/solids in the real world to geometric shapes/solids ● Sort Shapes according to their attributes and combine plane shapes to make new shapes ● Connect Create Charts or Tables to organize Data ● Divide shapes into halves and quarters ● Compare areas of divided shapes ● Explain if a shape is or is not divided equally ● Analyze a 2 Digit Add/Sub Equation and determine if regrouping is needed.	**Skills:** ***Students will be able to show or display...*** ● Identify and name plane geometric figures ● Draw plane shapes ● Identify and name solid figures. ● Find sides and vertices on plane and solid figures ● Read and Interpret Tally Charts and Bar Graphs ● Sort plane/solid figures according to their attributes ● Count sides and vertices of plane/solid figures ● Divide Plane shapes into equal parts ● Know the value of half and quarter in reference to dividing plane shapes ● Add and Subtract with regrouping (2 Digit)

Pacing Guide:

Geometric Shapes & Attributes	**2 Weeks**
Fractional Parts of Shapes	**1 ½ Weeks**
Collecting and Analyzing Data, using Graphs	**1 ½ Weeks**
Addition & Subtraction of 2 Digit Number w /Regrouping	**2 Weeks**
Review & Assess Fluency Standard (Add/Sub within 10)	**1 Week**
Benchmark Testing & Reteaching	**2 Weeks**

Week 25: GoMath Chapter 10

Week 26: GoMath Chapter 10

Week 27: GoMath Chapter 10 & 11

Week 28: GoMath Chapter 11

Week 29: GoMath Chapter 11 & 12

Cape May City Elementary School District Grade 1 Mathematics Curriculum Evidence of Learning

Specific Formative Assessments Utilized in Daily Lessons:
- Suggested Formative Assessment
- Daily independent practice
- Peer Discussions
- Student Portfolio
- Problem of the Day
- Self-Evaluations
- Teacher Quizzes
- Student created activities
- Exit Tickets

Summative Assessment Utilized throughout Units:
- QBA's
- Performance Task
- Technology Task
- MAPs Testing
- Chapter Tests from GoMath

Benchmarks:
- Quarterly Benchmarks from GoMath!
- MAPs Testing and Reports

Modifications for English Language Learner's [ELL]
- Teacher tutoring
- Peer tutoring
- Online Resources
- Cooperative Learning Groups
- Modified Assignments
- Differentiated Instruction
- Response to Intervention (www.help4teachers.com)
- Provide additional examples and opportunities for additional problems for repetition with visuals and manipulatives
- Assess/teach prerequisite skills

- Allow students to count in their native language.
- W rite the number words and corresponding numerals. Have children draw objects to illustrate each word.
- Provide students with a variety of materials of various textures to increase tactile learning while counting.
- Children should move objects in a set as they recite the counting sequence.
- Allow students to act out word problems, moving around room as necessary.
- Utilize Envision Spanish Version/Interactive Path and Printable Resources
  - Read picture books to build vocabulary and background knowledge (samples below)
    - o https://www.cantonpl.org/blog/post/picture-books-about-shapes
    - o http://childrenspicturebooks.info/math/fractions.htm
    - o http://www.the-best-childrens-books.org/teaching-graphs.html
  - Teach a variety of strategies that students can use to problem solve (act it out, manipulatives, hundreds chart, draw a picture, etc.)
  - Read all directions and word problems. Translate if necessary.
  - Utilize Envision Spanish Version/Interactive Path and Printable Resources

Modifications for Special Education Students [IEPs]:
- Follow all IEP accommodations for each student as to meet each student's individual need
- For extra strategies please review list above in the ELL category for students who have IEPs
- Provide instructional breaks / practice chunking
- Circling back to original topic
- Provide graphic organizers
- Provide additional examples and opportunities for additional problems for repetition
- Provide tutoring opportunities
- Provide retesting opportunities after remediation (up to teacher and district discretion) Teach for mastery not test
- Teaching concepts in different modalities
- Adjust pace and homework assignments

Modifications for students with 504s:
- Adhere to the modifications of the 504
- For extra strategies please review list above in the ELL category and for students who have IEPs
- Provide instructional breaks / practice chunking
- Circling back to original topic

Modifications Gifted and Talented Students:

- Advance Questions from GoMath
- Teacher created assignments
- STEM Lab Activities
- http://www.npsd.k12.wi.us/cms_files/resources/GiftedandTalentedResourcesforEducators2013.pdf

Modifications At-Risk/Basic Skills:

- Teacher tutoring
- Supplemental / Pullout Teaching
- Peer tutoring
- Cooperative Learning Groups / Centers
- Modified Assignments
- Differentiated Instruction
- Response to Intervention (www.help4teachers.com)
- Provide additional examples and opportunities for additional problems for repetition with visuals and manipulatives
- Simplified language for understanding
- Modify Homework, Assignments and Assessment (can be oral if necessary)
- Total Physical Response
- Picture & number wall

Teacher Notes:
- As required by the NJ Department of Education, teachers in all content areas will integrate the 21st Century Life and Careers Standards. As the NJDOE indicates, "Providing New Jersey students with the life and career skills needed to function optimally within this dynamic context is a critical focus and organizing principle of K-12 public education. New Jersey has both an obligation to prepare its young people to thrive in this environment, and a vested economic interest in grooming an engaged citizenry made up of productive members of a global workforce that rewards innovation, creativity, and adaptation to change." The links below indicate the CPIs for grade ranges and need to be addressed throughout the units of study:
  Life and Career Standards
- As indicated in the NJSLS, standards and interdisciplinary connections will be integrated throughout content area curriculum. Links to relevant content standards can be at Scholastic.com, Starfall.com, and other online resources.

Project-based Learning Tasks:
- Ongoing student portfolio assessments [created by faculty] to monitor student progress.

Vocabulary:
- In-text vocabulary should be incorporated into every unit. Word journals, vocabulary walls, and/or various other activities should be utilized by the instructor to teach vocabulary.
- Story, key details, retell, describe, main topic, rhyming words, syllables, story elements, character, setting, question, question words, front cover, back cover, title page, narrative, favorite, informational text, rules, connection, discuss, conversation, information, illustrator, author, illustrate, picture

The Research Process:
- The research process must be integrated within each course curriculum. Student will be provided with opportunities to investigate issues from thematic units of study. As the NJSLS indicate,

students will develop proficiency with MLA or APA format as applicable.
- https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html
- https://owl.purdue.edu/owl/research_and_citation/mla_style/mla_formatting_and_style_guide/mla_formatting_and_style_guide.html

Technology:
- Students must engage in technology applications integrated throughout the curriculum, though technology provided by us in their individual classroom, and in our technology centered classrooms.
- MAPs
- Online Resources

Resources:
- Ancillary resources and materials used to deliver instruction <u>are included below:</u>
- Learning New Jersey Model Curriculum
- ThinkCentral
- Achieve3000
- Prodigy.com
- Reading A-Z.com
- Abcmouse .com
- EnchantedLearning,Com
- Sing Along Songs
- Scholastic.com
- Bilingualplanet.com
- Frog street
- Press.com
- 122 teachme.com
- Purplemath.com
- Starfall
- NCTM Illuminations -http://illuminations.nctm.org,
- Illustrative Math - https://www.illustrativemathematics.org

Career Education & Resources:
- **NJDOE CTE (https://www.nj.gov/education/cte/)**
- Careers are Everywhere Workbook (https://lmci.state.tx.us/shared/careersareeverywhere.asp)
- Career Bingo (http://www.breitlinks.com/careers/career_pdfs/careerbingo.pdf)
- Vocational Information Center / Career Exploration Guides and Resources for Younger Students (http://www.khake.com/page64.html)
- CTE NJDOE Career Explore (https://www.nj.gov/education/cte/resources/tools/exploration.htm)

Differentiation Strategies

Differentiation strategies can require varied amounts of preparation time. High-prep strategies often require a teacher to both create multiple pathways to process information/demonstrate learning and to

assign students to those pathways. Hence, more ongoing monitoring and assessment is often required. In contrast, low-prep strategies might require a teacher to strategically create process and product choices for students, but students are allowed to choose which option to pursue given their learning profile or readiness level. Also, a low-prep strategy might be focused on a discrete skill (such as vocabulary words), so there are fewer details to consider. Most teachers find that integration of one to two new low-prep strategies and one high-prep strategy each quarter is a reasonable goal.

Low Prep Strategies	
Varied journal prompts, spelling or vocabulary lists	Students are given a choice of different journal prompts, spelling lists or vocabulary lists depending on level of proficiency/assessment results.
Anchor activities	Anchor activities provide meaningful options for students when they are not actively engaged in classroom activities (e.g., when they finish early, are waiting for further directions, are stumped, first enter class, or when the teacher is working with other students). Anchors should be directly related to the current learning goals.
Choices of review activities	Different review or extension activities are made available to students during a specific section of the class (such as at the beginning or end of the period).
Homework options	Students are provided with choices about the assignments they complete as homework. Or, students are directed to specific homework based on student needs.
Student-teacher goal setting	The teacher and student work together to develop individual learning goals for the student.
Flexible grouping	Students might be instructed as a whole group, in small groups of various permutations (homogeneous or heterogeneous by skill or interest), in pairs or individual. Any small groups or pairs change over time based on assessment data.
Varied computer programs	The computer is used as an additional center in the classroom, and students are directed to specific websites or software that allows them to work on skills at their level.
Multiple Intelligence or Learning Style options	Students select activities or are assigned an activity that is designed for learning a specific area of content through their strong intelligence (verbal-linguistic, interpersonal, musical, etc.)
Varying scaffolding of same organizer	Provide graphic organizers that require students to complete various amounts of information. Some will be more filled out (by the

	teacher) than others.
Think-Pair-Share by readiness, interest, and/or learning profile	Students are placed in predetermined pairs, asked to think about a question for a specific amount of time, then are asked to share their answers first with their partner and then with the whole group.
Mini workshops to re-teach or extend skills	A short, specific lesson with a student or group of students that focuses on one area of interest or reinforcement of a specific skill.
Orbitals	Students conduct independent investigations generally lasting 3-6 weeks. The investigations "orbit" or revolve around some facet of the curriculum.
Games to practice mastery of information and skill	Use games as a way to review and reinforce concepts. Include questions and tasks that are on a variety of cognitive levels.
Multiple levels of questions	Teachers vary the sorts of questions posed to different students based on their ability to handle them. Varying questions is an excellent way to build the confidence (and motivation) of students who are reluctant to contribute to class discourse. Note: Most teachers would probably admit that without even thinking about it they tend to address particular types of questions to particular students. In some cases, such tendencies may need to be corrected. (For example, a teacher may be unknowingly addressing all of the more challenging questions to one student, thereby inhibiting other students' learning and fostering class resentment of that student.)
High Prep Strategies	
Cubing	Designed to help students think about a topic or idea from many different angles or perspectives. The tasks are placed on the six sides of a cube and use commands that help support thinking (justify, describe, evaluate, connect, etc.). The students complete the task on the side that ends face up, either independently or in homogenous groups.
Tiered assignment/ product	The content and objective are the same, but the process and/or the products that students must create to demonstrate mastery are varied according to the students' readiness level.
Independent studies	Students choose a topic of interest that they are curious about and wants to discover new information on. Research is done from questions developed by the student and/or teacher. The researcher produces a product to share learning with classmates.

4MAT	Teachers plan instruction for each of four learning preferences over the course of several days on a given topic. Some lessons focus on mastery, some on understanding, some on personal involvement, and some on synthesis. Each learner has a chance to approach the topic through preferred modes and to strengthen weaker areas
Jigsaw	Students are grouped based on their reading proficiency and each group is given an appropriate text on a specific aspect of a topic (the economic, political and social impact of the Civil War, for example). Students later get into heterogeneous groups to share their findings with their peers, who have read about different areas of study from source texts on their own reading levels. The jigsaw technique allows you to tackle the same subject with all of your students while discreetly providing them the different tools they need to get there.
Alternative assessments	After completing a learning experience via the same content or process, the student may have a choice of products to show what has been learned. This differentiation creates possibilities for students who excel in different modalities over others (verbal versus visual).
Modified Assessments	Assessments can be modified in a variety of ways – for example by formatting the document differently (e.g. more space between questions) or by using different types of questions (matching vs. open ended) or by asking only the truly essential questions.
Learning contracts or Personal Agendas	A contract is a negotiated agreement between teacher and student that may have a mix of requirements and choice based on skills and understandings considered important by the teacher. A personal agenda could be quite similar, as it would list the tasks the teacher wants each student to accomplish in a given day/lesson/unit. Both Learning contracts and personal agendas will likely vary between students within a classroom.
Compacting	This strategy begins with a student assessment to determine level of knowledge or skill already attained (i.e. pretest). Students who demonstrate proficiency before the unit even begins are given the opportunity to work at a higher level (either independently or in a group).
Literature circles	Flexible grouping of students who engage in different studies of a piece of literature. Groups can be heterogeneous and homogeneous.
Learning Centers	A station (or simply a collection of materials) that students might use independently to explore topics or practice skills. Centers allow individual or groups of students to work at their own pace. Students

	are constantly reassessed to determine which centers are appropriate for students at a particular time, and to plan activities at those centers to build the most pressing skills.
Tic-Tac-Toe Choice Board (sometimes called "Think-Tac-Toe"	The tic-tac-toe choice board is a strategy that enables students to choose multiple tasks to practice a skill, or demonstrate and extend understanding of a process or concept. From the board, students choose (or teacher assigns) three adjacent or diagonal. To design a tic-tac-toe board: - Identify the outcomes and instructional focus - Design 9 different tasks - Use assessment data to determine student levels - Arrange the tasks on a tic-tac-toe board either randomly, in rows according to level of difficulty, or you may want to select one critical task to place in the center of the board for all students to complete.

Curriculum Development Resources/Instructional Materials:

List or Link Ancillary Resources and Curriculum Materials Here:
- New Jersey Student Learning Standards (https://www.nj.gov/education/cccs/)
- NJSLS Mathematics (https://www.nj.gov/education/aps/cccs/math/)

Board of Education Approved Text(s)

GoMath Grade 1 (Text and Workbook)