



Grade 2 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 2 Mathematics Curriculum	
Content Area: Mathematics	
Course Title: Grade 2 Mathematics	Grade level: 2
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: 2

Unit Summary:

Students will be able to:

- Represent and solve problems involving addition and subtraction
- Add and subtract within 20
- Understand place value
- Compare two and three digit numbers
- Use place value understanding and properties of operations to add and subtract

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:

2.OA.A.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. *(benchmarked)

2.OA.B.2. Fluently add and subtract within 20 using mental strategies. *By end of Grade 2, know from memory all sums of two one-digit numbers.* *(benchmarked)

2.NBT.A.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundred, 0 tens, and 6 ones. Understand the following as special cases:

2.NBT.A.1.a. 100 can be thought of as a bundle of ten tens called a “hundred.”

2.NBT.A.1.b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

2.NBT.A.2. Count within 1000; skip-count by 5s, 10s, and 100s. *(benchmarked)

2.NBT.A.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

2.NBT.A.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons

2.NBT.B.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900

CPI #	Cumulative Progress Indicators (CPI) for Unit										
Performance Task 1	<p>You are a principal at a school having a brand new school built. Now all students from 4 schools will come together in one school.</p> <p>Using the chart below write the number of students from other schools in order from <u>greatest</u> to <u>least</u>.</p> <p>Which school has the most students?</p> <p>Which school has the lease amount of students?</p> <p>Select any two schools and write $<$, $>$, or $=$ to compare the number of students.</p> <table border="1" data-bbox="485 636 1495 898"> <thead> <tr> <th>School</th><th>Students</th></tr> </thead> <tbody> <tr> <td>North Side</td><td>213</td></tr> <tr> <td>East Side</td><td>355</td></tr> <tr> <td>South Side</td><td>142</td></tr> <tr> <td>West Side</td><td>162</td></tr> </tbody> </table> <p>Rubric</p> <p>3 Points - Student answers all 3 bullet points correctly</p> <p>2 Points – Student answers all 2 bullet points correctly</p> <p>1 Point - Student answers all 1 bullet point correctly</p> <p>0 Points - Student does not show understanding of the task at hand.</p>	School	Students	North Side	213	East Side	355	South Side	142	West Side	162
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East Side	355										
South Side	142										
West Side	162										
<p>Unit Enduring Questions:</p> <p><i>Questions that will foster inquiry, understanding and transfer of learning.</i></p> <ul style="list-style-type: none"> Which strategy should I use to solve this problem? How do I read and tell the value of a number that is in a specific place to help me solve a problem? Why did I use this strategy or symbol to solve the problem? 	<p>Unit Enduring Understandings:</p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> Students will understand that there are a variety of strategies to solve problems, which include: drawing pictures, adding to, taking from, putting together, taking apart, and comparing numbers. Students will understand that 3 digit numbers represent amounts in hundreds, tens, and ones Numbers can be represented in various forms. 										
<p>Knowledge:</p> <p><i>Students will know how to/that....</i></p>	<p>Skills:</p> <p><i>Students will be able to show or display...</i></p>										

- Number and place value to the hundreds place using various forms
- Symbols plus, minus, greater than, less than equal to
- Appropriate math vocabulary
- Strategies of addition and subtraction
- Know single addition and subtraction facts

- Read and write numbers and symbols correctly in various forms.
- Count on to add and to write an equation.
- Count back to subtract and to write an equation.
- Solve single addition and subtraction facts.

Pacing Guide:

Pre-Test	1-2 Days
Basic Facts Strategies/ Review /Math Routines/15 Minute Math	3 Days
Solve Problems Addition & Subtraction within 20	2 Weeks
Counting & Skip Counting	2 Weeks
Value – Standard Form/Expanded Form/Word Form	2 Weeks
Strategies to Subtract	2 Weeks
Comparing up to 3 Digit Numbers using $>$ $<$ and $=$	2 Weeks
Benchmark Testing & Re-teaching	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

Week 5: GoMath Chapter 2

Week 6: GoMath Chapter 2

Week 7: GoMath Chapter 7

Week 8: GoMath Chapter 7 and Benchmark

Cape May City Elementary School District Grade 2 Mathematics Curriculum Unit II Overview

Content Area: Mathematics

Unit Title: Quarter II

Target Course/Grade Level: 2

Students will be able to:

- Represent and solve problems involving addition and subtraction
- Add and subtract within 20
- Work with equal groups of objects to gain foundations for multiplication
- Reason with shapes and their attributes
- Use place value understanding and properties of operations to add and subtract
- Understand place value

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

2.OA.A.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. *(benchmarked)

2.OA.B.2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers*(benchmarked)

2.OA.C.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends

2.OA.C.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

2.G.A.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

2.NBT.B.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. *(benchmarked)

2.NBT.B.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.

2.NBT.B.7. Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and thousands

2.NBT.9 Understand the steps for the standard Algorithm for Addition and Subtraction

2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, 100s,**CPI #****Cumulative Progress Indicators (CPI) for Unit**

2

Performance Assessment Task 2

A group of friends are sharing and collecting stickers. Here is what they have so far. They got together to trade. This is how many each boy/girl collected so far.

- Who has the largest sticker collection?
- Who has the smallest sticker collection?
- Write the numbers of stickers in order from **greatest** to **least**.
- Find one student with an odd number of stickers in his/her collection and one with an even one and explain how you know.
- Find the total number of stickers that Rico, Carla and Jamie have.
- How many more stickers does Rico need to catch up to Carmen and have the same amount?

Name	Number of Stickers
Rico	60
Carmen	92
Jamie	19
Thomas	64
Carla	37

RUBRIC – EACH ITEM IS WORTH (1) POINT FOR A TOTAL OF (6) POINTS

Unit Enduring Questions:

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

- Which strategy works best for me when solving larger addition and subtraction problems?
- Which strategy works best for me in

Unit Enduring Understandings:

Students will understand that...

- Base Ten Models can help with adding and subtracting two and three digit numbers
- Standard Algorithm and breaking apart numbers

<p>determining even or odd numbers (pairing/counting by 2/sect)?</p> <ul style="list-style-type: none"> • How can breaking apart 2 and 3 Digit numbers help me to add and subtract? • What is the difference between a row and a column? • Can knowing how to add and subtract correctly help me in the real world? • How can place value or using place value blocks help me solve for addition and subtraction? 	<p>into simpler numbers are strategies for addition and subtraction</p> <ul style="list-style-type: none"> • All sums and differences can be found using models/cubes or properties of place value • Several strategies can be used to solve problems paper/pencil, mental math, manipulatives, number line, Hundreds Chart, breaking apart larger numbers (Partial Sums) • Numbers can be added in any order to come up with the same sum • Numbers can be Even or Odd • Arrays can help model repeated addition 																
<p>Knowledge: <i>Students will know how to/that...</i></p> <ul style="list-style-type: none"> • Determine when to regroup numbers in order to add or subtract • Understand place value models to show how to add and subtract larger numbers • Manipulate place value blocks to show the regrouping process • Estimate sums and differences to reflect on their world • Construct Arrays to show equal rows and columns • Know when a number line can help to solve for addition and subtraction • Utilize a Hundreds Chart to solve for Addition or Subtraction 	<p>Skills: <i>Students will be able to show or display...</i></p> <ul style="list-style-type: none"> • Addition/Subtraction Facts • Steps to Add/Sub. Algorithm • Use Partial Sums & Differences to Add and Subtract one ten Regrouping 1 ten into 10 ones Recording calculations correctly Recognizing Tens and Ones Place • Use symbols correctly (+, -, =) • Use a number line to solve addition/subtraction • Use a Hundreds Chart to solve for addition or subtraction 																
<p>Pacing Guide:</p> <table border="1"> <tbody> <tr> <td>Addition and Subtraction without regrouping (Review)</td><td>1 Week</td></tr> <tr> <td>Strategies to Add/Subtract – Mental Math/Number Line/Hundreds Chart/Pencil Paper</td><td>1 Week</td></tr> <tr> <td>Facts Strategies for Add/Sub of Basic Facts</td><td>1 Week</td></tr> <tr> <td>Solving problems with Addition & Subtraction with regrouping</td><td>3 Weeks</td></tr> <tr> <td>Strategies for Even and Odd Numbers</td><td>1 Week</td></tr> <tr> <td>Arrays and Equal Groups and Columns</td><td>1 Week</td></tr> <tr> <td>Benchmark Testing & Re-teaching</td><td>2 Weeks</td></tr> <tr> <td>Addition and Subtraction without regrouping (Review)</td><td>1 Week</td></tr> </tbody> </table>		Addition and Subtraction without regrouping (Review)	1 Week	Strategies to Add/Subtract – Mental Math/Number Line/Hundreds Chart/Pencil Paper	1 Week	Facts Strategies for Add/Sub of Basic Facts	1 Week	Solving problems with Addition & Subtraction with regrouping	3 Weeks	Strategies for Even and Odd Numbers	1 Week	Arrays and Equal Groups and Columns	1 Week	Benchmark Testing & Re-teaching	2 Weeks	Addition and Subtraction without regrouping (Review)	1 Week
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Week 9: GoMath Chapter 3

Week 10: GoMath Chapter 3 & 4

Week 11: GoMath Chapter 4

Week 12: GoMath Chapter 4

Week 13: GoMath Chapter 5

Week 14: GoMath Chapter 5 & 6

Week 15: GoMath Chapter 6

Week 16: Performance Benchmark and review.

**Cape May City Elementary School District Grade 2 Mathematics Curriculum
Unit III Overview**

Content Area: Mathematics

Unit Title: Quarter III

Target Course/Grade Level: 2

Unit Summary:

Students will be able to:

- Measure and estimate lengths in standard units
- Relate addition and subtraction to length
- Work with time using an analog and digital clock
- Understand place value
- Use place value understanding and properties of operations to add and subtract

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.
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- Developing effective communication
- Developing Independent Learning Strategies
- Incorporating Science, Technology, Engineering, and Mathematical themes into daily lessons

Learning Targets

- 2.MD.A.1.** Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- 2.MD.A.2.** Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- 2.MD.A.3.** Estimate lengths using units of inches, feet, centimeters, and meters
- 2.MD.A.4.** Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit
- 2.MD.B.5.** Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem
- 2.MD.B.6.** Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, and represent whole-number sums and differences within 100 on a number line diagram.
- 2.NBT.A.2.** Count within 1000; skip-count by 5s, 10s, and 100s. *(benchmarked)
- 2.NBT.B.5.** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. *(benchmarked)
- 2.MD.C.7.** Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m

CPI #	Cumulative Progress Indicators (CPI) for Unit
3	<p>Real World Measurement Activities utilizing Standard and Metric Systems of Measurement</p> <p>•Students will <u>estimate</u> the length of their classroom to the nearest <u>meter</u> and to the nearest <u>foot</u>.</p> <p>•Students will work with a partner to measure the length of their classroom using a meter stick to find metric</p>

length in meters.

•Students will work with a partner to measure the length of their classroom using a ruler to find standard length in feet.

•Students will estimate the length of classroom door to the nearest meter and to the nearest foot.

•Alternate task students can measure the length of their desk in centimeters.

•Alternate task students can measure the length of their desk in inches.

•Students will explain which unit of measure needed more units to measure the room and why.

•Given the height of the classroom door to the nearest foot find the difference between the length of the classroom and the height of the door.

Item Measured	Estimate in Meters	Actual Measurement	Estimate in Feet	Actual Measurement in feet
Length of Classroom				
Length of Classroom Door				
Distance to the Water Fountain				

Alternate or Additional Task

Item Measured	Estimate in centimeters	Actual Measurement in Inches	Estimate in inches	Actual Measurement
Length of Desk				
Width of Desk				
Length of their Shoe				

Rubric

3 - The student's estimate in feet is greater than his/her estimate in meters. The student's measurement of the classroom's length is within 1 meter or 2 feet, explains that

	<p>it takes more feet to measure the classroom, because meters are a larger unit, correctly finds the difference between the length of the room and height of the door in feet and writes a sentence for their answer.</p> <p>2 - Student makes an estimate of the length of the room in feet and meters and measurement of the classroom is within 2 meters or 4 feet. The student states that it takes more feet than meters to measure the classroom, but his/her explanation is not clear. The student correctly finds the difference between the length of the room and the height of the door/or makes a computation mistake and answers the question in a sentence.</p> <p>1 - The student estimates the length of the classroom in meters or feet and measurement of the classroom is within 2 meters or 6 feet. The student states that it takes more feet or meters to measure the classroom and it either lacks an explanation or their reasoning is unclear. The student attempts to solve a subtraction problem to find the difference between the length of the room and the height of the door, or they correctly solve an addition problem.</p> <p>0 - The student lacks an estimate for the length of the room. And does not complete any of the tasks correctly or has no response at all</p>
<p>Unit Enduring Questions:</p> <p><i>Questions that will foster inquiry, understanding and transfer of learning.</i></p> <ul style="list-style-type: none"> • How do we decide which unit of measurement to use? • Which unit of measure should I use to measure an object? • How can counting by 5's help me tell time? • Why is it important to know the difference between the hour and minute hand? • Which operation or strategy will I use to solve a problem? 	<p>Unit Enduring Understandings:</p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> • You can estimate the length of an object by using standard units of measure and objects can be measured to find their actual length. • Objects lengths can be compared and measured to find which is greater. • An analog and a digital clock measure time in minutes and hours.
<p>Knowledge:</p> <p><i>Students will know how to/that...</i></p> <ul style="list-style-type: none"> • All the sums, within 20, by composing and decomposing numbers using 10 as the benchmark number. 	<p>Skills:</p> <p><i>Students will be able to show or display...</i></p> <ul style="list-style-type: none"> • Use mental strategies to add all numbers within 20. • Skip count by, 5's, 10's, and 100's within a 1,000. • Estimate or measure lengths of objects using the correct tools and units of measure (inches, centimeters, feet, and

- Time is measured in hours and minutes.
- Estimate or measure lengths of objects using the correct tools (inches, centimeters, feet, and meters).
- That the same object can be measured using different units of measurement, and the difference is related to the size of the unit chosen (i.e. feet and inches).
- How to compare the lengths of two objects to find how much longer one object is by using the same standard of measure

- meters).
- Find which of two objects is longer by using the same unit of measure.

Pacing Guide:

Measurement	3 Weeks
Telling time to the hour, half hour and 5 minutes	2 Weeks
Number Sense and Fluency Review - Add/Sub within 20 with fluency	1 Week
Review - Problem Solving involving adding and subtraction numbers within 100	1 Week
Review of Skip counting by , 5's, 10's, and 100's within a 1,000	1 Week
Benchmark Testing & Re-teaching	2 Weeks

Week 17: GoMath Chapter 6

Week 18: GoMath Chapter 6 & 8

Week 19: GoMath Chapter 8

Week 20: GoMath Chapter 8

Week 21: GoMath Chapter 8 & 9

Week 22: GoMath Chapter 9

Week 23: GoMath Chapter 9

Week 24: Performance Benchmark and review.

Content Area: Mathematics

Unit Title: Quarter IV

Target Course/Grade Level: 2

Unit Summary:

Students will be able to:

- Reason with shapes and their attributes
- Add and subtract within 20
- Work with Money
- Represent and interpret data

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.
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- Developing effective communication
- Developing Independent Learning Strategies
- Incorporating Science, Technology, Engineering, and Mathematical themes into daily lessons

Learning Targets

2.G.A.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

2.G.A.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

2.MD.C.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.

2.MD.D.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

2.MD.D.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in a bar graph.

2.OA.B.2. Fluently add and subtract within 20 using mental strategies.

2.NBT.B.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

*(benchmarked)

CPI #	Cumulative Progress Indicators (CPI) for Unit
4	<p>The teacher has sent you to the school store to buy 30 pencils for the class. Pencils come in boxes of 10 and cost 30 cents a box.</p> <ul style="list-style-type: none">• How much will it cost you to buy 3 boxes of pencils at the school store?• Show/Draw two different ways (coin combinations) you could use to pay for the pencils.• If you decided to buy one more box, would you need more or less than \$1 <p>Rubric</p> <p>3 Points – Student correctly determines the cost of the 3 boxes of pencils (90 cents)/Draws two different coin combinations correctly/Communicates in writing/equation or drawing that more than \$1.00 is needed</p> <p>2 Points – Student correctly determines the cost of the 3 boxes of pencils (90 cents)/Draws one of the two different coin combinations correctly/Communicates in writing/equation or drawing that more than \$1.00 is needed</p> <p>1 Point - Student correctly determines the cost of the 3 boxes of pencils (90 cents)/Does not draw two different coin combinations /Does not communicate in writing/equation or drawing that more than \$1.00 is needed</p> <p>0 Points – No Response or Attempt to Solve the Problem</p>
<p>Unit Enduring Questions:</p> <p><i>Questions that will foster inquiry, understanding and transfer of learning.</i></p> <ul style="list-style-type: none">• How would you describe or classify a given object?• What is the value of a penny, nickel, quarter, dime, dollar?• How should you show your data using a chart, table, or graph?• What is a strategy used to add or subtract three digit numbers	<p>Unit Enduring Understandings:</p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none">• Two and three dimensional objects can be described, classified, and analyzed by their attributes.• Coins and dollars are written in a specific way and each has a specific value.• Data can be collected and represented using various tables, charts, and graphs chosen appropriately.• Three digit numbers can be added and
<p>Knowledge:</p> <p><i>Students will know how to/that...</i></p> <ul style="list-style-type: none">• All objects have specific attributes.• That there are various ways to collect and organize data.• Knowing basic facts an important part of math• There are various strategies based on place	<p>Skills:</p> <p><i>Students will be able to show or display...</i></p> <ul style="list-style-type: none">• Name the attributes of objects.• Create a graph, table, or chart to organize data.• Count various sets of coins and tell the value of the set.

- value to add and subtract three digit numbers
- The values of various coins and one dollar.

- Fluently Add and Subtract within 20
- Add and subtract three digit numbers

Pacing Guide:

Geometry Basics – Plane and Solid Figures/Shapes & Attributes	2 Weeks
Working with Money and their values	2 Weeks
Data Analysis (Bar Graphs/Pictographs/Line Plots)	2 Weeks
Review/Practice Adding and Subtracting within 100 with regrouping	2 Weeks
Review/Practice Addition and Subtraction within 20	Entire Unit
Benchmark Testing & Re teaching	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

Week 30: GoMath Chapter 12

Week 31: GoMath Chapter 12

Week 32: Performance Benchmark and review.

Cape May City Elementary School District Grade 2 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.
- Write 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 are included below:
- 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

	<p>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.)</p>
<p>High Prep Strategies</p>	
Cubing	<p>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.</p>
Tiered assignment/ product	<p>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.</p>
Independent studies	<p>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.</p>
4MAT	<p>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</p>
Jigsaw	<p>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.</p>
Alternative assessments	<p>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).</p>

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: <ul style="list-style-type: none"> • 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 2 (Text and Workbook)