Curriculum Design	
Content Area: Mathematics	
Course Title: Mathematics	**Grade Level: 1**

Unit 1: Addition (within 20)	**3 weeks**
Unit 2: Subtraction (within 20)	**3 weeks**
Unit 3: Properties of Addition	**3 weeks**
Unit 4: Numbers to 120 / Base 10 (place value)	**4 weeks**
Unit 5: Time	**4 weeks**
Unit 6: Measurement and Data	**4 weeks**
Unit 7: Geometry (shapes)	**3 weeks**

Unit 8: Geometry (fractions)	**3 weeks**
Unit 9: Addition (within 100)	**3 weeks**
Unit 10: Subtraction (multiples of 10)	**3 weeks**

Date Revised: **August 2015**

Board Approved on: **August 27, 2015**

Unit 1 Overview
Content Area: Mathematics
Unit 1 Title: Addition
Grade Level: 1
Unit Summary: Use addition within 20 to solve word problems. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. Relate counting to addition (e.g., by counting on 2 to add 2). Add within 20, demonstrating fluency for addition within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums. Understand the meaning of the equal sign, and determine if equations involving addition are true or false. Determine the unknown whole number in an addition equation relating three whole numbers. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **1-ESS1-2.** Make observations at different times of year to relate the amount of daylight to the time of year. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
Unit Rationale: Students will be able to add two and three whole numbers whose sum is less than or equal to 20.

Learning Targets	
Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.	
CPI #	**Cumulative Progress Indicator (CPI)**
1.OA.1	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
1.OA.2	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a

	symbol for the unknown number to represent the problem.
1.OA.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
1.OA.6	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.
1.OA.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
1.OA.8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? – 3, 6 + 6 = ?.

Unit Essential Questions	**Unit Enduring Understandings**
• What makes a computational strategy both effective and efficient? • How do operations affect numbers?	• Computational fluency includes understanding not only the meaning, but also the appropriate use of numerical operations. • The magnitude of numbers affects the outcome of operations on them.

Unit Learning Targets

- Use addition within 20 to solve word problems.
- Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20
- Relate counting to addition.
- Add within 20, demonstrating fluency for addition within 10.
- Understand the meaning of the equal sign, and determine if equations involving addition are true or false.
- Determine the unknown whole number in an addition equation relating three whole numbers.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessments: **Go Math** Benchmarks

Equipment needed: GO Math student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Self-Assessment

• Classwork	• Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments
- Partner work
- Manipulatives
- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

wwwk-6.thinkcentral.com

Unit 2 Overview	
Content Area: Mathematics	
Unit 2 Title: Subtraction	
Grade Level: 1	
Unit Summary: Use subtraction within 20 to solve word problems. Relate counting to subtraction (e.g., by counting on 2 to add 2). Subtract within 20, demonstrating fluency for subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums. Understand the meaning of the equal sign, and determine if equations involving subtraction are true or false. Determine the unknown whole number in a subtraction equation relating three whole numbers. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **1-ESS1-2.** Make observations at different times of year to relate the amount of daylight to the time of year. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.	
Unit Rationale: Students will be able to subtract two whole numbers within 20.	
Learning Targets	
Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.	
CPI #	**Cumulative Progress Indicator (CPI)**
1.OA.1	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
1.OA.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
1.OA.6	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction;

	and creating equivalent but easier or known sums.
1.OA.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
1.OA.8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? – 3, 6 + 6 = ?.

Unit Essential Questions	**Unit Enduring Understandings**
• What makes a computational strategy both effective and efficient? • How do operations affect numbers?	• Computational fluency includes understanding not only the meaning, but also the appropriate use of numerical operations. • The magnitude of numbers affects the outcome of operations on them.

Unit Learning Targets

- Subtraction within 20 to solve word problems.
- Relate counting to subtraction.
- Subtract within 20, demonstrating fluency for subtraction within 10.
- Understand the meaning of the equal sign, and determine if equations involving subtraction are true or false.
- Determine the unknown whole number in an subtraction equation relating three whole numbers.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessment: Go Math Benchmarks

Equipment needed: Go Math student text, workbook, manipulatives

Teacher Resources: wwwk-6thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments

- Partner work
- Manipulatives
- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

wwwk-6.thinkcentral.com

Unit 3 Overview	
Content Area: Mathematics	
Unit 3 Title: Properties of Addition	
Grade Level: 1	
Unit Summary: Apply properties of operations as strategies to add and subtract. Understand subtraction as an unknown-addend problem. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **SL.1.5** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.	
Unit Rationale: Students will be able to apply the Commutative Property of Addition and the Associative Property of Addition and understand subtraction as an unknown-addend problem.	
Learning Targets	
Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.	
CPI #	**Cumulative Progress Indicator (CPI)**
1.OA.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.)
1.OA.4	Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.
Unit Essential Questions • What makes a computational strategy both effective and efficient? • How do operations affect numbers?	**Unit Enduring Understandings** • Computational fluency includes understanding not only the meaning, but also the appropriate use of numerical operations. • The magnitude of numbers affects the

	outcome of operations on them.

Unit Learning Targets

- Apply properties of operations as strategies to add and subtract. (Commutative Property of Addition and Associative Property of Addition)
- Understand subtraction as an unknown-addend problem.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessments: Go Math Benchmarks

Equipment needed: Go Math student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments
- Partner work
- Manipulatives
- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

wwwk-6.thinkcentral.com

Unit 4 Overview
Content Area: Mathematics
Unit 4 Title: Number and Operations in Base Ten
Grade Level: 1
Unit Summary: 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. Understand that the two digits of a two-digit number represent amounts of tens and ones. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **1-LS1-2.** Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
Unit Rationale: Students will be able to count to 120, starting at any number less than 120, read and write numerals less than 120, represent a number of objects with a written numeral, understand that the two digits of a two-digit number represent amounts of tens and ones, compare two two-digit numbers using >, =, and <,

Learning Targets	
Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.	
CPI #	**Cumulative Progress Indicator (CPI)**
1.NBT.1	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
1.NBT.2	Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones –called a “ten.” b. The numbers from 11 to 19 are composed of a ten and one, two, three,

	four, five, six, seven, eight, or nine ones. c.The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
1.NBT.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

Unit Essential Questions	**Unit Enduring Understandings**
• How do mathematical ideas interconnect and build on one another to produce a coherent whole. • How can we compare and contrast numbers? • How can counting, measuring, or labeling help to make sense of the world around us?	• One representation may sometimes be more helpful than another; and, used together, multiple representations give a fuller understanding of a problem. • A quantity can be represented numerically in various ways. Problem solving depends on choosing wise ways. • Numeric fluency includes both the understanding of and the ability to appropriately use numbers.

Unit Learning Targets

- 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.
- Understand that the two digits of a two-digit number represent amounts of tens and ones.
- Compare two two-digit numbers based on meanings of the tens and ones digits using >, =, and <.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessments: **Go Math Benchmark**

Equipment needed: Go Math student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments

- Partner work
- Manipulatives
- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

wwwk-6.thinkcentral.com

Unit 5 Overview
Content Area: Mathematics
Unit 5 Title: Time
Grade Level: 1
Unit Summary: Tell and write time in hours and half-hours using analog and digital clocks. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **1-ESS1-2.** Make observations at different times of year to relate the amount of daylight to the time of year. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
Unit Rationale: Students will be able to tell and write time in hours and half-hours using analog and digital clocks.

Learning Targets
Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.

CPI #	Cumulative Progress Indicator (CPI)
1.MD.3	Tell and write time in hours and half-hours using analog and digital clocks.

Unit Essential Questions	Unit Enduring Understandings
• How can measurements be used to solve problems.	• Everyday objects have a variety of attributes, each of which can be measured in many ways. • What we measure affects how we measure it. • Measurement can be used to describe, compare, and make sense of phenomena.

Unit Learning Targets

- Be able to tell and write time in hours and half-hours using analog and digital clocks.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessment: Go Math Benchmarks

Equipment needed: Go Math student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments
- Partner work
- Manipulatives
- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

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Unit 6 Overview
Content Area: Mathematics
Unit 6 Title: Measurement and Data
Grade Level: 1
Unit Summary: Order three objects by length; compare the lengths of two objects indirectly by using a third object. Express the length of an object as a whole number of length units, by laying multiple copies of 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. 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. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **1-ESS1-2.** Make observations at different times of year to relate the amount of daylight to the time of year. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
Unit Rationale: Students will be able to order three objects by length, compare the lengths of two objects, express the length of an object as a whole number of length units, and organize, represent, and interpret data with up to three categories.
Learning Targets
Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.

CPI #	Cumulative Progress Indicator (CPI)
1.MD.1	Order three objects by length; compare the lengths of two objects indirectly by using a third object.
1.MD.2	Express the length of an object as a whole number of length units, by laying multiple copies of 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.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.

Unit Essential Questions

- How can measurements be used to solve problems?
- How can the collection, organization, interpretation, and display of data be used to answer questions?

Unit Enduring Understandings

- Everyday objects have a variety of attributes, each of which can be measured in many ways.
- What we measure affects how we measure it.
- Measurement can be used to describe, compare, and make sense of phenomena.

Unit Learning Targets

- Order three objects by length and compare the lengths of two objects by using a third object.
- Express the length of an object as a whole number of length units and understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.
- 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.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessments: Go Math Benchmark

Equipment needed: GO Math student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments
- Partner work
- Manipulatives
- Flexible grouping

- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

wwwk-6.thinkcentral.com

Unit 7 Overview
Content Area: Mathematics
Unit 7 Title: Geometry (Shapes)
Grade Level: 1
Unit Summary: 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. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **L.1.5.A** Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
Unit Rationale: Students will be able to distinguish between defining attributes vs. non-defining attributes, build and draw shapes, and compose two-dimensional shapes or three-dimensional shapes.
Learning Targets
Standards: This unit will incorporate the following Mathematical Practices: make sense of

problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.

CPI #	Cumulative Progress Indicator (CPI)
1.G.1	Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.
1.G.2	Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

Unit Essential Questions

- How can spatial relationships be described by careful use of geometric language?
- How do geometric relationships help us to solve problems and/or make sense of phenomena?

Unit Enduring Understandings

- Geometric properties can be used to construct geometric figures.
- Geometric relationships provide a means to make sense of a variety of phenomena.

Unit Learning Targets

- 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.
- Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessments: Go Math Benchmarks

Equipment needed: Go Math student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments
- Partner work
- Manipulatives
- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

wwwk-6.thinkcentral.com

Unit 8 Overview	
Content Area: Mathematics	
Unit 8 Title: Geometry (Fractions)	
Grade Level: 1	
Unit Summary: 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. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **SL.1.5** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.	
Unit Rationale: Students will be able to partition circles and rectangles into two and four equal shares and describe the whole as two of, or four of the shares.	
Learning Targets	
Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.	
CPI #	**Cumulative Progress Indicator (CPI)**
1.G.3	Partition circles and rectangles into two and four equal shares, describe the shares using the words, halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
Unit Essential Questions	**Unit Enduring Understandings**
• How can spatial relationships be described	• Geometric properties can be used to

by careful use of geometric language? • How do geometric relationships help us to solve problems and/or make sense of phenomena?	construct geometric figures. • Geometric relationships provide a means to make sense of a variety of phenomena.

Unit Learning Targets

- 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.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessments: Go Math Benchmarks

Equipment needed: **Go Math** student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments
- Partner work
- Manipulatives
- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

wwwk-6.thinkcentral.com

Unit 9 Overview
Content Area: Mathematics
Unit 9 Title: Addition within 100
Grade Level: 1
Unit Summary: Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. Given a two-digit number, mentally find 10 more or less than the number, without having to count; explain the reasoning used. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **1-LS1-2.** Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
Unit Rationale: Students will be able to add within 100, including adding a two-digit number and a one-digit number, understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and sometimes it is necessary to compose a ten, and given a two-digit number, mentally find 10 more or less than the number.

Learning Targets	
Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.	
CPI #	**Cumulative Progress Indicator (CPI)**
1.NBT.4	Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or

	the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
1.NBT.5	Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

Unit Essential Questions	**Unit Enduring Understandings**
• What makes a computational strategy both effective and efficient? • How do operations affect numbers?	• Computational fluency includes understanding not only the meaning, but also the appropriate use of numerical operations. • The magnitude of numbers affects the outcome of operations on them.

Unit Learning Targets

- 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.
- Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

Evidence of Learning

Summative Assessment: Chapter Tests

Benchmark Assessment: Go Math Benchmarks

Equipment needed: GO Math student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments
- Partner work
- Manipulatives

- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

Click the links below to access additional resources used to design this unit:

https://www13.state.nj.us/NJCCCS/

wwwk-6.thinkcentral.com

Unit 10 Overview
Content Area: Mathematics
Unit 10 Title: Subtraction (multiples of 10)
Grade Level: 1
Unit Summary: Given a two-digit number, mentally find 10 more or less than the number, without having to count; explain the reasoning used. 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. **Primary interdisciplinary connections:** Science, Technology, and Life and Careers **1-LS1-2.** Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive **21st century themes:** This unit will incorporate the 21st Century Life and Careers standard 9.1 strand A. All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures. **CRP4.** Communicate clearly and effectively and with reason. **CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
Unit Rationale: Students will be able to mentally find 10 more or less than the number and subtract multiples of 10 in the range 10-90.

Learning Targets

Standards: This unit will incorporate the following Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.

CPI #	Cumulative Progress Indicator (CPI)
1.NBT.5	Given a two-digit number, mentally find 10 more or less than the number, without having to count; explain the reasoning used.
1.NBT.6	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Unit Essential Questions

- What makes a computational strategy both effective and efficient?
- How do operations affect numbers?

Unit Enduring Understandings

- Computational fluency includes understanding not only the meaning, but also the appropriate use of numerical operations.
- The magnitude of numbers affects the outcome of operations on them.

Unit Learning Targets

- Given a two-digit number, mentally find 10 more or less than the number, without having to count; explain the reasoning used.
- 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.

Evidence of Learning

Summative Assessment: Chapter Assessments

Benchmark Assessments: Go Math Benchmark

Equipment needed: Go Math student text, workbook, manipulatives

Teacher Resources: wwwk-6.thinkcentral.com

Formative Assessments

- Daily observation
- Classwork
- Self-Assessment
- Homework

Suggested Modifications (ELLs, Special Education, Gifted and Talented)

- Provide differentiated instruction as needed.
- Follow all IEP modifications and 504 plans.
- Menus
- Choice Boards
- Tiered Assignments
- Partner work
- Manipulatives
- Flexible grouping
- Individualizing lessons
- Compacting
- Varying question levels

Curriculum Development Resources

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