

Curriculum Design	
Content Area: Mathematics	
Course Title: Mathematics	Grade Level: Kindergarten
Unit 1: Numbers to 20	4 weeks
Unit 2: Comparing Numbers	4 weeks
Unit 3: Numbers to 100	4 weeks
Unit 4: Measurement and Data (sorting)	4 weeks
Unit 5: Geometry (shapes)	4 weeks
Unit 6: Addition	4 weeks
Unit 7: Subtraction	4 weeks

Unit 8: Base Ten (place value)

4 weeks

Date Revised: August 2015

Board Approved on: August 27, 2015

Unit 1 Overview

Content Area: Mathematics

Unit 1 Title: Numbers to 20

Grade Level: Kindergarten

Unit Summary: Counting to 20 by ones. Counting forward from a given number other than 1. Write numbers from 0 to 20. Count with cardinality, understand that the last number name said tells the number of objects counted, and understand that each successive number name refers to a quantity that is one larger. Count to answer “how many?” questions about as many as 20 arranged objects or as many as 10 scattered objects.

Primary interdisciplinary connections: Science, Technology, and Life and Careers

RI.K.1 With prompting and support, ask and answer questions about key details in a text.

SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

21st century themes: 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 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)
K.CC.1	Count to 100 by ones and tens.
K.CC.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
K.CC.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
K.CC.4.a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
K.CC.4.b	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in

	which they were counted.
K.CC.4.c	Understand that each successive number name refers to a quantity that is one larger.
K.CC.5	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.
Unit Essential Questions <ul style="list-style-type: none"> • 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? 	Unit Enduring Understandings <ul style="list-style-type: none"> • 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. • Numeric fluency includes both the understanding of and the ability to appropriately use numbers.
Unit Learning Targets <ul style="list-style-type: none"> • Count to 20 by ones • Write numbers from 0 to 20 • Connect counting to cardinality • Count to answer “how many?” questions 	
Evidence of Learning	
Summative Assessment: Chapter Assessments Benchmark Assessment: Go Math Assessment Equipment needed: GO Math student text, workbook, manipulatives Teacher Resources: www.k-6.thinkcentral.com	
Formative Assessments <ul style="list-style-type: none"> • Daily observation • Classwork • Self-Assessment • Homework 	
Suggested Modifications (ELLs, Special Education, Gifted and Talented) <ul style="list-style-type: none"> • 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/>
www.k-6.thinkcentral.com

Unit 2 Overview	
Content Area: Mathematics	
Unit 2 Title: Comparing Numbers	
Grade Level: Kindergarten	
<p>Unit Summary: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group by using matching and counting strategies. Compare two numbers between 1 and 10 presented as written numerals.</p> <p>Primary interdisciplinary connections: Science, Technology, and Life and Careers</p> <p>K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.</p> <p>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.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p>	
Unit Rationale: Students will be able to compare numbers.	
Learning Targets	
<p>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.</p>	
CPI #	Cumulative Progress Indicator (CPI)

K.CC.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
K.CC.7	Compare two numbers between 1 and 10 presented as written numerals.
<p>Unit Essential Questions</p> <ul style="list-style-type: none"> • 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? 	<p>Unit Enduring Understandings</p> <ul style="list-style-type: none"> • 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. • Numeric fluency includes both the understanding of and the ability to appropriately use numbers.
<p>Unit Learning Targets</p> <ul style="list-style-type: none"> • Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. • Compare two numbers between 1 and 10 presented as written numerals. 	
<p>Evidence of Learning</p>	
<p>Summative Assessment: Chapter Assessments Benchmark Assessment: Go Math Benchmarks Equipment needed: Go Math student text, workbook, manipulatives Teacher Resources: wwwk-6.thinkcentral.com</p>	
<p>Formative Assessments</p> <ul style="list-style-type: none"> • Daily observation • Classwork • Self-Assessment • Homework 	
<p>Suggested Modifications (ELLs, Special Education, Gifted and Talented)</p> <ul style="list-style-type: none"> • 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

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Unit 3 Overview

Content Area: Mathematics

Unit 3 Title: Numbers to 100

Grade Level: Kindergarten

Unit Summary: Counting to 100 by ones and tens. Counting forward from a given number other than 1. Count with cardinality, understand that the last number name said tells the number of objects counted, and understand that each successive number name refers to a quantity that is one larger.

Primary interdisciplinary connections: Science, Technology, and Life and Careers

K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.

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 100.

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)
K.CC.1	Count to 100 by ones and tens.
K.CC.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
K.CC.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
K.CC.4.a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
K.CC.4.b	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in

	which they were counted.
K.CC.4.c	Understand that each successive number name refers to a quantity that is one larger.
K.CC.5	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.
Unit Essential Questions <ul style="list-style-type: none"> • 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? 	Unit Enduring Understandings <ul style="list-style-type: none"> • 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. • Numeric fluency includes both the understanding of and the ability to appropriately use numbers.
Unit Learning Targets <ul style="list-style-type: none"> • Count to 100 by ones and tens • Connect counting to cardinality • Count to answer “how many?” questions 	
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 <ul style="list-style-type: none"> • Daily observation • Classwork • Self-Assessment • Homework 	
Suggested Modifications (ELLs, Special Education, Gifted and Talented) <ul style="list-style-type: none"> • 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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Unit 4 Overview	
Content Area: Mathematics	
Unit 4 Title: Measurement / Data (sorting)	
Grade Level: Kindergarten	
<p>Unit Summary: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. Directly compare two objects with a measurable attribute in common, to see which object has “more of” / “less of” the attribute, and describe the differences. Classify objects into given categories; count the number of objects in each category and sort the categories by count.</p> <p>Primary interdisciplinary connections: Science, Technology, and Life and Careers</p> <p>K-LSI-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.</p> <p>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.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p>	
Unit Rationale: Students will be able to measure items for length and weight, compare two objects, and classify objects into given 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)
K.MD.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.2	Directly compare two objects with a measurable attribute in common, to see which object has “more of” / “less of” the attribute, and describe the differences.
K.MD.3	Classify objects into given categories; count the number of objects in each category and sort the categories by count.
Unit Essential Questions <ul style="list-style-type: none"> How can measurements be used to solve problems? 	Unit Enduring Understandings <ul style="list-style-type: none"> Everyday objects have a variety of attributes, each of which can be measured in many ways.

<ul style="list-style-type: none"> • How can the collection, organization, interpretation, and display of data be used to answer questions? 	<ul style="list-style-type: none"> • What we measure affects how we measure it. • Measurement can be used to describe, compare, and make sense of phenomena.
<p>Unit Learning Targets</p> <ul style="list-style-type: none"> • Measure objects to determine length and weight • Compare two objects with an attribute in common • Classify (sort) objects into categories 	
<p>Evidence of Learning</p>	
<p>Summative Assessment: Chapter Assessments Benchmark Assessments: Go Math Benchmarks Equipment needed: GO Math student text, workbook, manipulatives Teacher Resources: wwwk-6.thinkcentral.com</p>	
<p>Formative Assessments</p> <ul style="list-style-type: none"> • Daily observation • Classwork • Self-Assessment • Homework 	
<p>Suggested Modifications (ELLs, Special Education, Gifted and Talented)</p> <ul style="list-style-type: none"> • 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 	
<p>Curriculum Development Resources</p> <p>Click the links below to access additional resources used to design this unit:</p> <p>https://www13.state.nj.us/NJCCCS/</p> <p>wwwk-6.thinkcentral.com</p>	

Unit 5 Overview

Content Area: Mathematics

Unit 5 Title: Geometry (shapes)

Grade Level: Kindergarten

Unit Summary: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. Correctly name shapes regardless of their orientations or overall size. Identify shapes as two-dimensional or three-dimensional. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides of equal length). Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. Compose simple shapes to form larger shapes.

Primary interdisciplinary connections: Science, Technology, and Life and Careers
SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
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 correctly name shapes, describe objects in the environment using the names of shapes, describe the relative position of these objects, identify objects as two-dimensional or three-dimensional, compare shapes, model shapes, and compose 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)
K.G.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
K.G.2	Correctly name shapes regardless of their orientations or overall size.
K.G.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

K.G.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides of equal length).		
K.G.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.		
K.G.6	Compose simple shapes to form larger shapes.		
<table border="1"> <tr> <td> Unit Essential Questions <ul style="list-style-type: none"> • 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? </td> <td> Unit Enduring Understandings <ul style="list-style-type: none"> • Geometric properties can be used to construct geometric figures. • Geometric relationships provide a means to make sense of a variety of phenomena. </td> </tr> </table>		Unit Essential Questions <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Geometric properties can be used to construct geometric figures. • Geometric relationships provide a means to make sense of a variety of phenomena.
Unit Essential Questions <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Correctly name shapes in the environment • Describe the relative position of shapes • Identify shapes as two-dimensional or three-dimensional • Model and compose shapes 			
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 <ul style="list-style-type: none"> • Daily observation • Classwork • Self-Assessment • Homework 			
Suggested Modifications (ELLs, Special Education, Gifted and Talented) <ul style="list-style-type: none"> • 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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wwwk-6.thinkcentral.com

Unit 6 Overview
Content Area: Mathematics
Unit 6 Title: Addition
Grade Level: Kindergarten
<p>Unit Summary: Represent addition with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations. Solve addition word problems, and add within 10, e.g., by using objects or drawings to represent the problem. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$). For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. Fluently add within 5.</p> <p>Primary interdisciplinary connections: Science, Technology, and Life and Careers</p> <p>SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.</p> <p>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.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>Unit Rationale: Students will be able to represent addition in various ways, solve addition word problems by using objects or drawings, find the number that makes 10 when added to the given number, and fluently add within 5.</p>
Learning Targets
<p>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</p>

regularity in repeated reasoning.					
CPI #	Cumulative Progress Indicator (CPI)				
K.O.A.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, (e.g., claps), acting out situations, verbal explanations, expressions, or equations.				
K.O.A.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.				
K.O.A.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).				
K.O.A.4	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.				
K.O.A.5	Fluently add and subtract within 5.				
<table border="1"> <tr> <td> Unit Essential Questions <ul style="list-style-type: none"> • What makes a computational strategy both effective and efficient? • How do operations affect numbers? </td> <td> Unit Enduring Understandings <ul style="list-style-type: none"> • 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. </td> </tr> </table>		Unit Essential Questions <ul style="list-style-type: none"> • What makes a computational strategy both effective and efficient? • How do operations affect numbers? 	Unit Enduring Understandings <ul style="list-style-type: none"> • 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 Essential Questions <ul style="list-style-type: none"> • What makes a computational strategy both effective and efficient? • How do operations affect numbers? 	Unit Enduring Understandings <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Represent addition in various ways • Solve addition word problems within 10 by using objects • Decompose numbers less than or equal to 10 into pairs in more than one way • Find the number that makes 10 when added to the given number • Fluently add within 5 					
Evidence of Learning					
Summative Assessment: Chapter Assessments Benchmark Assessments: Go Math Benchmarks. Equipment needed: Go Math student text, workbook, manipulatives Teacher Resources: www.k-6.thinkcentral.com					
Formative Assessments <table border="0"> <tr> <td>• Daily observation</td> <td>• Self-Assessment</td> </tr> <tr> <td>• Classwork</td> <td>• Homework</td> </tr> </table>		• Daily observation	• Self-Assessment	• Classwork	• Homework
• Daily observation	• Self-Assessment				
• Classwork	• Homework				
Suggested Modifications (ELLs, Special Education, Gifted and Talented) <ul style="list-style-type: none"> • 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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<https://www13.state.nj.us/NJCCCS/>

wwwk-6.thinkcentral.com

Unit 7 Overview

Content Area: Mathematics

Unit 7 Title: Subtraction

Grade Level: Kindergarten

Unit Summary: Represent subtraction with objects, fingers, mental images, drawings, sounds, (e.g., claps), acting out situations, verbal explanations, expressions, or equations. Solve and subtraction word problems, and subtract within 10, e.g., by using objects or drawings to represent the problem. Fluently subtract within 5.

Primary interdisciplinary connections: Science, Technology, and Life and Careers

SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.

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 represent subtraction in various ways, solve

subtraction word problems by using objects or drawings, and fluently subtract within 5.	
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)
K.O.A.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
K.O.A.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
K.O.A.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
K.O.A.4	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
K.O.A.5	Fluently add and subtract within 5.
Unit Essential Questions <ul style="list-style-type: none"> • What makes a computational strategy both effective and efficient? • How do operations affect numbers? 	Unit Enduring Understandings <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Represent subtraction in various ways • Solve subtraction word problems within 10 by using objects • Fluently subtract within 5 	
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 <ul style="list-style-type: none"> • Daily observation • Self-Assessment • Classwork • Homework 	

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

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

Curriculum Development Resources

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

wwwk-6.thinkcentral.com

Unit 8 Overview

Content Area: Mathematics

Unit 8 Title: Base Ten (place value)

Grade Level: Kindergarten

Unit Summary: Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Primary interdisciplinary connections: Science, Technology, and Life and Careers

SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.

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 compose and decompose numbers from 11 to 19 into tens and ones.

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)
K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Unit Essential Questions	Unit Enduring Understandings
<ul style="list-style-type: none"> • 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? 	<ul style="list-style-type: none"> • 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

- Compose and decompose numbers from 11 to 19 into tens and ones by using objects or drawings

Evidence of Learning

Summative Assessment: Chapter Assessments
Benchmark Assessments: Go Math benchmarks
Equipment needed: Go Math student text, workbook
Teacher Resources: www.k-6thinkcentral.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/>

www.k-6thinkcentral.com