

**WEYMOUTH TOWNSHIP MATHEMATICS
CURRICULUM**

Content Area: Mathematics

Course Title: Mathematics

Grade Level: K

**Unit 1 Plan:
Count to 100 by ones and by tens**

**September-October
Ongoing**

**Unit 2 Plan:
Operations and Algebraic Thinking**

**November/December
Ongoing**

**Unit 3 Plan:
Number and Operations in Base Ten**

**January/February
Ongoing**

**Unit 4 Plan:
Measurement and Data**

**March/April
Ongoing**

**Unit 5 Plan:
Geometry**

**May/June
Ongoing**

Date Created:

August, 2022

Revised:

Board Approved on:

August 2023

Gr –K Grade Unit 1-Counting and Cardinality

Unit Overview

Content topic and skill focus: Counting and Cardinality

Standard, Strand, and Content statements (CPIs listed below)

Learning in this unit will focus on: **Counting and Cardinality**

Standard MA.K.CC.A.1, MA.K.CC.A.2, MA.K.CC.A.3, MA.K.CC.B.4a, MA.K.CC.B.4b, MA.K.CC.B.4c, MA.K.CC.B.5, MA.K.CC.C.6, MA.K.CC.C.7

Content Statement: Students count to 100 by ones and by tens. Students count forward beginning from a given number within the known sequence. Students will write numbers 0 to 20. Students will understand the relationship between numbers and quantities; connect counting to cardinality. Students count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, a circle, or as many as 10 things scattered configuration. Students will identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. Students compare two numbers between 1 and 10 presented as written numerals.

Instructional Focus: Counting and Cardinality

Lesson #: Sections 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.1, 4.2, 4.3, 4.5, 6.5, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.11, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 11.2, 11.3, 11.5, 11.6, 12.1, 12.2, 12.3, 12.4, 13.3, 13.5

Essential Questions:

- How to name, count, and write numbers.
- How to pair each number name with an object.
- How to count objects in different arrangements.
- How to order numbers forward and backward.
- How to understand that the next number stated is one number greater.
- How to use matching and counting to tell whether the number of objects in a group is greater than, less than, or equal to the number of objects in another group.
- How to determine that the last number stated names the total.
- How to classify objects into categories and sort by counting.
- How to count by tens and ones to 100.
- How to analyze shapes and their attributes.
- How to name shapes when they are shown with different sizes and orientations.
- How to build and draw shapes.
- How to tell whether a shape is two-dimensional or three-dimensional.
- How to compare the lengths of two objects using numbers.

Student Learning Objectives: STUDENTS WILL BE ABLE TO:

- MA.K.CC (Domain) Counting and Cardinality
- MA.K.CC.A.1 Count to 100 by ones and by tens.

- o 1.1 Model and Count 1 and 2; 1.3 Model and Count 3 and 4; 1.5 Model and Count 5; 1.8 Count and Order Numbers to 5; 3.1 Model and Count 6; 3.3 Model and Count 7; 3.5 Model and Count 8; 3.7 Model and Count 9; 3.9 Model and Count 10; 3.11 Count and Order Numbers to 10; 8.2 Count and Write 11 and 12; 8.3 Understand 11 and 12; 8.4 Count and Write Numbers 13 and 14; 8.5 Understand 13 and 14; 8.6 Count and Write 15; 8.7 Understand 15; 8.8 Count and Understand 16 and 17; 8.9 Understand 16 and 17; 8.10 Count and Write 18 and 19; 8.11 Understand 18 and 19; 9.1 Model and Count 20; 9.2 Count and Write 20; 9.3 Count and Find How Many; 9.4 Count Forward from Any Number to 20; 9.5 Order Numbers to 20; 10.1 Count to 30 by Ones; 10.2 Count to 50 by Ones; 10.3 Count to 100 by Ones; 10.4 Count to 100 by Tens; 10.5 Count by Tens and Ones; 10.6 Count by Tens from a Number
- MA.K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1)
 - o 3.11 Count and Order Numbers to 10; 9.4 Count Forward from Any Number to 20; 9.5 Order Numbers to 20; 10.1 Count to 30 by Ones; 10.2 Count to 50 by Ones; 10.3 Count to 100 by Ones; 10.6 Count by Tens from a Number
- MA.K.CC.A.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).
 - o 1.1 Model and Count 1 and 2; 1.2 Understand and Write 1 and 2; 1.3 Model and Count 3 and 4; 1.4 Understand and Write 3 and 4; 1.5 Model and Count 5; 1.6 Understand and Write 5; 1.7 The Concept of Zero; 1.8 Count and Order Numbers to 5; 3.1 Model and Count 6; 3.2 Understand and Write 6; 3.3 Model and Count 7; 3.4 Understand and Write 7; 3.5 Model and Count 8; 3.6 Understand and Write 8; 3.7 Model and Count 9; 3.8 Understand and Write 9; 3.9 Model and Count 10; 3.10 Understand and write 10; 3.11 Count and Order Numbers to 10; 4.5 Classify and Compare by Counting; 8.1 Identify Groups of 10; 8.2 Count and Write 11 and 12; 8.3 Understand 11 and 12; 8.4 Count and Write Numbers 13 and 14; 8.5 Understand 13 and 14; 8.6 Count and Write 15; 8.7 Understand 15; 8.8 Count and Understand 16 and 17; 8.9 Understand 16 and 17; 8.10 Count and Write 18 and 19; 8.11 Understand 18 and 19; 9.2 Count and Write 20; 9.4 Count Forward from Any Number to 20; 9.5 Order Numbers to 20; 9.6 Compare Numbers to 20; 10.5 Count by Tens and Ones; 10.6 Count by Tens from a Number; 11.2 Triangles; 11.3 Rectangles; 11.5 Hexagons and Circles; 11.6 Join Two-Dimensional Shapes; 12.1 Two-and-Three Dimensional Shapes; 12.2 Describe Three-Dimensional Shapes
- MA.K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.
 - o 1.1 Model and Count 1 and 2; 1.2 Understand and Write 1 and 2; 1.3 Model and Count 3 and 4; 1.4 Understand and Write 3 and 4; 1.5 Model and Count 5; 1.6 Understand and Write 5; 1.7 The Concept of Zero; 1.8 Count and Order Numbers to 5; 3.1 Model and Count 6; 3.2 Understand and Write 6; 3.3 Model and Count 7; 3.4 Understand and Write 7; 3.5 Model and Count 8; 3.6 Understand and Write 8; 3.7 Model and Count 9; 3.8 Understand and Write 9; 3.9 Model and Count 10; 3.10 Understand and write 10; 3.11 Count and Order Numbers to 10; 4.5 Classify and Compare by Counting; 8.1 Identify Groups of 10; 8.2 Count and Write 11 and 12; 8.3 Understand 11 and 12; 8.4 Count and Write Numbers 13 and 14; 8.5 Understand 13 and 14; 8.6 Count and Write 15; 8.7 Understand 15; 8.8 Count and Understand 16 and 17; 8.9 Understand 16 and 17; 8.10 Count and Write 18 and 19; 8.11 Understand 18 and 19; 9.1 Model and Count 20; 9.2 Count and Write 20; 9.3 Count and Find How Many; 9.4 Count Forward from Any Number to 20
- MA.K.CC.B.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.

- o 1.1 Model and Count 1 and 2; 1.2 Understand and Write 1 and 2; 1.3 Model and Count 3 and 4; 1.4 Understand and Write 3 and 4; 1.5 Model and Count 5; 1.6 Understand and Write 5; 1.7 The Concept of Zero; 1.8 Count and Order Numbers to 5; 2.4 Compare Groups to 5 by Counting; 2.5 Compare Numbers to 5; 3.1 Model and Count 6; 3.2 Understand and Write 6; 3.3 Model and Count 7; 3.4 Understand and Write 7; 3.5 Model and Count 8; 3.6 Understand and Write 8; 3.7 Model and Count 9; 3.8 Understand and Write 9; 3.9 Model and Count 10; 3.10 Understand and write 10; 3.11 Count and Order Numbers to 10; 4.2 Compare Groups to 10 by Counting; 4.3 Compare Numbers to 10; 4.5 Classify and Compare by Counting; 8.1 Identify Groups of 10; 8.2 Count and Write 11 and 12; 8.3 Understand 11 and 12; 8.4 Count and Write Numbers 13 and 14; 8.5 Understand 13 and 14; 8.6 Count and Write 15; 8.7 Understand 15; 8.8 Count and Understand 16 and 17; 8.9 Understand 16 and 17; 8.10 Count and Write 18 and 19; 8.11 Understand 18 and 19; 9.1 Model and Count 20; 9.2 Count and Write 20; 9.3 Count and Find How Many; 9.5 Order Numbers to 20; 10.5 Count by Tens and Ones; 10.6 Count by Tens from a Number; 11.2 Triangles; 11.3 Rectangles; 11.5 Hexagons and Circles; 11.6 Join Two-Dimensional Shapes; 12.3 Cubes and Spheres; 12.4 Cones and Cylinders; 13.3 Use Numbers to Compare Lengths
- MA.K.CC.C.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.
 - o 2.1 Equal Groups; 2.2 Greater Than; 2.3 Less Than; 2.4 Compare Groups to 5 by Counting; 2.5 Compare Numbers to 5; 4.1 Compare Groups to 10 by Matching; 4.2 Compare Groups to 10 by Counting; 4.3 Compare Numbers to 10; 4.5 Classify and Compare by Counting; 9.5 Order Numbers to 20; 9.6 Compare Numbers to 20; 13.3 Use Numbers to Compare Lengths; 13.5 Use Numbers to Compare Weight
- MA.K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.
 - o 2.4 Compare Groups to 5 by Counting; 2.5 Compare Numbers to 5; 4.2 Compare Groups to 10 by Counting; 4.3 Compare Numbers to 10; 4.5 Classify and Compare by Counting; 10.4 Count to 100 by Tens; 13.3 Use Numbers to Compare Lengths; 13.5 Use Numbers to Compare Weight

Suggested Activities

- Introduction videos
- ixl
- Graphic organizers
- Scavenger hunts
- Flash cards
- Online textbook lesson
- Online questions correlated to textbook
- Stem videos
- Counting stories
- Differentiated rich math tasks
- Interactive tools
- Math musicals

Instructional Materials/Resources

- Big Ideas Math Textbook copyright 2022
- Big Ideas record and practice journal
- Big Ideas resource by chapter workbook
- Big Ideas skills review handbook
- Teacher made materials
- Instructional videos
- Quizzes
- Online chapter review
- Online practice test
- Online test
- Cumulative assessments
- Benchmark tests
- Performance assessment

Pacing: approx # of class periods: 62

NJ Student Learning Standards for Math: MA.K.CC.A.1, MA.K.CC.A.2, MA.K.CC.A.3, MA.K.CC.B.4a, MA.K.CC.B.4b, MA.K.CC.B.4c, MA.K.CC.B.5, MA.K.CC.C.6, MA.K.CC.C.7

Interdisciplinary Connections

Language Arts Literacy LA.RI.K.1, LA.RI.K.2, LA.RI.K.4, LA.RI.K.10, LA.RF.K.1.A, LA.RF.K.1.C, LA.RF.K.2.B, LA.RF.K.4.B, LA.W.K.8, LA.SL.K.2, LA.SL.K.3, LA.SL.K.5, LA.SL.K.6, LA.L.K.4.A, LA.L.K.5.C

Career Readiness-Personal Financial Literacy PFL.9.1.4.A.2, PFL.9.1.4.B.2, PFL.9.1.4.B.4, PFL.9.1.4.B.5, PFL.9.1.4.C.4, PFL.9.1.4.D.1

Career Awareness, Exploration, and Training WRK.9.2.8.CAP.3

Life Literacy and Key Skills TECH.8.1.2.A.CS1, TECH.8.1.2.A.4, TECH.8.1.2.C.1, TECH.8.1.2.E.CS3, TECH.8.2.2.D.CS2

Computer Science and Design Thinking CS.K-2.1.2.CS.1, CS.K-2.8.2.2.ED.1, CS.K-2.8.2.2.ED.2, CS.K-2.8.2.2.ITH.3, CS.K-2.8.2.2.ITH.4, CS.K-2.8.1.2.AP.1, CS.K-2.8.1.2.AP.4

21st Century Life and Career Skills

X	CRP1. Act as a responsible and contributing citizen and employee.
X	CRP2. Apply appropriate academic and technical skills.
	CRP3. Attend to personal health and financial well-being.
X	CRP4. Communicate clearly and effectively and with reason.
	CRP5. Consider the environmental, social and economic impacts of decisions.
X	CRP6. Demonstrate creativity and innovation.
	CRP7. Employ valid and reliable research strategies.
X	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
X	CRP9. Model integrity, ethical leadership and effective management.
	CRP10. Plan education and career paths aligned to personal goals.
X	CRP11. Use technology to enhance productivity.
	CRP12. Work productively in teams while using cultural global competence.

Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities
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Unit Pretest Unit Project Unit Test Performance Assessment Beginning of the year benchmark Trimester benchmark End of year benchmark	Hand Signals Student Conference Fun and Games Class work/participation Critical Thinking Skill activity Writing about Math Textbook Interactive Activities ixl record and practice journal	Lesson Review questions Reading Check questions Share/Pair Skills Practice Study Guide Teacher Observation Unit Review Vocabulary Review Graphic Organizers Writing Connection Content Videos Online Questions
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Instructional Delivery

Student learning experiences will include a combination of instructional strategies appropriate to the content and skills being taught. Lessons may include (but are not limited to) the following:

- Direct instruction/demonstration
- Interactive/Guided math strategies
- Cooperative learning activities
- Digital activities including videos, games, assessments
- Research projects and Presentation projects
- Small Group Instruction
- Share Examples
- Visual Aids
- Learning Centers
- Modeled, Shared, and Independent Activities
- Active Learning

Differentiated Instruction, Accommodations & Adaptations

Alternative Assessments
Goal Setting with Students
Homework Options
Frequent Breaks
Tests Read Aloud
Color Coded Assignments/books/notebooks/folders

Cooperative Learning
Picture Vocabulary Wall
Anchor Charts of Concepts
Change in Content, Process, Product
Flexible Grouping
Modified Class Assignments

Special Education/IEP	504
Assessments/assignments read orally w/ extended time Concept chunking Graphic organizer concept maps Picture study guides	Extended time for assignments Frequent breaks Sign agenda book daily Study guides

<p>Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts</p>	<p>Graphic organizers</p>
<p>ELL</p>	<p>Gifted & Talented</p>
<p>Picture study guides Video presentation/Audio presentation Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts Spanish pupil editions including assessments</p>	<p>Independent extension research projects Jigsaw cooperative learning activities Student choice Advanced Activities Class grouping</p>
<p><u>At Risk/I&RS</u></p>	<p><u>At Risk/I&RS</u></p>
<p>Presentation accommodations (changes the way information is presented)</p> <ul style="list-style-type: none"> ● Listen to audio recordings instead of reading text ● Learn content from videos, and digital media instead of reading print versions ● Work with fewer items per page or line ● Have a “designated reader”—someone who reads test questions aloud to ● Hear instructions spoken aloud ● Get class notes from teacher ● See an outline of a lesson ● Use visual presentations of verbal material, such as word webs ● Get a written list of instructions <p>Response accommodations (changes the way kids complete assignments or tests)</p> <ul style="list-style-type: none"> ● Give responses in a form (spoken or written) that’s easier for them ● Dictate answers to a scribe who writes or types ● Use a spelling dictionary or digital spell-checker ● Use a laptop to type notes or give answers in class ● Use a calculator or table of “math facts” <p>Setting accommodations</p> <ul style="list-style-type: none"> ● Work or take a test in a different setting, such as a quiet room with few distractions 	<p>Common Modifications</p> <p>Assignment modifications</p> <ul style="list-style-type: none"> ● Complete fewer or different homework problems than peers ● Write shorter answers to questions ● Answer fewer or different test questions ● Create alternate projects or assignments <p>Curriculum modifications</p> <ul style="list-style-type: none"> ● Learn different material (such as continuing to work on multiplication while classmates move on to fractions) ● Get graded or assessed using a different standard than other students ● Be excused from particular projects <p>Scheduling accommodations</p> <ul style="list-style-type: none"> ● Take more time to complete a project ● Take a test in several sessions or over several days ● Take sections of a test in a different order ● Take a test at a specific time of day <p>Organization skills accommodations</p> <ul style="list-style-type: none"> ● Mark notes with a highlighter ● Use a planner or organizer to help coordinate assignments

<ul style="list-style-type: none"> • Sit where they learn best (for example, near the teacher) • Adjust lighting in the classroom • Take a test in a small group setting <p>Timing accommodations</p> <ul style="list-style-type: none"> • Take more time to complete a task or a test • Have extra time to process spoken information and directions • Take frequent breaks, such as after completing a worksheet 	<ul style="list-style-type: none"> • Receive organizational skills instruction
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Internet Resources

Big Idea Math Series <https://www.bigideasmath.com/>
ixl math <http://www.ixl.com/math/kindergarten>
Prodigy <https://www.prodigygame.com/>
National Library of Virtual Manipulatives <http://nlvm.usu.edu/en/nav/vlibrary.html>
Internet4classrooms https://www.internet4classrooms.com/skills_6th.htm
Dr. Jane <http://www.drjean.org/>
Funbrain www.funbrain.com
Mathwire www.mathwire.com
Brain Pop Jr. <http://www.brainpopjr.com/math/>
Jump Start <http://www.jumpstart.com/>

Gr –K Grade Unit 2-Operations and Algebraic Thinking

Unit Overview

Content topic and skill focus: **Operations and Algebraic Thinking**

Standard, Strand, and Content statements (CPIs listed below)

Learning in this unit will focus on: **Operations and Algebraic Thinking**

Standard MA.K.OA.A.1, MA.K.OA.A.2, MA.K.OA.A.3, MA.K.OA.A.4, MA.K.OA.A.5

Content Statement: Students will represent addition and subtraction with objects, fingers, mental images, drawing, sounds, acting out situations, verbal explanations, expressions, and equations. Students solve addition and subtraction word problems, and add and subtract within 10. Students decompose numbers less than or equal to 10 into pairs in more than one way. Students will understand any numbers from 1 to 9, and find the number that makes 10 when added to the given number. Students will fluently add and subtract within 5.

Instructional Focus: Operations and Algebraic Thinking

Lesson #: Sections 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 7.1, 7.2, 7.2, 7.4, 7.5, 7.6 7.7, 8.3, 8.5, 8.7, 8.9, 8.11, 11.2 11.3

Essential Questions:

- How to represent addition and subtraction with various models and strategies.
- How to decompose numbers less than or equal to 10 into pairs in more than one way.
- How to write an addition and subtraction number sentence using symbols.
- How to represent, write, and solve "add to" and "put together" problems with unknowns.
- How to represent, write, and solve "take from" and "take part" problems with unknowns.
- How to break apart numbers to 10 in different ways.
- How to understand that the next number stated is one number greater.
- How to write the same number when 0 is added.
- How to solve addition word problems.
- How to understand that taking away from a group will tell how many are left.
- How to understand that subtracting 0 doesn't change the number.
- How to name, count, and write numbers 11 to 19.
- How to identify and describe triangles.
- How to identify and describe rectangles.

Student Learning Objectives: STUDENTS WILL BE ABLE TO:

- MA. K.OA (Domain) Objects and Algebraic Thinking
- MA.K.OA.A.1 Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
 - 5.1 Partner Numbers to 5; 5.2 Use Number Bonds to Represent Numbers to 5; 5.3 Compose and Decompose 6; 5.4 Compose and Decompose 7; 5.5 Compose and Decompose 8; 5.6 Compose and Decompose 9; 5.7 Compose and Decompose 10; 5.8 Compose and Decompose Using a Group of 5; 6.1 Understand Addition; 6.2 Addition: Add To; 6.3 Addition: Put Together; 6.4 Addition: Partner Numbers; 6.5 Addition Number Patterns; 6.6 Practice Addition; 6.7 Use a Group of 5 to Add; 6.8 Add to Make 10; 7.1 Understand Subtraction; 7.2 Subtraction: Take From; 7.3 Subtraction: Take Away; 7.4 Subtraction Number Patterns; 7.5 Practice Subtraction; 7.6 Use a Group of 5 to Subtract; 7.7 Related Facts; 8.3 Understand 11 and 12; 8.5 Understand 13 and 14; 8.7 Understand 15; 8.9 Understand 16 and 17; 8.11 Understand 18 and 19
- MA.K.OA.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.
 - 6.1 Understand Addition; 6.2 Addition: Add To; 6.3 Addition: Put Together; 6.4 Addition: Partner Numbers; 6.5 Addition Number Patterns; 6.6 Practice Addition; 6.7 Use a Group of 5 to Add; 6.8 Add to Make; 7.1 Understand Subtraction; 7.2 Subtraction: Take From; 7.3 Subtraction: Take Away; 7.4 Subtraction Number Patterns; 7.5 Practice Subtraction; 7.6 Use a Group of 5 to Subtract; 7.7 Related Facts; 11.2 Triangles; 11.3 Rectangles
- MA.K.OA.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 $5 = 4 + 1$).
 - 5.1 Partner Numbers to 5; 5.2 Use Number Bonds to Represent Numbers to 5; 5.3 Compose and Decompose 6; 5.4 Compose and Decompose 7; 5.5 Compose and Decompose 8; 5.6 Compose and Decompose 9; 5.7 Compose and Decompose 10; 5.8 Compose and Decompose Using a Group of 5; 6.4 Addition: Partner Numbers

<ul style="list-style-type: none"> ● MA.K.OS.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. <ul style="list-style-type: none"> ○ 6.8 Add to Make ● MA.K.OA.A.5 Demonstrate fluency for addition and subtraction within 5. <ul style="list-style-type: none"> ○ 5.1 Partner Numbers to 5; 5.2 Use Numbers Bonds to Represent Numbers to 5; 6.1 Understand Addition; 6.2 Addition: Add To; 6.3 Addition: Put Together; 6.4 Addition: Partner Numbers; 6.5 Addition Number Patterns; 6.6 Practice Addition; 7.1 Understand Subtraction; 7.2 Subtraction: Take From; 7.3 Subtraction: Take Away; 7.4 Subtraction Number Patterns; 7.5 Practice Subtraction; 7.6 Use a Group of 5 to Subtract; 7.7 Related Facts 	
<p>Suggested Activities</p> <ul style="list-style-type: none"> ● Introduction videos ● ixl ● Graphic organizers ● Scavenger hunts ● Flash cards ● Online textbook lesson ● Online questions correlated to textbook ● Stem videos ● Counting stories ● Differentiated rich math tasks ● Interactive tools ● Math musicals 	<p>Instructional Materials/Resources</p> <ul style="list-style-type: none"> ● Big Ideas Math Textbook copyright 2022 ● Big Ideas record and practice journal ● Big Ideas resource by chapter workbook ● Big Ideas skills review handbook ● Teacher made materials ● Instructional videos ● Quizzes ● Online chapter review ● Online practice test ● Online test ● Cumulative assessments ● Benchmark tests ● Performance assessment
<p>Pacing: approx # of class periods: 9</p>	

NJ Student Learning Standards for Math:MA.K.OA.A.1, MA.K.OA.A.2, MA.K.OA.A.3, MA.K.OA.A.4, MA.K.OA.A.5
Interdisciplinary Connections

Language Arts Literacy LA.RI.K.1, LA.RI.K.2, LA.RI.K.4, LA.RI.K.10, LA.RF.K.1.A, LA.RF.K.1.C, LA.RF.K.2.B, LA.RF.K.4.B, LA.W.K.8, LA.SL.K.2, LA.SL.K.3, LA.SL.K.5, LA.SL.K.6, LA.L.K.4.A, LA.L.K.5.C

Career Readiness-Personal Financial Literacy PFL.9.1.4.A.2, PFL.9.1.4.B.2, PFL.9.1.4.B.4, PFL.9.1.4.B.5, PFL.9.1.4.C.4, PFL.9.1.4.D.1

Career Awareness, Exploration, and Training WRK.9.2.8.CAP.3

Life Literacy and Key Skills TECH.8.1.2.A.CS1, TECH.8.1.2.A.4, TECH.8.1.2.C.1, TECH.8.1.2.E.CS3, TECH.8.2.2.D.CS23

Computer Science and Design Thinking CS.K-2.1.2.CS.1, CS.K-2.8.2.2.ED.1, CS.K-2.8.2.2.ED.2, CS.K-2.8.2.2.ITH.3, CS.K-2.8.2.2.ITH.4, CS.K-2.8.1.2.AP.1, CS.K-2.8.1.2.AP.4

21st Century Life and Career Skills

X	CRP1. Act as a responsible and contributing citizen and employee.
X	CRP2. Apply appropriate academic and technical skills.

	CRP3. Attend to personal health and financial well-being.
X	CRP4. Communicate clearly and effectively and with reason.
	CRP5. Consider the environmental, social and economic impacts of decisions.
X	CRP6. Demonstrate creativity and innovation.
	CRP7. Employ valid and reliable research strategies.
X	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
X	CRP9. Model integrity, ethical leadership and effective management.
	CRP10. Plan education and career paths aligned to personal goals.
X	CRP11. Use technology to enhance productivity.
	CRP12. Work productively in teams while using cultural global competence.

Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities	
Unit Pretest Unit Project Unit Test Performance Assessment Beginning of the year benchmark Trimester benchmark End of year benchmark	Hand Signals Student Conference Fun and Games Class work/participation Critical Thinking Skill activity Writing about Math Textbook Interactive Activities ixl record and practice journal	Lesson Review questions Reading Check questions Share/Pair Skills Practice Study Guide Teacher Observation Unit Review Vocabulary Review Graphic Organizers Writing Connection Content Videos Online Questions

Instructional Delivery

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- Cooperative learning activities
- Digital activities including videos, games, assessments
- Research projects and Presentation projects
- Small Group Instruction
- Share Examples
- Visual Aids
- Learning Centers
- Modeled, Shared, and Independent Activities
- Active Learning

Differentiated Instruction, Accommodations & Adaptations

Alternative Assessments
 Goal Setting with Students
 Homework Options
 Frequent Breaks
 Tests Read Aloud
 Color Coded Assignments/books/notebooks/folders

Cooperative Learning
 Picture Vocabulary Wall
 Anchor Charts of Concepts
 Change in Content, Process, Product
 Flexible Grouping
 Modified Class Assignments

Special Education/IEP	504
Assessments/assignments read orally w/ extended time Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts	Extended time for assignments Frequent breaks Sign agenda book daily Study guides Graphic organizers
ELL	Gifted & Talented
Picture study guides Video presentation/Audio presentation Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts Spanish pupil editions including assessments	Independent extension research projects Jigsaw cooperative learning activities Student choice Advanced Activities Class grouping
<u>At Risk/I&RS</u>	<u>At Risk/I&RS</u>
<p>Presentation accommodations (changes the way information is presented)</p> <ul style="list-style-type: none"> • Listen to audio recordings instead of reading text • Learn content from videos, and digital media instead of reading print versions • Work with fewer items per page or line • Have a “designated reader”—someone who reads test questions aloud to • Hear instructions spoken aloud • Get class notes from teacher • See an outline of a lesson 	<p>Common Modifications</p> <p>Assignment modifications</p> <ul style="list-style-type: none"> • Complete fewer or different homework problems than peers • Write shorter answers to questions • Answer fewer or different test questions • Create alternate projects or assignments <p>Curriculum modifications</p>

- Use visual presentations of verbal material, such as word webs
- Get a written list of instructions

Response accommodations (changes the way kids complete assignments or tests)

- Give responses in a form (spoken or written) that's easier for them
- Dictate answers to a scribe who writes or types
- Use a spelling dictionary or digital spell-checker
- Use a laptop to type notes or give answers in class
- Use a calculator or table of "math facts"

Setting accommodations

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where they learn best (for example, near the teacher)
- Adjust lighting in the classroom
- Take a test in a small group setting

Timing accommodations

- Take more time to complete a task or a test
- Have extra time to process spoken information and directions
- Take frequent breaks, such as after completing a worksheet

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions)
- Get graded or assessed using a different standard than other students
- Be excused from particular projects

Scheduling accommodations

- Take more time to complete a project
- Take a test in several sessions or over several days
- Take sections of a test in a different order
- Take a test at a specific time of day

Organization skills accommodations

- Mark notes with a highlighter
- Use a planner or organizer to help coordinate assignments
- Receive organizational skills instruction

Internet Resources

Big Idea Math Series <https://www.bigideasmath.com/>

ixl math <http://www.ixl.com/math/kindergarten>

Prodigy <https://www.prodigygame.com/>

National Library of Virtual Manipulatives <http://nlvm.usu.edu/en/nav/vlibrary.html>

Internet4classrooms https://www.internet4classrooms.com/skills_6th.htm

Dr. Jane <http://www.drjean.org/>

Funbrain www.funbrain.com

Mathwire www.mathwire.com

Brain Pop Jr. <http://www.brainpopjr.com/math/>

Jump Start <http://www.jumpstart.com/>

Gr –K Grade Unit 3-Number and Operations in Base Ten

Unit Overview

Content topic and skill focus: Number and Operations in Base Ten

Standard, Strand, and Content statements (CPIs listed below)

Learning in this unit will focus on: **Number and Operations in Base Ten**

Standard MA.K.NBT.A.1

Content Statement: Students will compose and decompose numbers from 11 to 19 into ten ones and some further ones.

Instructional Focus: Number and Operations in Base Ten

Lesson #: Sections 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.11

<p>Essential Questions:</p> <ul style="list-style-type: none">• How to name, count, and write numbers 11 to 19.• How to pair each number name with an object.• How to determine that the last number stated names the total.• How to count objects in different arrangements.• How to identify a group of 10 from a larger group.• How to decompose numbers 11 to 19 into 10 ones and some more ones.• How to write numbers 11 to 19 as 10 plus numbers.	
<p>Student Learning Objectives: STUDENTS WILL BE ABLE TO:</p> <ul style="list-style-type: none">• MA.K.NBT (Domain) Number and Operations in Base Ten• MA.K.NBT.A.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.<ul style="list-style-type: none">○ 8.1 Identify Groups of 10; 8.2 Count and Write 11 and 12; 8.3 Understand 11 and 12; 8.4 Count and Write 13 and 14; 8.5 Understand 13 and 14; 8.6 Count and Write 15; 8.7 Understand 15; 8.8 Count and Write 16 and 17; 8.8 Understand 16 and 17; 8.9 Understand 16 and 17; 8.10 Count and Write 18 and 19; 8.11 Understand 18 and 19	
<p>Suggested Activities</p> <ul style="list-style-type: none">• Introduction videos• ixl• Graphic organizers• Scavenger hunts• Flash cards• Online textbook lesson• Online questions correlated to textbook• Stem videos• Counting stories• Differentiated rich math tasks• Interactive tools• Math musicals	<p>Instructional Materials/Resources</p> <ul style="list-style-type: none">• Big Ideas Math Textbook copyright 2022• Big Ideas record and practice journal• Big Ideas resource by chapter workbook• Big Ideas skills review handbook• Teacher made materials• Instructional videos• Quizzes• Online chapter review• Online practice test• Online test• Cumulative assessments• Benchmark tests• Performance assessment

Pacing: approx # of class periods: 9

NJ Student Learning Standards for MA.K.NBT.A.1

Interdisciplinary Connections

Language Arts Literacy LA.RI.K.1, LA.RI.K.2, LA.RI.K.4, LA.RI.K.10, LA.RF.K.1.A, LA.RF.K.1.C, LA.RF.K.2.B, LA.RF.K.4.B, LA.W.K.8, LA.SL.K.2, LA.SL.K.3, LA.SL.K.5, LA.SL.K.6, LA.L.K.4.A, LA.L.K.5.C

Career Readiness-Personal Financial Literacy PFL.9.1.4.A.2, PFL.9.1.4.B.2, PFL.9.1.4.B.4, PFL.9.1.4.B.5, PFL.9.1.4.C.4, PFL.9.1.4.D.1

Career Awareness, Exploration, and Training WRK.9.2.8.CAP.3

Life Literacy and Key Skills TECH.8.1.2.A.CS1, TECH.8.1.2.A.4, TECH.8.1.2.C.1, TECH.8.1.2.E.CS3, TECH.8.2.2.D.CS2

Computer Science and Design Thinking CS.K-2.1.2.CS.1, CS.K-2.8.2.2.ED.1, CS.K-2.8.2.2.ED.2, CS.K-2.8.2.2.ITH.3, CS.K-2.8.2.2.ITH.4, CS.K-2.8.1.2.AP.1, CS.K-2.8.1.2.AP.4

21st Century Life and Career Skills

X	CRP1. Act as a responsible and contributing citizen and employee.
X	CRP2. Apply appropriate academic and technical skills.
	CRP3. Attend to personal health and financial well-being.
X	CRP4. Communicate clearly and effectively and with reason.
	CRP5. Consider the environmental, social and economic impacts of decisions.
X	CRP6. Demonstrate creativity and innovation.
	CRP7. Employ valid and reliable research strategies.
X	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
X	CRP9. Model integrity, ethical leadership and effective management.
	CRP10. Plan education and career paths aligned to personal goals.
X	CRP11. Use technology to enhance productivity.
	CRP12. Work productively in teams while using cultural global competence.

Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities
Unit Pretest	Hand Signals
Unit Project	Student Conference
Unit Test	Fun and Games
Performance Assessment	Class work/participation
Beginning of the year benchmark	Critical Thinking Skill activity
Trimester benchmark	Writing about Math
	Lesson Review questions
	Reading Check questions
	Share/Pair
	Skills Practice
	Study Guide
	Teacher Observation

End of year benchmark	Textbook Interactive Activities ixl record and practice journal	Unit Review Vocabulary Review Graphic Organizers Writing Connection Content Videos Online Questions
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Instructional Delivery

Student learning experiences will include a combination of instructional strategies appropriate to the content and skills being taught. Lessons may include (but are not limited to) the following:

- Direct instruction/demonstration
- Interactive/Guided math strategies
- Cooperative learning activities
- Digital activities including videos, games, assessments
- Research projects and Presentation projects
- Small Group Instruction
- Share Examples
- Visual Aids
- Learning Centers
- Modeled, Shared, and Independent Activities
- Active Learning

Differentiated Instruction, Accommodations & Adaptations

Alternative Assessments
Goal Setting with Students
Homework Options
Frequent Breaks
Tests Read Aloud
Color Coded Assignments/books/notebooks/folders

Cooperative Learning
Picture Vocabulary Wall
Anchor Charts of Concepts
Change in Content, Process, Product
Flexible Grouping
Modified Class Assignments

Special Education/IEP	504
Assessments/assignments read orally w/ extended time Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts	Extended time for assignments Frequent breaks Sign agenda book daily Study guides Graphic organizers
ELL	Gifted & Talented
Picture study guides	Independent extension research projects

<p>Video presentation/Audio presentation Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts Spanish pupil editions including assessments</p>	<p>Jigsaw cooperative learning activities Student choice Advanced Activities Class grouping</p>
<p><u>At Risk/I&RS</u></p>	<p><u>At Risk/I&RS</u></p>
<p>Presentation accommodations (changes the way information is presented)</p> <ul style="list-style-type: none"> ● Listen to audio recordings instead of reading text ● Learn content from videos, and digital media instead of reading print versions ● Work with fewer items per page or line ● Have a “designated reader”—someone who reads test questions aloud to ● Hear instructions spoken aloud ● Get class notes from teacher ● See an outline of a lesson ● Use visual presentations of verbal material, such as word webs ● Get a written list of instructions <p>Response accommodations (changes the way kids complete assignments or tests)</p> <ul style="list-style-type: none"> ● Give responses in a form (spoken or written) that’s easier for them ● Dictate answers to a scribe who writes or types ● Use a spelling dictionary or digital spell-checker ● Use a laptop to type notes or give answers in class ● Use a calculator or table of “math facts” <p>Setting accommodations</p> <ul style="list-style-type: none"> ● Work or take a test in a different setting, such as a quiet room with few distractions ● Sit where they learn best (for example, near the teacher) ● Adjust lighting in the classroom ● Take a test in a small group setting <p>Timing accommodations</p>	<p>Common Modifications</p> <p>Assignment modifications</p> <ul style="list-style-type: none"> ● Complete fewer or different homework problems than peers ● Write shorter answers to questions ● Answer fewer or different test questions ● Create alternate projects or assignments <p>Curriculum modifications</p> <ul style="list-style-type: none"> ● Learn different material (such as continuing to work on multiplication while classmates move on to fractions) ● Get graded or assessed using a different standard than other students ● Be excused from particular projects <p>Scheduling accommodations</p> <ul style="list-style-type: none"> ● Take more time to complete a project ● Take a test in several sessions or over several days ● Take sections of a test in a different order ● Take a test at a specific time of day <p>Organization skills accommodations</p> <ul style="list-style-type: none"> ● Mark notes with a highlighter ● Use a planner or organizer to help coordinate assignments ● Receive organizational skills instruction

- Take more time to complete a task or a test
- Have extra time to process spoken information and directions
- Take frequent breaks, such as after completing a worksheet

Internet Resources

Big Idea Math Series <https://www.bigideasmath.com/>

ixl math <http://www.ixl.com/math/kindergarten>

Prodigy <https://www.prodigygame.com/>

National Library of Virtual Manipulatives <http://nlvm.usu.edu/en/nav/vlibrary.html>

Internet4classrooms https://www.internet4classrooms.com/skills_6th.htm

Dr. Jane <http://www.drjean.org/>

Funbrain www.funbrain.com

Mathwire www.mathwire.com

Brain Pop Jr. <http://www.brainpopjr.com/math/>

Jump Start <http://www.jumpstart.com/>

Gr –K Grade Unit 4-Measurement and Data

Unit Overview

Content topic and skill focus: **Measurement and Data**

Standard, Strand, and Content statements (CPIs listed below)

Learning in this unit will focus on: **Measurement and Data**

Standard MA.K.MD.A.1, MA.K.MD.A.2, MA.K.MD.B.3

Content Statement: Students describe measurable attributes of objects, such as length or weight. Students will directly compare two objects with a measurable attribute in common, to see which object has more or less attributes, and describe the difference. Students classify objects into given categories.

Instructional Focus: Measurement and Data

Lesson #: Sections 4.4, 4.5, 11.1, 11.2, 11.3, 11.4, 12.3, 12.4, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7

Essential Questions:

- How to describe attributes that can be measured.
- How to describe more than one attribute of an object.
- How to compare the measurable attributes of two objects.
- How to describe the measurable attributes of two objects that are different.
- How to name shapes when they are shown with different sizes and orientations.
- How to build and draw shapes.
- How to put shapes together to make a new shape.
- How to identify and describe cubes, spheres, cones, and cylinders.

Student Learning Objectives: STUDENTS WILL BE ABLE TO:

<ul style="list-style-type: none"> ● MA.K.MD (Doman) Measurement and Data ● MA.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. <ul style="list-style-type: none"> ○ 13.1 Compare Heights; 13.2 Compare Lengths; 13.3 Use Numbers to Compare Lengths; 13.4 Compare Weight; 13.5 Use Numbers to Compare Weight; 13.6 Compare Capacities; 13.7 Describe Objects by Attributes ● MA.K.MD.A.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 difference. <ul style="list-style-type: none"> ○ 13.1 Compare Heights; 13.2 Compare Lengths; 13.3 Use Numbers to Compare Lengths; 13.4 Compare Weight; 13.5 Use Numbers to Compare Weight; 13.6 Compare Capacities ● MA.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <ul style="list-style-type: none"> ○ 4.4 Classify Objects into Categories; 4.5 Classify and Compare by Counting; 11.1 Describe Two-Dimensional Shapes; 11.2 Triangles; 11.3 Rectangles; 11.4 Squares; 12.3 Cubes and Spheres; 12.4 Cones and Cylinders 	
<p>Suggested Activities</p> <ul style="list-style-type: none"> ● Introduction videos ● ixl ● Graphic organizers ● Scavenger hunts ● Flash cards ● Online textbook lesson ● Online questions correlated to textbook ● Stem videos ● Counting stories ● Differentiated rich math tasks ● Interactive tools ● Math musicals 	<p>Instructional Materials/Resources</p> <ul style="list-style-type: none"> ● Big Ideas Math Textbook copyright 2022 ● Big Ideas record and practice journal ● Big Ideas resource by chapter workbook ● Big Ideas skills review handbook ● Teacher made materials ● Instructional videos ● Quizzes ● Online chapter review ● Online practice test ● Online test ● Cumulative assessments ● Benchmark tests ● Performance assessment
<p>Pacing: approx # of class periods: 9</p>	

NJ Student Learning Standards for Math: MA.K.MD.A.1, MA.K.MD.A.2, MA.K.MD.B.3

Interdisciplinary Connections

Language Arts Literacy LA.RI.K.1, LA.RI.K.2, LA.RI.K.4, LA.RI.K.10, LA.RF.K.1.A, LA.RF.K.1.C, LA.RF.K.2.B, LA.RF.K.4.B, LA.W.K.8, LA.SL.K.2, LA.SL.K.3, LA.SL.K.5, LA.SL.K.6, LA.L.K.4.A, LA.L.K.5.C

Career Readiness/Personal Financial Literacy PFL.9.1.4.A.2, PFL.9.1.4.B.2, PFL.9.1.4.B.4, PFL.9.1.4.B.5, PFL.9.1.4.C.4, PFL.9.1.4.D.1

Career Awareness, Exploration, and Training WRK.9.2.8.CAP.3

Life Literacy and Key Skills TECH.8.1.2.A.CS1, TECH.8.1.2.A.4, TECH.8.1.2.C.1, TECH.8.1.2.E.CS3, TECH.8.2.2.D.CS2

Computer Science and Design Thinking CS.K-2.1.2.CS.1, CS.K-2.8.2.2.ED.1, CS.K-2.8.2.2.ED.2, CS.K-2.8.2.2.ITH.3, CS.K-2.8.2.2.ITH.4, CS.K-2.8.1.2.AP.1, CS.K-2.8.1.2.AP.4

21st Century Life and Career Skills

X	CRP1. Act as a responsible and contributing citizen and employee.
X	CRP2. Apply appropriate academic and technical skills.
	CRP3. Attend to personal health and financial well-being.
X	CRP4. Communicate clearly and effectively and with reason.
	CRP5. Consider the environmental, social and economic impacts of decisions.
X	CRP6. Demonstrate creativity and innovation.
	CRP7. Employ valid and reliable research strategies.
X	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
X	CRP9. Model integrity, ethical leadership and effective management.
	CRP10. Plan education and career paths aligned to personal goals.
X	CRP11. Use technology to enhance productivity.
	CRP12. Work productively in teams while using cultural global competence.

Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities
Unit Pretest Unit Project Unit Test Performance Assessment Beginning of the year benchmark Trimester benchmark End of year benchmark	Hand Signals Student Conference Fun and Games Class work/participation Critical Thinking Skill activity Writing about Math Textbook Interactive Activities ixl record and practice journal Lesson Review questions Reading Check questions Share/Pair Skills Practice Study Guide Teacher Observation Unit Review Vocabulary Review Graphic Organizers Writing Connection Content Videos Online Questions

Instructional Delivery

Student learning experiences will include a combination of instructional strategies appropriate to the content and skills being taught. Lessons may include (but are not limited to) the following:

- Direct instruction/demonstration
- Interactive/Guided math strategies
- Cooperative learning activities
- Digital activities including videos, games, assessments
- Research projects and Presentation projects
- Small Group Instruction
- Share Examples
- Visual Aids

- Learning Centers
- Modeled, Shared, and Independent Activities
- Active Learning

Differentiated Instruction, Accommodations & Adaptations

Alternative Assessments
 Goal Setting with Students
 Homework Options
 Frequent Breaks
 Tests Read Aloud
 Color Coded Assignments/books/notebooks/folders

Cooperative Learning
 Picture Vocabulary Wall
 Anchor Charts of Concepts
 Change in Content, Process, Product
 Flexible Grouping
 Modified Class Assignments

Special Education/IEP	504
Assessments/assignments read orally w/ extended time Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts	Extended time for assignments Frequent breaks Sign agenda book daily Study guides Graphic organizers
ELL	Gifted & Talented
Picture study guides Video presentation/Audio presentation Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts Spanish pupil editions including assessments	Independent extension research projects Jigsaw cooperative learning activities Student choice Advanced Activities Class grouping
<u>At Risk/I&RS</u>	<u>At Risk/I&RS</u>
Presentation accommodations (changes the way information is presented) <ul style="list-style-type: none"> ● Listen to audio recordings instead of reading text ● Learn content from videos, and digital media instead of reading print versions ● Work with fewer items per page or line ● Have a “designated reader”—someone who reads test questions aloud to 	Common Modifications Assignment modifications <ul style="list-style-type: none"> ● Complete fewer or different homework problems than peers ● Write shorter answers to questions ● Answer fewer or different test questions ● Create alternate projects or assignments

- Hear instructions spoken aloud
- Get class notes from teacher
- See an outline of a lesson
- Use visual presentations of verbal material, such as word webs
- Get a written list of instructions

Response accommodations (changes the way kids complete assignments or tests)

- Give responses in a form (spoken or written) that's easier for them
- Dictate answers to a scribe who writes or types
- Use a spelling dictionary or digital spell-checker
- Use a laptop to type notes or give answers in class
- Use a calculator or table of "math facts"

Setting accommodations

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where they learn best (for example, near the teacher)
- Adjust lighting in the classroom
- Take a test in a small group setting

Timing accommodations

- Take more time to complete a task or a test
- Have extra time to process spoken information and directions
- Take frequent breaks, such as after completing a worksheet

Curriculum modifications

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions)
- Get graded or assessed using a different standard than other students
- Be excused from particular projects

Scheduling accommodations

- Take more time to complete a project
- Take a test in several sessions or over several days
- Take sections of a test in a different order
- Take a test at a specific time of day

Organization skills accommodations

- Mark notes with a highlighter
- Use a planner or organizer to help coordinate assignments
- Receive organizational skills instruction

Internet Resources

Big Idea Math Series <https://www.bigideasmath.com/>

ixl math <http://www.ixl.com/math/kindergarten>

Prodigy <https://www.prodigygame.com/>

National Library of Virtual Manipulatives <http://nlvm.usu.edu/en/nav/vlibrary.html>

Internet4classrooms https://www.internet4classrooms.com/skills_6th.htm

Dr. Jane <http://www.drjean.org/>

Funbrain www.funbrain.com

Mathwire www.mathwire.com

Brain Pop Jr. <http://www.brainpopjr.com/math/>

Gr –K Grade Unit 5-Geometry

Unit Overview

Content topic and skill focus: **Geometry**

Standard, Strand, and Content statements (CPIs listed below)

Learning in this unit will focus on: **Geometry**

Standard MA.K.G.A.1, MA.K.G.A.2, MA.K.G.A.3, MA.K.G.B.4, MA.K.G.B.5, MA.K.G.B.6

Content Statement: Students 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. Students will correctly name shapes regardless of their orientations or overall size. Students will identify shapes as two-dimensional. Students will analyze and compare two-dimensional and three-dimensional shapes, in different sizes and orientation. Students will model shapes in the world by building shapes from components. Students compose simple shapes to form a larger shape.

Instructional Focus: Geometry

Lesson #: Sections 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6

Essential Questions:

- How to analyze shapes and their attributes. How to name shapes when they are shown with different sizes and orientations.
- How to build and draw shapes.
- How to put shapes together to make new shapes.
- How to tell whether a shape is two-dimensional or three-dimensional.
- How to describe positions of shapes.

Student Learning Objectives: STUDENTS WILL BE ABLE TO:

- MA.K.G (Doman) Geometry
- MA.K.G.A.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.
 - 11.1 Describe Two-Dimensional Shapes; 11.2 Triangles; 11.3 Rectangles; 11.4 Squares; 12.1 Two- and Three-Dimensional Shapes; 12.2 Describe Three-Dimensional Shapes; 12.3 Cubes and Spheres; 12.4 Cones and Cylinders; 12.6 Positions of Solid Shapes
- MA.K.G.A.2 Correctly name shapes regardless of their orientations or overall size.
 - 11.2 Triangles; 11.3 Rectangles; 11.4 Squares; 11.5 Hexagons and Circles; 12.3 Cubes and Spheres; 12.4 Cones and Cylinders; 12.6 Positions of Solid Shapes
- MA.K.G.A.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).
 - 12.1 Two- and Three-Dimensional Shapes; 12.3 Cubes and Spheres; 12.4 Cones and Cylinders
- MA.K.G.B.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 and vertices/“corners”) and other attributes (e.g., having sides of equal length).

<ul style="list-style-type: none"> ○ 11.1 Describe Two-Dimensional Shapes; 11.2 Triangles; 11.3 Rectangles; 11.4 Squares; 11.5 Hexagons and Circles; 12.2 Describe Three-Dimensional Shapes; 12.3 Cubes and Spheres; 12.4 Cones and Cylinders ● MA.K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. <ul style="list-style-type: none"> ○ 11.2 Triangles; 11.3 Rectangles; 11.4 Squares; 11.5 Hexagons and Circles; 11.6 Join Two-Dimensional Shapes; 11.7 Build Two-Dimensional Shapes; 12.3 Cubes and Spheres; 12.4 Cones and Cylinders; 12.5 Build Three-Dimensional Shapes ● MA.K.G.B.6 Compose simple shapes to form larger shapes. <ul style="list-style-type: none"> ○ 11.6 Join Two-Dimensional Shapes; 12.5 Build Three-Dimensional Shapes 	
<p>Suggested Activities</p> <ul style="list-style-type: none"> ● Introduction videos ● ixl ● Graphic organizers ● Scavenger hunts ● Flash cards ● Online textbook lesson ● Online questions correlated to textbook ● Stem videos ● Counting stories ● Differentiated rich math tasks ● Interactive tools ● Math musicals 	<p>Instructional Materials/Resources</p> <ul style="list-style-type: none"> ● Big Ideas Math Textbook copyright 2022 ● Big Ideas record and practice journal ● Big Ideas resource by chapter workbook ● Big Ideas skills review handbook ● Teacher made materials ● Instructional videos ● Quizzes ● Online chapter review ● Online practice test ● Online test ● Cumulative assessments ● Benchmark tests ● Performance assessment
<p>Pacing: approx # of class periods: 9</p>	

NJ Student Learning Standards for Math: MA.K.G.A.1, MA.K.G.A.2, MA.K.G.A.3, MA.K.G.B.4, MA.K.G.B.5, MA.K.G.B.6

Interdisciplinary Connections

Language Arts Literacy LA.RI.K.1, LA.RI.K.2, LA.RI.K.4, LA.RI.K.10, LA.RF.K.1.A, LA.RF.K.1.C, LA.RF.K.2.B, LA.RF.K.4.B, LA.W.K.8, LA.SL.K.2, LA.SL.K.3, LA.SL.K.5, LA.SL.K.6, LA.L.K.4.A, LA.L.K.5.C

Career Readiness-Personal Financial Literacy PFL.9.1.4.A.2, PFL.9.1.4.B.2, PFL.9.1.4.B.4, PFL.9.1.4.B.5, PFL.9.1.4.C.4, PFL.9.1.4.D.1

Career Awareness, Exploration, and Training WRK.9.2.8.CAP.3

Life Literacy and Key Skills TECH.8.1.2.A.CS1, TECH.8.1.2.A.4, TECH.8.1.2.C.1, TECH.8.1.2.E.CS3, TECH.8.2.2.D.CS2

Computer Science and Design Thinking CS.K-2.1.2.CS.1, CS.K-2.8.2.2.ED.1, CS.K-2.8.2.2.ED.2, CS.K-2.8.2.2.ITH.3, CS.K-2.8.2.2.ITH.4, CS.K-2.8.1.2.AP.1, CS.K-2.8.1.2.AP.4

21st Century Life and Career Skills

X	CRP1. Act as a responsible and contributing citizen and employee.
X	CRP2. Apply appropriate academic and technical skills.
	CRP3. Attend to personal health and financial well-being.

X	CRP4. Communicate clearly and effectively and with reason.
	CRP5. Consider the environmental, social and economic impacts of decisions.
X	CRP6. Demonstrate creativity and innovation.
	CRP7. Employ valid and reliable research strategies.
X	CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
X	CRP9. Model integrity, ethical leadership and effective management.
	CRP10. Plan education and career paths aligned to personal goals.
X	CRP11. Use technology to enhance productivity.
	CRP12. Work productively in teams while using cultural global competence.

Evidence of Learning

Summative and Benchmark Assessments	Formative Assessments and Alternative Activities	
Unit Pretest Unit Project Unit Test Performance Assessment Beginning of the year benchmark Trimester benchmark End of year benchmark	Hand Signals Student Conference Fun and Games Class work/participation Critical Thinking Skill activity Writing about Math Textbook Interactive Activities ixl record and practice journal	Lesson Review questions Reading Check questions Share/Pair Skills Practice Study Guide Teacher Observation Unit Review Vocabulary Review Graphic Organizers Writing Connection Content Videos Online Questions

Instructional Delivery

Student learning experiences will include a combination of instructional strategies appropriate to the content and skills being taught. Lessons may include (but are not limited to) the following:

- Direct instruction/demonstration
- Interactive/Guided math strategies
- Cooperative learning activities
- Digital activities including videos, games, assessments
- Research projects and Presentation projects
- Small Group Instruction
- Share Examples
- Visual Aids
- Learning Centers
- Modeled, Shared, and Independent Activities
- Active Learning

Differentiated Instruction, Accommodations & Adaptations

Alternative Assessments
 Goal Setting with Students
 Homework Options
 Frequent Breaks
 Tests Read Aloud
 Color Coded Assignments/books/notebooks/folders

Cooperative Learning
 Picture Vocabulary Wall
 Anchor Charts of Concepts
 Change in Content, Process, Product
 Flexible Grouping
 Modified Class Assignments

Special Education/IEP	504
Assessments/assignments read orally w/ extended time Concept chunking Graphic organizer concept maps Picture study guides Small group instruction Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts	Extended time for assignments Frequent breaks Sign agenda book daily Study guides Graphic organizers
ELL	Gifted & Talented
Picture study guides Video presentation/Audio presentation Tests modified to include a word bank, drawings, and diagrams while still covering the essential concepts Spanish pupil editions including assessments	Independent extension research projects Jigsaw cooperative learning activities Student choice Advanced Activities Class grouping
<u>At Risk/I&RS</u>	<u>At Risk/I&RS</u>
<p>Presentation accommodations (changes the way information is presented)</p> <ul style="list-style-type: none"> • Listen to audio recordings instead of reading text • Learn content from videos, and digital media instead of reading print versions • Work with fewer items per page or line • Have a “designated reader”—someone who reads test questions aloud to • Hear instructions spoken aloud • Get class notes from teacher • See an outline of a lesson 	<p>Common Modifications</p> <p>Assignment modifications</p> <ul style="list-style-type: none"> • Complete fewer or different homework problems than peers • Write shorter answers to questions • Answer fewer or different test questions • Create alternate projects or assignments <p>Curriculum modifications</p>

- Use visual presentations of verbal material, such as word webs
- Get a written list of instructions

Response accommodations (changes the way kids complete assignments or tests)

- Give responses in a form (spoken or written) that's easier for them
- Dictate answers to a scribe who writes or types
- Use a spelling dictionary or digital spell-checker
- Use a laptop to type notes or give answers in class
- Use a calculator or table of "math facts"

Setting accommodations

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where they learn best (for example, near the teacher)
- Adjust lighting in the classroom
- Take a test in a small group setting

Timing accommodations

- Take more time to complete a task or a test
- Have extra time to process spoken information and directions
- Take frequent breaks, such as after completing a worksheet

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions)
- Get graded or assessed using a different standard than other students
- Be excused from particular projects

Scheduling accommodations

- Take more time to complete a project
- Take a test in several sessions or over several days
- Take sections of a test in a different order
- Take a test at a specific time of day

Organization skills accommodations

- Mark notes with a highlighter
- Use a planner or organizer to help coordinate assignments
- Receive organizational skills instruction

Internet Resources

Big Idea Math Series <https://www.bigideasmath.com/>

ixl math <http://www.ixl.com/math/kindergarten>

Prodigy <https://www.prodigygame.com/>

National Library of Virtual Manipulatives <http://nlvm.usu.edu/en/nav/vlibrary.html>

Internet4classrooms https://www.internet4classrooms.com/skills_6th.htm

Dr. Jane <http://www.drjean.org/>

Funbrain www.funbrain.com

Mathwire www.mathwire.com

Brain Pop Jr. <http://www.brainpopjr.com/math/>

Jump Start <http://www.jumpstart.com/>

