East Newark Public School

Mathematics Curriculum
Grade K

Revised 2022

Equity Statement:

East Newark Public School District does not discriminate on the basis of race, color, creed, religion, sex, ancestry, or national origin. The East Newark Board of Education ensures that all students enrolled in the schools of this district shall be afforded equal educational opportunities in strict accordance with the law. No student shall be denied access to or benefit from any educational program or activity on the basis of the student's race, color, creed, religion, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, gender identity or expression, socioeconomic status, or disability. The Board directs the Superintendent to allocate faculty, administrators, support staff members, curriculum materials, and instructional equipment supplies among classes of this district in a manner that ensures equivalency of educational opportunity throughout this district. The school district's curricula will eliminate discrimination, promote mutual acceptance and respect among students, and enable students to interact effectively with others, regardless of race, color, creed, religion, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, gender identity or expression, socioeconomic status, or disability.

Course Description:

In Kindergarten, instructional time should focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to numbers than to other topics.

Critical Area 1:
Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as 5 + 2 = 7 and 7 – 2 = 5. (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.

Critical Area 2:
Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

Course Modifications:
The course instructor will determine, with the assistance of administrators, teacher assistants/aides, educational specialists, and/or special education teachers, what modifications will be made for his/her students. Such examples of modifications can include, but not be limited to:

- Extended time as needed
- Modification of tests and quizzes
- Preferential seating
- Alternative/Formative assessment (projects)
- Effective teacher questioning (ranging from simple recall to higher order critical thinking questions)

- Supplemental materials
- Cooperative learning
- Teacher tutoring
- Peer tutoring
- Differentiated Instruction

Grade K Pacing Guide:

UNIT		STANDARDS	PACING
Unit 1: Numbers to 5			
1A	Counting within 5	K.CC.A.1, K.CC.A.3, K.CC.B.4.a, K.CC.B.4.b, K.CC.B.5, K.G.A.2	14 days
1B	Counting and Comparing within 5	K.CC.C.6, K.OA.A.1, K.OA.A.2, K.MD.A.2, K.MD.B.3, K.G.A.2	14 days
1C	Adding and Subtracting within 5	K.CC.A.1, K.CC.A.2, K.CC.A.3, K.CC.B.5, K.OA.A.1, K.OA.A.2, K.OA.A.3	14 days
Unit 2: Numbers to 10			
2A	Counting within 10	K.CC.A.3, K.CC.B.4.a, K.CC.B.4.b, K.CC.B.4.c, K.CC.B.5	15 days
2B	Counting and Comparing within 10	K.CC.C.6, K.CC.C.7, K.MD.B.3, K.G.A.2	15 days
2C	Adding and Subtracting within 10	K.CC.A.1, K.CC.A.2, K.CC.B.5, K.OA.A.1, K.OA.A.2, K.OA.A.3	15 days
Unit 3: Composing and Decomposing / Foundations of Place Value			
3A	Composing and Decomposing Numbers	K.OA.A.1, K.OA.A.2, K.OA.A.3, K.OA.A.4, K,OA.A.5	16 days
3B	Composing and Decomposing Shapes	K.CC.A.1, K.CC.A.2, K.G.A.2, K.G.B.5, K.G.B.6	14 days
3C	Teen Numbers	K.CC.A.3, K.CC.B.4.b, K.CC.B.4.c, K.CC.B.5, K.NBT.A.1	16 days
Unit 4: Size, Shape and Position			
5A	Measurement, Positions and Patterns	K.MD.A.1, K.MD.A.2, K.G.A.1, K.G.A.2	20 days
5B	Shapes	K.CC.A.1, K.CC.A.2, K.OA.A.1, K.OA.A.2, K.MD.B.3, K.G.A.1, K.G.A.2, K.G.A.3, K.G.B.4, K.G.B.6	16 days

Marking Period	Unit Title	Recommended Instructional Days
1	**Numbers to 5**	42 days

Domain:		**Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLS-CLKS within Unit**
Strand:	***Progress Indicator:***	**<u>Essential Question/s:</u>** 1. What are numbers? 2. How are numbers and quantity related? 3. What is counting and how is it useful? 4. How do we measure things? 5. How can objects be classified? 6. How are sorting and comparing related? 7. How can counting help us sort and compare objects? 8. What is addition? 9. What is subtraction? 10. How can we model how many we have in all when we add two numbers? 11. How can we model how many we have left when we subtract two numbers? **<u>Activity Description</u>**: ● Count to tell the number of objects (within 5). ● Count a group of objects within 5 and write the corresponding numeral. ● Directly compare two objects with an attribute in common. ● Classify objects into different categories and count the number of objects in each category. ● Identify and describe attributes of triangles, squares, and rectangles. ● Count to tell the number of objects (within 5). ● Identify and describe attributes of triangles, squares, and rectangles. ● Identify triangles, squares, and rectangles in different sizes and orientations. ● Count the number of sides and vertices to compare shapes. ● Classify objects based on one attribute.
Counting and Cardinality	● **K.CC.A.1:** Count to 100 by ones and by tens. ● **K.CC.A.2:** Count forward beginning from a given number within the known sequence (instead of having to begin at 1). ● **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). ● **K.CC.B.4a:** 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.B.4b:** 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.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. ● **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.	● Count the number of objects in different groups and sort the groups based on number. ● Create models to represent real-world problems involving addition and subtraction within 5. ● Explain and model their mathematical thinking orally and in drawings. ● Solve addition and subtraction word problems within 5. ● Represent word problem situations with actions, manipulatives, drawings, and numbers. **Interdisciplinary Connections: Content: ;NJSLS#:** Science - ● K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time. ex: Students write the number of sunny or rainy days in the previous month. ● K-ESS3-1 Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live. ● K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather. Technology - ● 8.1.2.AP.4: Break down a task into a sequence of steps.
Operations and Algebraic Thinking	● **K.OA.A.1:** Represent addition and subtraction with objects, ingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. ● **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. ● **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).	
Measurement and Data	● **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. For example, directly compare the heights of two children and describe one child as taller/shorter. ● **K.MD.B.3:** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	
Geometry	● **K.G.A.2:** Correctly name shapes regardless of their orientations or overall size.	
Mathematics 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.
- Look for and express regularity in repeated reasoning.

Social and Emotional Learning: ***Competencies***	**Social and Emotional Learning:** ***Sub-Competencies***
• Self-Awareness • Self-Management • Responsible Decision Making • Social Awareness • Relationship Skills • Motivation	• Emotional Awareness • Internal Regulation • Behavior Control • Goal Pursuance • Appreciating Social and Environment Diversity • Adaptive Behavior • Communication • Social Engagement • Constructive Thinking • Consequence Evaluation • Respect for Self and Others • Enthusiasm • Initiative • Resilience

Assessments (Formative) ***To show evidence of meeting the standard/s, students will successfully engage within:***	**Assessments (Summative)** ***To show evidence of meeting the standard/s, students will successfully complete:***
<u>Formative Assessments:</u> • Check for Understanding Questions • Quizzes • Class activities/participation • Exit tickets	**<u>Benchmarks:</u>** • Module Assessment • iReady scores **<u>Summative Assessments:</u>** • Module Test • Unit Assessment

Differentiated Student Access to Content:
Teaching and Learning *Resources/Materials*

Core Resources	**Alternate Core Resources** ***IEP/504/At-Risk/ESL***	**ELL Core Resources**	**Gifted & Talented Core Resources**
• *Into Math* Textbook, Modules 1-6 • Student Activity Cards • Teacher Activity Cards	• *Into Math* Textbook, Modules 1-6 • Extra Practice pages • Anchor charts • Scaffolded explanations of topics	• *Into Math* Textbook, Modules 1-6 • Visual aids • Manipulatives • Vocabulary with images and	• *Into Math* Textbook, Modules 1-6 • Student Activity Cards • Teacher Activity Cards • Numeral Cards

• Numeral Cards • Dot Cards • White Boards • Connecting Cubes • Number Cubes • Visual Representations of Numbers and Number of Objects • Counters	• Manipulatives • Visual aids • Hands-on learning activities	examples • Hands-on learning activities • Extra Practice pages • Anchor charts	• Dot Cards • White Boards • Connecting Cubes • Number Cubes • Visual Representations of Numbers and Number of Objects • Counters

Supplemental Resources

Technology:
- SmartBoards
- Chromebooks
- IXL
- Teacher Online Resources
- Applicable educational videos
- SplashLearn

Differentiated Student Access to Content:
Recommended *Strategies & Techniques*

Core Resources	Alternate Core Resources *IEP/504/At-Risk/ESL*	ELL Core Resources	Gifted & Talented Core
• Small group instruction • Peer tutoring • Modeling • Visual demonstrations • Encourage creative expression and thinking	• Provide additional manipulatives to support instruction • Allow for alternative strategies to solve algorithms or tasks • Provide the steps needed to complete the task • Model frequently • Use visuals to demonstrate/model the processes • Extra time for work • Modified assignments • Small group work for more individualize attention	• Use of translate materials and simplified language • Provide additional manipulatives to support instruction • Allow for alternative strategies to solve algorithms or tasks • Provide the steps needed to complete the task • Model frequently • Use visuals to demonstrate/model the processes • Extra time for work • Modified assignments • Small group work for more individualize attention	• Enrichment book • Higher-level questions • Leading group work

	Disciplinary Concept:

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	***Core Ideas:***	Brainstorming can create new, innovative ideas.
	Performance Expectation/s:	• 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives • 9.4.2.CI.2: Demonstrate originality and inventiveness in work
	Career Readiness, Life Literacies, & Key Skills Practices	
	• Act as a responsible and contributing community members and employee. • Attend to financial well-being. • Consider the environmental, social and economic impacts of decisions. • Demonstrate creativity and innovation. • Utilize critical thinking to make sense of problems and persevere in solving them. • Model integrity, ethical leadership and effective management • Plan education and career paths aligned to personal goals. • Use technology to enhance productivity increase collaboration and communicate effectively. • Work productively in teams while using cultural/global competence.	

Marking Period	**Unit Title**	**Recommended Instructional Days**
2	**Numbers to 10**	45 days

Domain:		**Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLS-CLKS within Unit**
Strand:	***Progress Indicator:***	**Essential Question/s:** 1. What are numbers? 2. How are numbers and quantity related? 3. How is counting helpful in our everyday lives? 4. Why is data collected and analyzed? 5. How can numbers 1-10 be compared and ordered? 6. How do the attributes of a shape help us identify the shape? 7. How do I know when to add or subtract? 8. What is the meaning of the solution and does it make sense?
Counting and Cardinality	• **K.CC.A.1:** Count to 100 by ones and by tens. • **K.CC.A.2:** Count forward beginning from a given number within the known sequence (instead of having to begin at 1). • **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).	**Activity Description**:

	• **K.CC.B.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.B.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.B.4.c:** Understand that each successive number name refers to a quantity that is one larger. • **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. • **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. • **K.CC.C.7:** Compare two numbers between 1 and 10 presented as written numerals.	• Count to tell the number of objects (within 10). • Count a group of objects within 10 and write the corresponding numeral. • Directly compare two objects with an attribute in common. • Classify objects into different categories and count the number of objects in each category. • Identify and describe attributes of circles, hexagons, triangles, squares, and rectangles. • Students can compare two groups of objects to determine which group has more or less, or if the groups have the same amount. • Students can compare two numbers 1-10 and determine which number is greater, less, or if the numbers are the same. • Students identify circles and hexagons based on their attributes. • Students can collect data and ask questions about the data. • Create models to represent real world problems involving addition and subtraction within 10. • Explain and model their mathematical thinking orally, in drawings, or with objects. • Solve addition and subtraction word problems within 10. • Represent word problem situations with actions, manipulatives, drawings, and numbers. **Interdisciplinary Connections: Content: ;NJSLS#:** Science - • K-ESS2-1 - Use and share observations of local weather conditions to describe patterns over time. • ex: Students write the number of sunny or rainy days in the previous month. • K-ESS3-1 - Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live. • K-ESS3-2 - Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather. Technology - • 8.1.2.AP.4: Break down a task into a sequence of steps.
Operations and Algebraic Thinking	• **K.OA.A.1:** Represent addition and subtraction with objects, ingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. • **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. • **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).	
Measurement and Data	• **K.MD.B.3:** Classify objects into given categories; count the numbers of objects in each category and sort the categories	

	by count.
Geometry	• **K.G.A.2:** Correctly name shapes regardless of their orientations or overall size

Mathematics 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. • Look for and express regularity in repeated reasoning.

Social and Emotional Learning: ***Competencies***	**Social and Emotional Learning:** ***Sub-Competencies***
• Self-Awareness • Self-Management • Responsible Decision Making • Social Awareness • Relationship Skills • Motivation	• Emotional Awareness • Internal Regulation • Behavior Control • Goal Pursuance • Appreciating Social and Environment Diversity • Adaptive Behavior • Communication • Social Engagement • Constructive Thinking • Consequence Evaluation • Respect for Self and Others • Enthusiasm • Initiative • Resilience

Assessments (Formative) ***To show evidence of meeting the standard/s, students will successfully engage within:***	**Assessments (Summative)** ***To show evidence of meeting the standard/s, students will successfully complete:***
Formative Assessments: • Check for Understanding Questions • Quizzes	**Benchmarks:** • Module Assessment • iReady scores

• Class activities/participation • Exit tickets	**<u>Summative Assessments:</u>** • Module Test • Unit Assessment

Differentiated Student Access to Content:
Teaching and Learning *Resources/Materials*

Core Resources	**Alternate Core Resources *IEP/504/At-Risk/ESL***	**ELL Core Resources**	**Gifted & Talented Core Resources**
• *Into Math* Textbook, Modules 7-12 • Student Activity Cards • Teacher Activity Cards • Numeral Cards • Dot Cards • White Boards • Connecting Cubes • Number Cubes • Visual Representations of Numbers and Number of Objects • Counters	• *Into Math* Textbook, Modules 7-12 • Extra Practice pages • Anchor charts • Scaffolded explanations of topics • Manipulatives • Visual aids • Hands-on learning activities	• *Into Math* Textbook, Modules 7-12 • Visual aids • Manipulatives • Vocabulary with images and examples • Hands-on learning activities • Extra Practice pages • Anchor charts	• *Into Math* Textbook, Modules 7-12 • Student Activity Cards • Teacher Activity Cards • Numeral Cards • Dot Cards • White Boards • Connecting Cubes • Number Cubes • Visual Representations of Numbers and Number of Objects • Counters

Supplemental Resources

Technology:
- SmartBoards
- Chromebooks
- IXL
- Teacher Online Resources
- Applicable educational videos
- SplashLearn

Differentiated Student Access to Content:
Recommended *Strategies & Techniques*

Core Resources	**Alternate Core Resources *IEP/504/At-Risk/ESL***	**ELL Core Resources**	**Gifted & Talented Core**
• Small group instruction • Peer tutoring • Modeling • Visual demonstrations	• Provide additional manipulatives to support instruction • Allow for alternative strategies to solve algorithms or tasks	• Use of translate materials and simplified language • Provide additional manipulatives to support instruction	• Enrichment book • Higher-level questions • Leading group work

• Encourage creative expression and thinking	• Provide the steps needed to complete the task • Model frequently • Use visuals to demonstrate/model the processes • Extra time for work • Modified assignments • Small group work for more individualize attention	• Allow for alternative strategies to solve algorithms or tasks • Provide the steps needed to complete the task • Model frequently • Use visuals to demonstrate/model the processes • Extra time for work • Modified assignments • Small group work for more individualize attention	

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	**Disciplinary Concept:**	
	Core Ideas:	Brainstorming can create new, innovative ideas.
	Performance Expectation/s:	• 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives • 9.4.2.CI.2: Demonstrate originality and inventiveness in work
	Career Readiness, Life Literacies, & Key Skills Practices	
	• Act as a responsible and contributing community members and employee. • Attend to financial well-being. • Consider the environmental, social and economic impacts of decisions. • Demonstrate creativity and innovation. • Utilize critical thinking to make sense of problems and persevere in solving them. • Model integrity, ethical leadership and effective management • Plan education and career paths aligned to personal goals. • Use technology to enhance productivity increase collaboration and communicate effectively. • Work productively in teams while using cultural/global competence.	

<table>
<tr><th>Marking
Period</th><th colspan="2">Unit
Title</th><th>Recommended
Instructional Days</th></tr>
<tr><td>3</td><td colspan="2">Composing and Decomposing / Foundations of Place Value</td><td>46 days</td></tr>
<tr><td colspan="2">Domain:</td><td colspan="2" rowspan="2">Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLS-CLKS within Unit</td></tr>
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● K.CC.A.2: Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
● 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).
● K.CC.B.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.B.4.c: Understand that each successive number name refers to a quantity that is one larger.
● 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 coniguration; given a number from 1-20, count out that many objects.</td><td colspan="2" rowspan="2"><u>Essential Question/s:</u>
1. How can I use different combinations of numbers to represent the same quantity?
2. How are patterns helpful when composing and decomposing numbers?
3. How can I represent problems using objects, pictures, and numbers?
4. How can I easily add and subtract within 5?
5. How do I know where to begin when solving a problem?
6. How does explaining (or drawing) my process help me to understand the problem solution?
7. How do I decide what operation will work best with a given problem?
8. What is the meaning of the solution and does it make sense?
9. How can shapes be put together to make new shapes?
10. How can a shape be decomposed into smaller shapes?
11. How can drawings and objects be used to compose and decompose numbers from 11-19?
12. How can numbers be grouped?
13. How is counting the same as +1 and -1?

<u>Activity Description</u>:
● Decompose numbers less than or equal to 10 into pairs in more than one way.
● For any number from 1 to 9 find the number that makes 10 when added to the given number.
● Compose simple shapes to make a larger shape.
● Decompose a shape into smaller shapes.
● Use ordinal numbers to identify the position of objects.
● Compose and decompose numbers 11-19 into 10 ones and some more ones.
● Identify the number that is one more than a given number within 20.

Interdisciplinary Connections: Content: ;NJSLS#:</td></tr>
<tr><td>Operations and Algebraic Thinking</td><td>● K.OA.A.1: Represent addition and subtraction with objects, ingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
● 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).
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<tr><td></td><td>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.OA.A.5: Fluently add and subtract within 5.</td><td rowspan="5">Science -
• K-ESS2-1 - Use and share observations of local weather conditions to describe patterns over time.
• ex: Students write the number of sunny or rainy days in the previous month.
• K-ESS3-1 - Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
• K-ESS3-2 - Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

Technology -
• 8.1.2.AP.4: Break down a task into a sequence of steps.</td></tr>
<tr><td>Number and Operations in Base Ten</td><td>• 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 (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, ive, six, seven, eight, or nine ones.</td></tr>
<tr><td>Geometry</td><td>• K.G.A.2: Correctly name shapes regardless of their orientations or overall size.
• K.G.B.5: Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
• K.G.B.6: Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?”</td></tr>
<tr><td colspan="2">Mathematics Practices</td></tr>
<tr><td colspan="2">• 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.
• Look for and express regularity in repeated reasoning.</td></tr>
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Competencies	***Sub-Competencies***	
• Self-Awareness • Self-Management • Responsible Decision Making • Social Awareness • Relationship Skills • Motivation	• Emotional Awareness • Internal Regulation • Behavior Control • Goal Pursuance • Appreciating Social and Environment Diversity • Adaptive Behavior • Communication • Social Engagement • Constructive Thinking • Consequence Evaluation • Respect for Self and Others • Enthusiasm • Initiative • Resilience	

Assessments (Formative) ***To show evidence of meeting the standard/s, students will successfully engage within:***	**Assessments (Summative)** ***To show evidence of meeting the standard/s, students will successfully complete:***
Formative Assessments: • Check for Understanding Questions • Quizzes • Class activities/participation • Exit tickets	**Benchmarks:** • Module Assessment • iReady scores **Summative Assessments:** • Module Test • Unit Assessment

Differentiated Student Access to Content:
Teaching and Learning *Resources/Materials*

Core Resources	**Alternate Core Resources** ***IEP/504/At-Risk/ESL***	**ELL Core Resources**	**Gifted & Talented Core Resources**
• *Into Math* Textbook, Modules 13, 17, 18 • Student Activity Cards • Teacher Activity Cards • Numeral Cards • Dot Cards • White Boards • Connecting Cubes	• *Into Math* Textbook, Modules 13, 17, 18 • Extra Practice pages • Anchor charts • Scaffolded explanations of topics • Manipulatives • Visual aids • Hands-on learning activities	• *Into Math* Textbook, Modules 13, 17, 18 • Visual aids • Manipulatives • Vocabulary with images and examples • Hands-on learning activities • Extra Practice pages	• *Into Math* Textbook, Modules 13, 17, 18 • Student Activity Cards • Teacher Activity Cards • Numeral Cards • Dot Cards • White Boards • Connecting Cubes

• Number Cubes • Visual Representations of Numbers and Number of Objects • Counters		• Anchor charts	• Number Cubes • Visual Representations of Numbers and Number of Objects • Counters

Supplemental Resources

Technology:
- SmartBoards
- Chromebooks
- IXL
- Teacher Online Resources
- Applicable educational videos
- SplashLearn

Differentiated Student Access to Content:
Recommended *Strategies & Techniques*

Core Resources	Alternate Core Resources *IEP/504/At-Risk/ESL*	ELL Core Resources	Gifted & Talented Core
• Small group instruction • Peer tutoring • Modeling • Visual demonstrations • Encourage creative expression and thinking	• Provide additional manipulatives to support instruction • Allow for alternative strategies to solve algorithms or tasks • Provide the steps needed to complete the task • Model frequently • Use visuals to demonstrate/model the processes • Extra time for work • Modified assignments • Small group work for more individualize attention	• Use of translate materials and simplified language • Provide additional manipulatives to support instruction • Allow for alternative strategies to solve algorithms or tasks • Provide the steps needed to complete the task • Model frequently • Use visuals to demonstrate/model the processes • Extra time for work • Modified assignments • Small group work for more individualize attention	• Enrichment book • Higher-level questions • Leading group work

NJSLS CAREER READINESS,	**Disciplinary Concept:**	
	Core Ideas:	Brainstorming can create new, innovative ideas.
	Performance Expectation/s:	• 9.4.2.CI.1: Demonstrate openness to new ideas and perspectives

LIFE LITERACIES & KEY SKILLS		• 9.4.2.CI.2: Demonstrate originality and inventiveness in work
	Career Readiness, Life Literacies, & Key Skills Practices	
	• Act as a responsible and contributing community members and employee. • Attend to financial well-being. • Consider the environmental, social and economic impacts of decisions. • Demonstrate creativity and innovation. • Utilize critical thinking to make sense of problems and persevere in solving them. • Model integrity, ethical leadership and effective management • Plan education and career paths aligned to personal goals. • Use technology to enhance productivity increase collaboration and communicate effectively. • Work productively in teams while using cultural/global competence.	

Marking Period	**Unit Title**	**Recommended Instructional Days**
4	**Size, Shape and Position**	35 days

Domain:		**Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLS-CLKS within Unit**
Strand:	***Progress Indicator:***	**<u>Essential Question/s:</u>** 1. How can we describe the location or position of a shape or an object? 2. What attributes of an object can be measured? 3. How can objects be compared and ordered by height, weight, volume, and area? 4. What makes shapes different from each other? 5. How can shapes be sorted? 6. How are plane and solid objects different? **<u>Activity Description</u>**: • 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.
Counting and Cardinality	• **K.CC.A.1:** Count to 100 by ones and by tens. • **K.CC.A.2:** Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	
Operations and Algebraic Thinking	• **K.OA.A.1:** Represent addition and subtraction with objects, ingers, mental images, drawings1, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. • **K.OA.A.2:** Solve addition and subtraction word problems, and add and	

<table>
<tr><td></td><td>subtract within 10, e.g., by using objects or drawings to represent the problem.</td><td rowspan="5">

Describe the location of shapes and objects using positional words.
Recognize, describe, and extend patterns.
Identify shapes as two-dimensional or three-dimensional.
Describe the attributes of three-dimensional shapes (cubes, spheres, cylinder, and cones).
Compose simple shapes to make a larger shape.

Interdisciplinary Connections: Content: ;NJSLS#:

Science -

K-PS2-1 - Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.
K-PS3-1 - Make observations to determine the effect of sunlight on Earth’s surface.
K-PS3-2 - Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.
K-LS1-1 - Use observations to describe patterns of what plants and animals (including humans) need to survive.
K-ESS2-1 - Use and share observations of local weather conditions to describe patterns over time.
K-ESS3-1 - Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
K-ESS3-2 - Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

Technology -

8.1.2.AP.4: Break down a task into a sequence of steps.

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<tr><td>Measurement and Data</td><td>

K.MD.A.1: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
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. For example, directly compare the heights of two children and describe one child as taller/shorter.
K.MD.B.3: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

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<tr><td>Geometry</td><td>

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.
K.G.A.2: Correctly name shapes regardless of their orientations or overall size.
K.G.A.3: Identify shapes as two-dimensional (lying in a plane, "lat") or three-dimensional ("solid").
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).
K.G.B.6: Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

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<tr><td colspan="2">Mathematics Practices</td></tr>
<tr><td colspan="2">

Make sense of problems and persevere in solving them.

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- 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.
- Look for and express regularity in repeated reasoning.

Social and Emotional Learning: ***Competencies***	**Social and Emotional Learning:** ***Sub-Competencies***
• Self-Awareness • Self-Management • Responsible Decision Making • Social Awareness • Relationship Skills • Motivation	• Emotional Awareness • Internal Regulation • Behavior Control • Goal Pursuance • Appreciating Social and Environment Diversity • Adaptive Behavior • Communication • Social Engagement • Constructive Thinking • Consequence Evaluation • Respect for Self and Others • Enthusiasm • Initiative • Resilience

Assessments (Formative) ***To show evidence of meeting the standard/s, students will successfully engage within:***	**Assessments (Summative)** ***To show evidence of meeting the standard/s, students will successfully complete:***
Formative Assessments: • Check for Understanding Questions • Quizzes • Class activities/participation • Exit tickets	**Benchmarks:** • Module Assessment • iReady scores **Summative Assessments:** • Module Test • Unit Assessment

Differentiated Student Access to Content:
Teaching and Learning *Resources/Materials*

Core Resources	**Alternate Core Resources**	**ELL Core Resources**	**Gifted & Talented Core Resources**

	IEP/504/At-Risk/ESL		
• *Into Math* Textbook, • Student Activity Cards • Teacher Activity Cards • Numeral Cards • Dot Cards • White Boards • Connecting Cubes • Number Cubes • Visual Representations of Numbers and Number of Objects • Counters	• *Into Math* Textbook, • Extra Practice pages • Anchor charts • Scaffolded explanations of topics • Manipulatives • Visual aids • Hands-on learning activities	• *Into Math* Textbook, • Visual aids • Manipulatives • Vocabulary with images and examples • Hands-on learning activities • Extra Practice pages • Anchor charts	• *Into Math* Textbook, • Student Activity Cards • Teacher Activity Cards • Numeral Cards • Dot Cards • White Boards • Connecting Cubes • Number Cubes • Visual Representations of Numbers and Number of Objects • Counters

Supplemental Resources

Technology:
- SmartBoards
- Chromebooks
- IXL
- Teacher Online Resources
- Applicable educational videos
- SplashLearn

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New Jersey Legislative Statutes and Administrative Code (place an "X" before each law/statute if/when present within the curriculum map)									
	Amistad Law: *N.J.S.A. 18A 52:16A-88*		Holocaust Law: *N.J.S.A. 18A:35-28*		LGBT and Disabilities Law: *N.J.S.A. 18A:35-4.35*		Diversity & Inclusion: *N.J.S.A. 18A:35-4.36a*		Standards in Action: *Climate Change*