GRADE Kindergarten– Unit 4: Numbers to 10 and Shapes

Mission Statement
The primary goal of the Swedesboro-Woolwich School District is to prepare each student with the real life skills needed to compete in a highly competitive global economy. This will be achieved by providing a comprehensive curriculum, the integration of technology, and the professional services of a competent and dedicated faculty, administration, and support staff. Guiding this mission will be Federal mandates, including No Child Left Behind, the New Jersey Core Curriculum Content Standards, and local initiatives addressing the individual needs of our students as determined by the Board of Education. The diverse resources of the school district, which includes a caring PTO and active adult community, contribute to a quality school system. They serve an integral role in supporting positive learning experiences that motivate, challenge and inspire children to learn.

Unit/Module Overview
i-Ready Unit 4: Numbers to 10 and Shapes This unit introduces students to counting, writing, and comparing numbers to 10. It also introduces them to Shapes and number partners for 10. The major themes of the unit are: - You can compare two numbers to decide if one number is greater than, less than, or equal to the other. - Number partners combine to make a new number. You can find number partners by breaking apart a number into smaller parts. - You can put together two or more shapes to make larger shapes. Unit Skills include: 1. Show, write, and count numbers 6 to 10. 2. Compare two numbers 1 to 10 using the terms greater than, less than, or equal to. 3. Put together two-dimensional shapes to compose larger shapes.

4. Put together three-dimensional shapes to compose larger shapes.
5. Compose and decompose 10.
6. Find a missing number partner for 10.
7. Write equations to represent number partners for 10.
8. Use math vocabulary to describe numbers and shapes.

Standards Covered in Current Unit/Module
Related Standards and Learning Goals

K.CC.A. Know number names and the count sequence
1. Count to 100 by ones and by tens.
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. Count to tell the number of objects
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. Compare numbers
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. (Clarification: Include groups with up to ten objects.)
7. Compare two numbers between 1 and 10 presented as written numerals.

K.G.B. Analyze, compare, create, and compose shapes
2. 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).
6. Compose simple shapes to form larger shapes.

K.OA.A Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from
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.

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.

Essential Questions Covered

- What do numbers tell me?
- Why do we need to count to 100 by 1's?
- Why do we need to count to 100 by 10's?
- Can you count to 100 by 1's and 10's?
- How can I represent how many objects I counted?
- How can we show a number in other ways?
- How do I write numbers to 10?
- How do I know how many objects are in a group?
- How do I determine how many objects are in a group?
- What does the successive number when counting mean?
- How can we show how many objects we counted?
- What is the difference between greater than, less than and equal to?
- How do I compose numbers?
- How do I decompose numbers?
- How can we make 10 using two groups?

- Which number is larger, smaller?
- How do I organize objects into categories?
- What different types of shapes are in our world?
- What are the different kinds and parts of shapes?
- How can smaller shapes be used to build bigger shapes?
- What do the + and = symbols mean?
- How can I use objects to add?
- How can I show that I am adding?
- How can I figure out the answer when I am adding?
- What do the - and = symbols mean?
- How can I use objects to subtract?
- How can I show that I am subtracting?
- How can I figure out the answer when I am subtracting?
- How many ways can I make 10?

Unit/Module Weekly Learning Activities and Pacing Guide			
Topic & # Days	NJ Standards	Critical Knowledge & Skills	Possible Resources & Activities
5 Days	K.CC.A.1 K.CC.A.3 K.CC.B.5	Objectives: ● Count to 100 by 1's ● Count to 100 by 10's	Lesson: ● Ready Math - Lesson 11 Count, Show, and Write Numbers 6 to 10

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- Write the numbers 0 to 20
- Count objects up to 20
- Represent objects up to 20 with a written numeral
- Count objects and tell how many
- Count to answer "how many?" objects up to 20 arranged in a line

- Count to answer "how many?" objects up to 20 arranged in a rectangular array

- Count to answer "how many?" objects up to 20 arranged in a circle

- Count to answer "how many?" objects up to 10 arranged in a scattered configuration

Mathematical Practices Covered:
- 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

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Materials:
- Teacher Toolbox
- iReady app
- iReady Classroom text
- Centers library
- Classroom library read aloud
- Hands on math manipulatives
- Student Workbooks

Formative Assessments:
- My Learning Path weekly progress
- Diagnostic Growth assessments
- Teacher observation
- Class participation
- Guided practice
- Individual practice
- Group work
- Student workbook
- Comprehension checks
- Lesson quizzes

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<td>5 Days</td>
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K.CC.C.7</td>
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Objectives:
- Identify a group of objects that has the greater amount
- Identify a group of objects that has the lesser amount
- Identify groups that have an equal amount of objects
- Tell which number is greater than or less than up

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Lesson:
- Ready Math - Lesson 12 Compare Numbers to 10

Materials:
- Teacher Toolbox
- iReady app
- iReady Classroom text

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		to 10 Mathematical Practices Covered: ● 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	● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks Formative Assessments: ● My Learning Path weekly progress ● Diagnostic Growth assessments ● Teacher observation ● Class participation ● Guided practice ● Individual practice ● Group work ● Student workbook ● Comprehension checks ● Lesson quizzes
5 Days	K.G.B.4 K.G.B.6	Objectives: ● Analyze and compare two- and three-dimensional shapes, in different sizes and orientations to describe their similarities ● Analyze and compare two- and three-dimensional shapes, in different sizes and orientations to describe their differences ● Analyze and compare two- and three-dimensional shapes, in different sizes and orientations to describe their parts and other attributes ● Compose simple shapes to form larger shapes Mathematical Practices Covered: ● Make sense of problems and persevere in solving them ● Reason abstractly and quantitatively ● Construct viable arguments and critique the reasoning of others	Lesson: ● Ready Math - Lesson 13 Compose Shapes Materials: ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks Formative Assessments: ● My Learning Path weekly progress ● Diagnostic Growth assessments ● Teacher observation ● Class participation ● Guided practice ● Individual practice

		● Model with mathematics ● Use appropriate tools strategically ● Attend to precision ● Look for and make use of structure	● Group work ● Student workbook ● Comprehension checks ● Lesson quizzes
5 Days	K.OA.A.1	Objectives: ● Recognize the symbols +, = ● Represent addition up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations ● Understand addition as putting together and adding to ● Recognize the symbols -, = ● Represent subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations ● Understand subtraction as taking away and taking apart Mathematical Practices Covered: ● 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	Lesson: ● Ready Math - Lesson 14 Compose and Decompose 10 Materials: ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks Formative Assessments: ● My Learning Path weekly progress ● Diagnostic Growth assessments ● Teacher observation ● Class participation ● Guided practice ● Individual practice ● Group work ● Student workbook ● Comprehension checks ● Lesson quizzes
5 Days	K.OA.A.4	Objectives: ● Find the number that makes 10 when added to the given number	Lesson: ● Ready Math - Lesson 15 Find Number Partners for 10

		Mathematical Practices Covered: ● 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	Materials: ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks Formative Assessments: ● My Learning Path weekly progress ● Diagnostic Growth assessments ● Teacher observation ● Class participation ● Guided practice ● Individual practice ● Group work ● Student workbook ● Comprehension checks ● Lesson quizzes
3 Days	K.G.B.6 K.CC.B.5 K.CC.C.6 K.OA.A.4 K.DL.A.1	Objectives: ● Compose simple shapes to form larger shapes ● Count objects and tell how many ● Count to answer "how many?" objects up to 20 arranged in a line ● Count to answer "how many?" objects up to 20 arranged in a rectangular array ● Count to answer "how many?" objects up to 20 arranged in a circle ● Count to answer "how many?" objects up to 10 arranged in a scattered configuration ● Identify a group of objects that has the greater amount ● Identify a group of objects that has the lesser	Lesson: ● Ready Math - Math in Action - Plan a Playground Materials: ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks Formative Assessments: ● My Learning Path weekly progress

		amount ● Identify groups that have an equal amount of objects ● Find the number that makes 10 when added to the given number ● Classify objects into given categories ● Count the number of objects in each category ● Sort categories by count Mathematical Practices Covered: ● Model with mathematics	● Diagnostic Growth assessments ● Teacher observation ● Class participation ● Guided practice ● Individual practice ● Group work ● Student workbook ● Comprehension checks
1 Day		Objectives: ● Demonstrate knowledge of Unit 4 standards and objectives. Mathematical Practices Covered: ● 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	Lesson: ● Ready Math - Comprehension Check / Unit Assessments Materials: ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks Formative Assessments: ● Unit Assessment

Interdisciplinary Connections for Kindergarten Math	
Technology Integration	21st Century Skills

- Animal Circus (ipad app) - learning games
- Create a classroom Math Word Wall
- If appropriate, use an interactive anchor chart to introduce or extend a lesson
- Prior to lesson, engage students by viewing a video on the topic of the lesson (YouTube, connected)
- Small group games, activities, challenges using classroom iPads
- www.IXL.com - counting, skip counting, shapes
- www.abcya.com - counting, shapes, numerical order, number sense, math bingo
- www.funbrain.com - number recognition to 10, counting
- www.gonoodle.com - Counting to 100, Skip counting
- www.mathplayground.com - counting, shapes
- www.pbskids.org - Counting (Peg's Pizza Place, Rock Art, Martha Seeks), Shapes (Paint-a-long, Stack to the Sky)
- www.starfall.com - shapes, calendar skills, math songs, counting to 5

- CRP.K-12 CRP 1 Act as a responsible and contributing citizen and employee
- CRP.K-12 CRP 2 Apply appropriate academic and technical skills
- CRP.K-12 CRP 6 Demonstrate creativity and innovation
- CRP.K-12.CRP 8 Utilize critical thinking to make sense of problems and persevere in solving them
- CRP.K-12.CRP11 Use technology to enhance productivity
- CRP.K-12.CRP12 Work productively in teams while using cultural global competence
- WRK.9.1.2.CAP.1 Make a list of different types of jobs and describe the skills associated with each job
- CAEP.0.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success
- TECH.9.4.2.CT.3 Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
- TECH.9.4.2.TL.3 Enter information into a spreadsheet and sort the information.
- TECH.9.4.2.IML.1 Identify a simple search term to find the information in a search engine or digital resource
- TECH.9.4.2.IML.2 Represent data in a visual format to tell a story about the data
- TECH.9.4.2.IML.4 Compare and contrast the way the information is shared in a variety of contexts (e.g., social, academic, athletic).

Link to Additional Components including Cross Curricular Connections, Accommodations, Assessments, Etc

ELA Enduring Understanding Statements