GRADE Kindergarten- Unit 6: Addition and Subtraction Within 10

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 6: Addition and Subtraction Within 10

This unit introduces students to adding and subtracting within 10. It also introduces them to solving addition and subtraction story problems within 10.

The major themes of the unit are:

- Knowing how to add and subtract with numbers to 5 can help you learn how to add and subtract with numbers to 10.
- You can use different tools to help you tell and solve addition and subtraction story problems.
- You can write an equation to show what is happening in a problem.

Unit Skills include:

1. Use manipulatives to add two numbers within 10.

- 2. Write equations to show addition.
- 3. Use manipulatives to subtract two numbers within 10.
- 4. Write equations to show subtraction.
- 5. Decide whether to add or subtract to solve a story problem.
- 6. Solve addition and subtraction story problems within 10.
- 7. Draw pictures or write equations to represent story problems.
- 8. Use math vocabulary to describe addition and subtraction.

Standards Covered in Current Unit/Module

Related Standards and Learning Goals

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.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.
- 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.DL.A. Classify objects and count the number of objects in each category

1. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Essential Questions Covered	
What do numbers tell me?Why do we need to count to 100 by 1's?	Which number is larger, smaller?How do I organize objects into categories?

- 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?

- 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.OA.A.1	 Objectives: Recognize the symbols + and = Represent addition up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations Understand addition is putting together and adding to Mathematical Practices Covered: Make sense of problems and persevere in solving them Reason abstractly and quantitatively Construct viable arguments and critique the 	Lesson: Ready Math - Lesson 20 Add Within 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

		reasoning of others Model with mathematics Use appropriate tools strategically Attend to precision	 Teacher observation Class participation Guided practice Individual practice Group work Student workbook Comprehension checks Lesson quizzes
5 Days	K.OA.A.1	Objectives: Recognize the symbols - and = Represent subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations Understand subtraction is 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 Look for and express regularity in repeated reasoning	Lesson: Ready Math - Lesson 21 Subtract Within 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 Individual practice Group work Student workbook Comprehension checks Lesson quizzes
5 Days	K.OA.A.2	Objectives: • Solve addition word problems, and add within 10	Lesson: • Ready Math - Lesson 22 Add and

		by using objects or drawings to represent the problem Solve subtraction word problems, and subtract within 10 by using objects or drawings to represent the problem 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	Subtract to Solve Word Problems Materials:
3 Days	K.CC.B.5 K.OA.A.1 K.DL.A.1	 Objectives: 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 Recognize the symbols + and = Represent addition up to 10 with objects, fingers, mental images, drawings, sounds, acting out 	Lesson: Ready Math - Math in Action - Design a Dance Materials: Teacher Toolbox iReady app iReady Classroom text Centers library Classroom library read aloud Hands on math manipulatives Student Workbooks Formative Assessments:

		situations, verbal explanations, expressions, or equations • Understand addition is putting together and adding to • Recognize the symbols - and = • Represent subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations • Understand subtraction is taking away and taking apart • Classify objects into given categories • Count the number of objects in each category • Sort categories by count Mathematical Practices Covered: • Model with mathematics	 My Learning Path weekly progress Diagnostic Growth assessments Teacher observation Class participation Guided practice Individual practice Group work Student workbook Comprehension checks
1 Day	All standards from this unit	Objectives: Demonstrate knowledge of Unit 6 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