

Swedesboro-Woolwich School District's Math Curriculum Guidance Document
GRADE Kindergarten– Unit 3: Addition and Subtraction Within 5 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 3: Addition and Subtraction Within 5 and Shapes

This unit introduces students to adding and subtracting within 5. It also introduces them to two-dimensional shapes.

The major themes of the unit are:

- Adding one group to another group makes more.
- When you take away objects from a group, you are subtracting.
- Two-dimensional shapes have attributes that can be described.
- You can identify shapes as flat or solid. Flat shapes make the faces of solid shapes.
- You can use words to name a shape and describe its position.

Unit Skills include:

1. Use fingers or manipulatives to add two numbers within 5.
2. Tell and solve add-to story problems.
3. Identify and name two-dimensional shapes regardless of orientation or size.
4. Use fingers or manipulatives to subtract two numbers within 5.
5. Tell and solve take-away story problems.
6. Determine whether a story problem calls for addition or subtraction.
7. Use math vocabulary to describe addition, subtraction, and two-dimensional shapes
1. Compare two numbers 0 to 5 using the words more, less, or same.
3. Understand that one more refers to the next number in the counting sequence.
4. Name and describe solid shapes.
5. Compare the weights of two objects to tell which is heavier or lighter.
6. Use math vocabulary to describe numbers, shapes, and weight.

Standards Covered in Current Unit/Module
Related Standards and Learning Goals
<p>K.CC.B. Count to tell the number of objects</p> <p>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.</p> <p>K.DL.A. Classify objects and count the number of objects in each category</p> <p>1. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.</p> <p>K.G.A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)</p> <p>2. Correctly name shapes regardless of their orientations or overall size.</p> <p>3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).</p>

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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.

Essential Questions Covered

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| <ul style="list-style-type: none"> 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? | <ul style="list-style-type: none"> 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? |
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Unit/Module Weekly Learning Activities and Pacing Guide

Unit/Module Weekly Learning Activities and Pacing Guide			
Topic & # Days	NJ Standards	Critical Knowledge & Skills	Possible Resources & Activities

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5 Days	K.OA.A.1	<p>Objectives:</p> <ul style="list-style-type: none"> ● Recognize the symbols +, = ● Represent addition up to 5 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations ● Understand addition as putting together and adding to <p>Mathematical Practices Covered:</p> <ul style="list-style-type: none"> ● 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 	<p>Lesson:</p> <ul style="list-style-type: none"> ● Ready Math - Lesson 7 Add Within 5 <p>Materials:</p> <ul style="list-style-type: none"> ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks <p>Formative Assessments:</p> <ul style="list-style-type: none"> ● 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.A.2 K.G.A.3	<p>Objectives:</p> <ul style="list-style-type: none"> ● Recognize and name the shape circle ● Recognize and name the shape square ● Recognize and name the shape rectangle ● Recognize and name the shape triangle ● Recognize and name the shape hexagon ● Recognize if a shape is two-dimensional (flat) <p>Mathematical Practices Covered:</p> <ul style="list-style-type: none"> ● Make sense of problems and persevere in solving them ● Reason abstractly and quantitatively 	<p>Lesson:</p> <ul style="list-style-type: none"> ● Ready Math - Lesson 8 Two-Dimensional Shapes <p>Materials:</p> <ul style="list-style-type: none"> ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks

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		<ul style="list-style-type: none"> ● 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 	<p>Formative Assessments:</p> <ul style="list-style-type: none"> ● 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.1	<p>Objectives:</p> <ul style="list-style-type: none"> ● Recognize the symbols -, = ● Represent subtraction up to 5 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations ● Understand subtraction as taking away and taking apart <p>Mathematical Practices Covered:</p> <ul style="list-style-type: none"> ● 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 	<p>Lesson:</p> <ul style="list-style-type: none"> ● Ready Math - Lesson 9 Subtract Within 5 <p>Materials:</p> <ul style="list-style-type: none"> ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks <p>Formative Assessments:</p> <ul style="list-style-type: none"> ● 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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5 Days	K.OA.A.1	<p>Objectives:</p> <ul style="list-style-type: none"> ● Recognize the symbols +, = ● Represent addition up to 5 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 5 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations ● Understand subtraction as taking away and taking apart <p>Mathematical Practices Covered:</p> <ul style="list-style-type: none"> ● 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 	<p>Lesson:</p> <ul style="list-style-type: none"> ● Ready Math - Lesson 10 Add and Subtract Within 5 <p>Materials:</p> <ul style="list-style-type: none"> ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud ● Hands on math manipulatives ● Student Workbooks <p>Formative Assessments:</p> <ul style="list-style-type: none"> ● 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.CC.B.5 K.OA.A.1 K.G.A.2 K.DL.A.1	<p>Objectives:</p> <ul style="list-style-type: none"> ● 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 	<p>Lesson:</p> <ul style="list-style-type: none"> ● Ready Math - Lesson 10 Add and Subtract Within 5 <p>Materials:</p> <ul style="list-style-type: none"> ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud

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		<p>arranged in a scattered configuration</p> <ul style="list-style-type: none"> ● Recognize the symbols $+$, $=$ ● Represent addition up to 5 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 5 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations ● Understand subtraction as taking away and taking apart ● Recognize and name the shape circle ● Recognize and name the shape square ● Recognize and name the shape rectangle ● Recognize and name the shape triangle ● Recognize and name the shape hexagon ● Recognize if a shape is two-dimensional (flat) ● Classify objects into given categories ● Count the number of objects in each category ● Sort categories by count <p>Mathematical Practices Covered:</p> <ul style="list-style-type: none"> ● Model with mathematics 	<ul style="list-style-type: none"> ● Hands on math manipulatives ● Student Workbooks <p>Formative Assessments:</p> <ul style="list-style-type: none"> ● My Learning Path weekly progress ● Diagnostic Growth assessments ● Teacher observation ● Class participation ● Guided practice ● Individual practice ● Group work ● Student workbook ● Comprehension checks
1 Day		<p>Objectives:</p> <ul style="list-style-type: none"> ● Demonstrate knowledge of Unit 3 standards and objectives. <p>Mathematical Practices Covered:</p> <ul style="list-style-type: none"> ● Make sense of problems and persevere in solving them ● Reason abstractly and quantitatively ● Construct viable arguments and critique the 	<p>Lesson:</p> <ul style="list-style-type: none"> ● Ready Math - Comprehension Check / Unit Assessments <p>Materials:</p> <ul style="list-style-type: none"> ● Teacher Toolbox ● iReady app ● iReady Classroom text ● Centers library ● Classroom library read aloud

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		<p>reasoning of others</p> <ul style="list-style-type: none"> ● 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 	<ul style="list-style-type: none"> ● Hands on math manipulatives ● Student Workbooks <p>Formative Assessments:</p> <ul style="list-style-type: none"> ● Unit Assessment
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Interdisciplinary Connections for Kindergarten Math	
Technology Integration	21st Century Skills
<ul style="list-style-type: none"> ● 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 	<ul style="list-style-type: none"> ● 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

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| | <ul style="list-style-type: none">● 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). |
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[Link to Additional Components including Cross Curricular Connections, Accommodations, Assessments, Etc](#)

[ELA Enduring Understanding Statements](#)