TOWNSHIP OF UNION PUBLIC SCHOOLS



Grade K Mathematics

Adopted August 27, 2024

Mission Statement

The mission of the Township of Union Public Schools is to build on the foundations of honesty, excellence, integrity, strong family, and community partnerships. We promote a supportive learning environment where every student is challenged, inspired, empowered, and respected as diverse learners. Through cultivation of students' intellectual curiosity, skills and knowledge, our students can achieve academically and socially, and contribute as responsible and productive citizens of our global community.

Philosophy Statement

The Township of Union Public School District, as a societal agency, reflects democratic ideals and concepts through its educational practices. It is the belief of the Board of Education that a primary function of the Township of Union Public School System is to formulate a learning climate conducive to the needs of all students in general, providing therein for individual differences. The school operates as a partner with the home and community.

Unit Title: Mathematics – Number Concepts and Counting to 10 – Unit 1 – Module A

Grade level: Kindergarten Timeframe: 6 weeks

Rationale

Kindergarten – Number Concepts and Counting to 10 – Unit 1

Unit 1 focuses on counting and the relationship between numbers and quantities. Learners count by ones up to ten and say the number name for each object when counting up to ten objects. They come to understand that, when counting, the last number tells the total number of objects regardless of their order. Learners represent numbers of objects, including the absence of objects (0), with written numbers and answer 'how many' questions about a group of objects arranged in lines, rectangular, arrays, and circles.

Also in this unit, learners use their counting experiences to develop an understanding of addition and subtraction within 5. They represent addition and subtraction within 5 using multiple strategies including using objects, fingers, mental images, drawings, sounds, acting out, verbal explanations, expressions or equations.

Throughout the unit, learners use concrete objects to count and to represent addition and subtraction. These concrete objects support learners' development of spatial reasoning. They recognize and correctly name two-dimensional shapes regardless of the orientation and size of objects. By describing objects in the environment using names of shapes and describing the relative positions of objects, learners extend their spatial reasoning skills.

Note: Double asterisks (**) indicate that the example(s) included within the New Jersey Student Learning Standard may be especially informative when considering the Student Learning Objective.

Guiding Questions

- K.CC.A.1 What patterns do you notice when counting by tens versus counting by ones?
- K.CC.A.2 What strategies can you use to continue counting from a number other than one?
- K.CC.A.3 How can you represent a number of objects with a written numeral from 0 to 20?
- K.CC.B.4 What is the relationship between numbers and the quantity of objects they represent?

Why is it important to say the number names in the standard order when counting objects?

K.CC.B.5 How can you count objects arranged in different ways, such as in a line, array, or scattered, to answer "how many?" questions?

K.OA.A.1 How can you represent addition and subtraction using objects, drawings, or actions?

What are different ways to show the same addition or subtraction problem?

Standards

Standards (Taught and Assessed):

- **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.4** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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.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.

Key: Major Cluster Supporting Cluster OAdditional Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.

- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them. CRP11. Use technology to enhance productivity.
- **Social-Emotional Learning Competencies**

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment Pre-Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of
	Failure, 504) and Reflections
Pre-Assessment Question 1:	ELL: Model and Provide
Standard: K.CC.A.1, K.CC.A.2	Example. Establish a
Question: Can you count out loud from 1 to 20? Now, can you count by tens to 100?	non-verbal cue to redirect
Objective: To assess the student's ability to count sequentially by ones and by tens.	students when not on task.
	Students may use a bilingual
Pre-Assessment Question 2:	dictionary.
Standard: K.CC.B.4a, K.CC.B.4b, K.CC.B.4c, K.CC.B.5	At Risk: Individualized as
Question: Here are 10 objects (e.g., blocks, beads). Can you count them and tell me how many there	needed
are? What if we rearrange them into a different shape, can you count them again?	IEP/504:
Objective: To evaluate the student's understanding of counting objects, the concept of cardinality, and	Modifications/Accommodations
the ability to count objects in different arrangements.	a stated in IEP
Pre-Assessment Question 3:	
Standard: K.CC.A.3, K.OA.A.1	
Question: Can you write the numbers from 0 to 10? Using these numbers, can you show me how to	
add 3 + 2 using objects or a drawing?	
Objective: To check the student's ability to write numbers and represent basic addition using visual	
aids or manipulatives.	

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT	Student Strategies	Formative	Activities and Resources	Modifications (ELL,
We are learning to/that		Assessment		Special Education, Gifted, At-risk of
				,

				Failure, 504) and Reflections
K.CC.A.1 - WALT count by ones to 10	Think about the last number said	Exit slip- count to a specific number of objects within 10-count, write, represent.	Students will learn that numbers have value amounts and are different then letters. Use manipulatives to show numbers 0-10 Recognize and state the last number said when counting (the last number said tells the total number of objects). Use a number line to count to 10. Trace the form of numbers 0-10 Number songs/poems Shaving cream on desk to write numbers Write the last number said. Literature "Pancakes for All" Childrens will read the book and count kittens.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task.
K.CC.A.2 - WALT count on from a number other than 1 to 10	Use concrete models drawings and counters to explore the concept of counting.	If you start counting from 3, what number comes after 3? Count onward until you reach 10.	In this activity, students will practice counting on from a number other than 1. Provide each student with a number card randomly ranging from 2 to 9. Ask them to stand in a circle and begin counting aloud from their assigned number, continuing sequentially until they reach 10. For example, if a student has the number 5, they start by saying "5" and then count "6, 7, 8, 9, 10" as they move clockwise around the circle. Encourage students to use their fingers to keep track and to listen carefully to their peers to ensure the count continues smoothly. This activity helps reinforce counting forward from various starting points, developing their understanding of number sequencing beyond starting from 1.	Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accom modations a stated in IEP

WALT write numbers 0 to 10 WALT represent a number of objects with a written number from 1 through 10	Students will use visuals to remember each number Remember last number said Count the number of objects in a set and write the written number.	Draw to show what you know about the number sets 1-10. Tell a friend about your drawing.	Provide students with a set of cards numbered 0 to 10. Place various objects (e.g., blocks, buttons) in front of the students. Have them count the objects and match the correct number card to the quantity of objects. Next, give students worksheets where they practice writing the numbers 0 to 10. Finally, students will draw a certain number of objects and write the corresponding numeral beneath each group, reinforcing their understanding of the relationship between numbers and quantities.
K.CC.A.3 - WALT zero represents a count of no objects	Students know that 0 is represented as no objects or objects that are taken away.	Have students draw what they know about the number 0 and explain their	quantities. Read "Zero my hero" and identify 0 as none. Write the number name and written numeral.
WALT when counting, each object is paired with only one number name WALT say the number name for each object in a group up to 10 objects when counting	Count and write the number under each picture. Cross off objects as your count. Count and write the number under each picture.	drawing to a friend. Exit slip- Match objects to numbers Quick Checks	Count objects and write the number value. Literature- Read the Red Caboose and count the number of toy trains. Count out loud for objects in a group.

WALT when counting a set of objects up to 10, the last number tells the total number of objects WALT after counting a set of objects up to 10, the total is the same even when the arrangement or order is changed	Use last number said strategy Have students cross off objects as they count them.	Exit slip- have students count the number of objects in different arrangements	Have students do different activities for last number said (shout the number, whisper, say like a monster, etc). Place a counter on each object when counting. Then rearrange the counters and count again. Use counters when counting objectsthen show the same number matched up.
K.CC.B.4.C– WALT when given a number between 0 and 10, the next number is one larger than the given number	Have students circle the larger number.	Exit ticket- use a number line to find the larger number of a given number.	Use a number line to see the numbers. Identify the numbers get larger as they go on. Have students count objects and find the larger number.
WALT count out the correct number of objects when given a number up to 10 WALT answer "how many" questions about a group of objects up to 10 in a line, rectangular array, and circle by counting	Count and write the number under each picture. Use a ten frame to know one row is 5 and two rows is 10.	Count the number of objects orally	Use manipulatives to show a number. Model a 10 frame. One row is 5 two rows is 10. Use egg cartons and manipulatives to show numbers 1-10.

K.OA.A.1 WALT represent addition within 5 in a variety of ways (e.g., objects, fingers, mental images, drawings, sounds, acting out, verbal explanations, expressions or equations)	Use snap cubes to show different combinations to add within 5.	Exit slip- show two ways to make 5.	Use counters to add two numbers together Use a beaded number line to add numbers Use snap cubes to add numbers together Children can add themselves together to represent addition Trace the plus sign and learn what it means add together.	
WALT represent subtraction within 5 in a variety of ways (e.g., objects, fingers, mental images, drawings, sounds, acting out, verbal explanations, expressions or equations)	Circle and cross out the number being taken away.	Sarah has 5 apples. She eats 3 of them. How many apples are left? Show me how you would solve this problem using drawings.	Use the act out strategy to subtract within 5. Find the number that is left. Students use counters and take away to find what is left. Trace the take away symbol and learn the symbol means take away.	

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Formative Assessment Question 1: Standard: K.CC.A.1, K.CC.A.2 Question: Starting at the number 5, can you count up to 15? What comes next after 15? Objective: To assess the student's ability to count forward from a given number and continue the sequence. Formative Assessment Question 2: Standard: K.CC.B.4a, K.CC.B.4b, K.CC.B.4c Question: Here are 12 objects arranged in a circle. Can you count them and tell me how many there are? If you move some objects around, does the total number change? Objective: To evaluate the student's understanding of the stable order and cardinality principles, and that the number of objects is consistent regardless of their arrangement. Formative Assessment Question 3:	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accomm odations a stated in IEP

Standard: K.OA.A.1

Question: Using your fingers or some objects, can you show me how to solve 4 + 3? Can you also

draw a picture to show this addition problem?

Objective: To check the student's ability to represent addition using physical objects, fingers, or

drawings, ensuring they understand the concept of combining quantities.

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Summative Assessment Question 1:	ELL: Model and
Standard: K.CC.A.1, K.CC.A.2	Provide Example.
Question: Count out loud from 1 to 100 by ones and then by tens. Next, start counting from the number 8 and continue up to 20.	Establish a non-verbal cue to redirect students
Objective: To comprehensively assess the student's ability to count sequentially by ones and by tens,	when not on task.
as well as their ability to count forward from a given number.	Students may use a
	bilingual dictionary.
Summative Assessment Question 2:	At Risk:
Standard: K.CC.A.3, K.CC.B.4a, K.CC.B.4b, K.CC.B.4c, K.CC.B.5	Individualized as
Question: Write the numbers from 0 to 20 on a piece of paper. Then, count the objects in the following arrangements and write down the number of objects you counted:	needed IEP/504:
15 objects in a line.	Modifications/Accomm
12 objects in a rectangular array.	odations a stated in IEP
9 objects scattered randomly.	
Objective: To evaluate the student's ability to write numbers from 0 to 20, understand the relationship between numbers and quantities, and accurately count objects in various arrangements.	
Summative Assessment Question 3:	
Standard: K.OA.A.1	
Question: Solve the following addition and subtraction problems using objects, drawings, or	
equations: 5 + 2	
$\begin{vmatrix} 3 & 2 \\ 9 - 4 \end{vmatrix}$	
3+6	
Objective: To assess the student's proficiency in representing and solving addition and subtraction problems using various methods, demonstrating their understanding of basic operations up to 10.	

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure, 504) and Reflections
1. Math and Literacy:	ELL: Model and Provide Example.
Activity: Counting and Number Books	Establish a non-verbal cue to redirect
Description: Use storybooks that focus on counting and numbers, such as "Chicka Chicka 1, 2, 3" by	students when not on task. Students
Bill Martin Jr. and Michael Sampson, or "Ten Black Dots" by Donald Crews. After reading, students	may use a bilingual dictionary.
can count objects in the book, write down the numbers they see, and even create their own counting books.	At Risk: Individualized as needed IEP/504:
Objective: To enhance counting skills (K.CC.A.1, K.CC.A.2) and number writing (K.CC.A.3) while developing literacy skills such as listening, comprehension, and sequencing.	Modifications/Accommodations a stated in IEP
2. Math and Science:	
Activity: Nature Counting Walk	
Description: Take the students on a nature walk where they can count various natural objects, such as	
leaves, rocks, or flowers. Have them collect a small number of objects and then count, write the	
numbers, and create addition and subtraction problems with their collections.	
Objective: To connect counting and number recognition (K.CC.B.4, K.CC.B.5) with observations in	
nature, fostering an understanding of the natural world and basic addition and subtraction (K.OA.A.1).	
3. Math and Art:	
Activity: Counting and Number Art	
Description: Provide students with art supplies to create artwork that incorporates numbers and	
counting. For example, students can use paint or collage techniques to create a picture with a specific	
number of items (e.g., 10 stars, 15 dots). They can also represent addition and subtraction problems	
visually in their artwork.	
Objective: To blend counting (K.CC.A.1, K.CC.A.2), number representation (K.CC.A.3), and basic	
operations (K.OA.A.1) with creative expression, helping students visualize and reinforce	
mathematical concepts through art.	

Unit Title: Math – Number Concepts and Counting to 10 – Unit 1 – Module B

Grade level: Kindergarten Timeframe: 3 weeks

Rationale

Kindergarten – Number Concepts and Counting to 10 – Unit 1

Unit 1 focuses on counting and the relationship between numbers and quantities. Learners count by ones up to ten and say the number name for each object when counting up to ten objects. They come to understand that, when counting, the last number tells the total number of objects regardless of their order. Learners represent numbers of objects, including the absence of objects (0), with written numbers and answer 'how many' questions about a group of objects arranged in lines, rectangular, arrays, and circles.

Also in this unit, learners use their counting experiences to develop an understanding of addition and subtraction within 5. They represent addition and subtraction within 5 using multiple strategies including using objects, fingers, mental images, drawings, sounds, acting out, verbal explanations, expressions or equations.

Throughout the unit, learners use concrete objects to count and to represent addition and subtraction. These concrete objects support learners' development of spatial reasoning. They recognize and correctly name two-dimensional shapes regardless of the orientation and size of objects. By describing objects in the environment using names of shapes and describing the relative positions of objects, learners extend their spatial reasoning skills.

Note: Double asterisks (**) indicate that the example(s) included within the New Jersey Student Learning Standard may be especially informative when considering the Student Learning Objective.

Guiding Questions

K.G.A.1- How can you describe where an object is using words like above, below, beside, in front of, behind, and next to?

What are the names of different shapes you see around you, and how can you describe their positions relative to other objects?

How do you use shapes to describe objects in your environment?

K.G.A.2 How can you identify and name shapes no matter how they are turned or how big or small they are?

What makes a shape a circle, square, triangle, rectangle, hexagon, cube, cone, cylinder, or sphere, even if they look different in size or orientation?

Why is it important to recognize shapes regardless of their size or position?

Standards

Standards (Taught and Assessed):

• 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.

Note: shapes include squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres.

K.G.A.2 Correctly name shapes regardless of their orientations or overall size.

Note: shapes include squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres.

Key: Major Cluster Supporting Cluster OAdditional Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.
- Social-Emotional Learning Competencies

Instructional Plan

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of
	Failure, 504) and Reflections
Pre-Assessment Question 1:	ELL: Model and Provide
Standard: K.G.A.1	Example. Establish a
Question: Can you look around the classroom and find an object that is above another object? Describe	non-verbal cue to redirect
what you see using the words above, below, beside, in front of, behind, or next to.	students when not on task.
Objective: To assess the student's ability to use positional words to describe the location of objects in	Students may use a bilingual
their environment.	dictionary.
	At Risk: Individualized as
Pre-Assessment Question 2:	needed
Standard: K.G.A.2	IEP/504:
Question: Can you name these shapes (show pictures of a circle, square, triangle, and rectangle)? How	Modifications/Accommodations
do you know they are the same shape even if they look different?	a stated in IEP
Objective: To evaluate the student's ability to correctly name shapes and recognize them regardless of	
their orientation or size.	

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
K.G.A.1 – WALT identify squares, circles, triangles, rectangles, and hexagons	Visualize and identify the different shapes.	Identify and name two dimensional shapes.	Trace shapes and draw shapes. Activate prior knowledge by naming objects at home and school and what shapes they are.	
K.G.A.1 – WALT describe the attributes of squares, circles, triangles, rectangles, and hexagons	Count the number of sides	Describe the attributes of each shape.	Draw to join shapes. Identify how many sides (vertex) or curves each shape has. Ready Math - Lessons 9.2, 9.4, 9.6, 9.8, 9.10	
				ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task.

K.G.A.1 – WALT describe objects in the environment using names of shapes	Be able to identify and visualize all shapes	Show and Tell- Bring in an object of a certain shape. (Circle day).	Name objects around the classroom of each shape. Draw pictures of a given shape.	Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504:
K.G.A.1 – WALT describe the positions of objects in the environment using words such as above, below, beside, in front of, behind, and next to	Know vocabulary and be able to demonstrate what it means.	Use cubes to describe their position of colors.	Working with a partner, children list shapes that are above and below them in the classroom Make a cube tower with two different color cubes. Use words to tell about the cubes. Where are the red cubes? They are above the blue cubes.	Modifications/Accommoda tions a stated in IEP
K.G.A.2 – WALT the name of a shape does not change when orientation and size change	Students will know the attributes of a shape to identify the shape no matter orientation and size.	Exit slip- Identify and pick out all of the shapes selected (Ready Math Example: 9.5 Question 1).	Draw shapes of different sizes to make a picture. (Different size squares to make a picture).	
K.G.A.2 – WALT correctly name squares, circles, triangles, rectangles and hexagons of different sizes and orientations	Know the vocabulary about shapes- a triangle has 3 sides, a square has 4 equal sides.	Color a selected shape in a picture (Ready Math Lesson 9.5 Question 2).	In a mosaic identify the different shapes. Sort pattern blocks	

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Standard: K.G.A.1	ELL: Model and Provide
	Example. Establish a
Question: Using the blocks, can you place one block above another and then describe their positions	non-verbal cue to redirect
using the correct terms?	students when not on task.

Objective: To assess the student's understanding of spatial relationships and their ability to use positional words accurately.	Students may use a bilingual dictionary.
Standard: K.G.A.2	At Risk: Individualized as needed
Question: Here are some shapes of different sizes and orientations. Can you name each shape and explain why it is still the same shape even if it looks different from the others?	IEP/504: Modifications/Accommoda
Objective: To evaluate the student's ability to recognize and correctly name shapes regardless of orientation or size.	tions a stated in IEP

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL,
	Special Education,
	Gifted, At-risk of
	Failure, 504) and
	Reflections
Standard: K.G.A.1	ELL: Model and Provide
Question: Look at the picture of a playground. Can you describe the position of the slide relative to	Example. Establish a
the swings using words like above, below, beside, in front of, behind, and next to?	non-verbal cue to redirect
Objective: To comprehensively assess the student's ability to describe the relative positions of objects	students when not on task.
using positional language.	Students may use a
	bilingual dictionary.
Standard: K.G.A.2	At Risk: Individualized as
Question: On your worksheet, you have several shapes of different sizes and orientations. Write the	needed
name of each shape next to it and color all the triangles red, all the circles blue, all the squares green,	IEP/504:
and all the rectangles yellow.	Modifications/Accommod
Objective: To assess the student's ability to correctly name shapes and recognize them regardless of	ations a stated in IEP
their size or orientation.	

Interdisciplinary Connections

	Interdisciplinary Connections	Modifications (ELL,
-		Special Education,
		Gifted, At-risk of
-		Failure, 504) and
Į		Reflections

1. Math and Literacy:

Activity: Shape Stories

Description: Read a story that features various shapes, such as "The Shape of Things" by Dayle Ann Dodds. After reading, students can create their own short stories or drawings featuring shapes they find in their environment, describing the shapes and their positions.

Objective: To integrate literacy skills with geometry, encouraging students to recognize shapes and use positional words in their storytelling and illustrations.

2. Math and Physical Education:

Activity: Shape Hunt

Description: Organize a "Shape Hunt" activity where students move around the playground or gym looking for objects that match specific shapes (e.g., a round ball for a circle, a rectangular bench for a rectangle). They can describe the positions of these objects relative to other items using positional terms.

Objective: To connect physical activity with geometry, helping students to identify shapes in their environment and describe their positions, reinforcing both spatial awareness and physical movement.

ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP

Unit Title: Math – Counting to 20, Addition and Subtraction – Unit 2 – Module A

Grade level: Kindergarten Timeframe: 6 weeks

Rationale

Kindergarten – Counting to 20, Addition and Subtraction – Unit 2

In unit 2, learners continue to develop an understanding of number names and the count sequence. They extend the count sequence to 20, starting at various numbers and represent up to 20 objects with written numbers. Counting objects in a scattered arrangement is introduced in this unit. Learners demonstrate spatial reasoning and understanding of the count sequence to answer "how many" questions about a group of up to 10 scattered objects. They classify objects into given categories, find totals for each category and compare numbers up to 10. Learners also determine whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.

Throughout the unit, learners use concrete objects to count and to represent addition and subtraction. Addition and subtraction, including solving word problems using objects and drawings, is extended to up to 10 objects. Learners begin decomposing numbers less than or equal to 5 into pairs in multiple ways using objects or drawings. This leads them towards building fluency (accuracy and efficiency) for addition and subtraction within 5.

To extend spatial reasoning skills, learners describe objects in the environment using names of shapes and describe their relative positions. They identify and describe both two and three-dimensional shapes, recognizing that two dimensional shapes are flat, and three-dimensional shapes are solid.

Guiding Questions

- K.CC.A.1 What patterns do you notice when counting by tens compared to counting by ones?
- K.CC.A.2 What strategies help you continue counting from a number other than one?
- K.CC.A.3 How can you represent a number of objects with a written numeral from 0 to 20?
- K.CC.B.4a Why is it important to say the number names in order when counting objects?
- How does pairing each object with one number name help in counting accurately?
- K.CC.B.4b How does the last number you say when counting tell you the total number of objects?
- Why does the number of objects remain the same regardless of their arrangement?
- K.CC.B.4c What does it mean that each successive number name refers to a quantity that is one larger?

How can you explain that each number you count is one more than the previous number?

K.CC.B.5 - How can you count to find out how many objects are in different arrangements like lines, arrays, or scattered groups?

How can you count out a specific number of objects when given a number from 1 to 20?

K.CC.C.6 - How can you tell if one group of objects has more, fewer, or the same number of objects as another group?

What strategies can you use to compare the number of objects in two groups?

K.CC.C.7 - How can you compare two numbers between 1 and 10 to see which is greater, less, or if they are equal?

What tools or methods can help you compare written numerals between 1 and 10?

Standards

Standards (Taught and Assessed):

- **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.4** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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.

Key: Major Cluster Supporting Cluster OAdditional Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.
- Social-Emotional Learning Competencies

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Pre-Assessment Question 1 Standards Covered: K.CC.A.1, K.CC.A.2 Question: Count out loud from 1 to 20. After that, count by tens up to 100. Can you start counting from the number 8 and continue to 18? Objective: To assess the student's ability to count sequentially by ones and by tens, as well as their ability to count forward from a given number. Pre-Assessment Question 2 Standards Covered: K.CC.A.3 Question: Write down the numbers from 0 to 10. Can you draw a picture of 4 objects and write the correct number next to it? Objective: To evaluate the student's ability to write numbers and represent quantities with written numerals. Pre-Assessment Question 3	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP

Standards Covered: K.CC.B.4, K.CC.B.5

Question: Here are 10 objects. Can you count them and tell me how many there are? Then, count these objects arranged in a line and in a rectangular array. Does the total number change?

Objective: To assess the student's understanding of counting objects, cardinality, and their ability to

count in different configurations.

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
K.CC.A.1 – WALT count by ones to 20	Pattern in numbers, repeat 1-19 as you count	K.CC.A.1 Count to 100 by ones and by tens. Can you count aloud from 1 to 20 by ones, and then from 10 to 100 by tens?	In this activity, students will practice counting by ones up to 20 using a visual and tactile approach. Prepare a set of paper cupcakes, each labeled with a number from 1 to 20. Distribute the cupcakes randomly on a table or display board. Ask students to take turns picking up a cupcake, saying the number out loud, and arranging them in numerical order. This hands-on activity not only reinforces counting skills but also encourages students to visually recognize and sequence numbers up to 20. It can be adapted by adding more cupcakes for advanced learners or by incorporating a timer to challenge students to beat their previous time.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP

K.CC.A.2 – WALT count on from a number other than 1 up to 20	Model and count using cubes and 2 ten frames	K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1). If we start counting from 5, what are the next five numbers?	Counting Forward Challenge Begin by showing a number card randomly selected from 1 to 20. The first student counts aloud starting from that number and continues up to 20. Encourage each student to take turns selecting a new number card and counting on from that number. This activity promotes number sequencing skills and reinforces the concept of counting from any given starting point, beyond just starting from 1.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP
WALT write numbers 0 through 20 WALT represent the number of objects with a written number from 0 through 20	Pattern in numbers, repeat 1-19 as you count Model and count using cubes and 2 ten frames	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). Can you write the numbers 0 to 10? Now, look at this group of 8 blocks and write the number that shows how many blocks there are.	Number Writing and Representation Activity: Provide each student with a worksheet containing blank spaces labeled with numbers from 0 to 20. Next to each number, place a box where students can draw objects to represent that number. For example, next to the number 3, they would draw three objects.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP
K.CC.B.4.A WALT when counting, each object is paired with only one number name. WALT say the number name for each object in a group up to 20 objects when counting	Pattern in numbers, repeat 1-19 as you count Model and count using cubes and 2 ten frames	K.CC.B.4a Understand the relationship between numbers and quantities; connect counting to cardinality: 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.	Counting and Number Pairing Activity: Provide a collection of objects (e.g., counters, blocks) and ask students to count them one by one. Emphasize that each object should be paired with a single number name, ensuring clarity and accuracy in counting. Encourage students to say the number name aloud for	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP

		Here are 6 apples. Count them out loud, making sure	each object as they count up to 20.	
WALT when counting a set of objects up to 20, the last number tells the total number of objects WALT after counting a set of objects up to 20, the total is the same even when the arrangement or order is changed	Pattern in numbers, repeat 1-19 as you count Model and count using cubes and 2 ten frames	each apple gets one number. K.CC.B.4b Understand the relationship between numbers and quantities; connect counting to cardinality: Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their	Morning calendar routine for counting by 1's Review counting to 20	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP
K.CC.B.4.C WALT when given a number between 0 and 20, the next number is one larger than the given number	Pattern in numbers, repeat 1-19 as you count Model and count using cubes and 2 ten frames	arrangement or the order in which they were counted. Count these 7 pencils. What number did you end with? Does the number of pencils change if we arrange them in a circle? K.CC.B.4c Understand the relationship between numbers and quantities; connect counting to cardinality: Understand that each successive number name refers to a quantity that is one larger. If you have 3 toys and get one more, how many toys do you have now? 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	Sequential Counting Activity: Begin by displaying number cards randomly from 0 to 20. Ask students to identify each number and then state the next number in sequence. For example, if the number card shows 5, students should say "6" as the next number.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP

WALT count out the correct number of objects when given a number up to 20 WALT answer "how many" questions about groups of objects up to 20 in a line, rectangular array, and circle by counting WALT answer "how many" questions about a group of up to 10 objects in a scattered arrangement by counting	Pattern in numbers, repeat 1-19 as you count Model and count using cubes and 2 ten frames	things in a scattered configuration; given a number from 1–20, count out that many objects. Here are 12 marbles in a line. Count them and tell me how many there are.	Morning calendar routine for counting by 1's Review counting to 20	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP
WALT equal means the same amount WALT identify when the number of objects is equal to, greater than, or less than the number of objects in another group by matching or counting the number of objects in both groups		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. Look at these two groups of stars. Does group A have more, less, or the same number of stars as group B?	Comparing Groups Activity: Prepare several sets of objects (e.g., counters, blocks) in varying quantities. Place two sets side by side and ask students to compare them. Guide them to count the objects in each group and determine if one group has more, fewer, or the same number of objects as the other group. Emphasize that "equal" means both groups have the same amount, and encourage students to demonstrate their understanding by matching objects or counting to compare quantities accurately.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP

K.CC.C.7 – WALT compare two written numbers between 1 and 10	Pattern in numbers, repeat 1-19 as you count Model and count using cubes and 2 ten frames	K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals. Which is greater, 6 or 9? Which is less, 3 or 8?	Comparing Written Numbers Activity: Students will practice comparing two written numbers between 1 and 10 to determine which number is greater, less than, or equal to the other. Provide pairs of number cards (e.g., 3 and 7, 5 and 5) randomly to students. Ask them to read each number aloud and then compare them. Guide students to use comparative language (e.g., "greater than," "less than," "equal to") to describe the relationship between the numbers. Encourage students to justify their comparisons by explaining why one number is greater, less than, or equal to the other. This activity reinforces understanding of number order and comparison skills, helping students develop fluency in comparing written numerals within the range of 1 to 10.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommod ations a stated in IEP
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Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special	
	Education, Gifted, At-risk of Failure,	
	504) and Reflections	
Formative Assessment Question 1	ELL: Model and Provide Example. Establish a non-verbal cue to redirect	
Standards Covered: K.CC.B.4a, K.CC.B.4b, K.CC.B.4c	students when not on task. Students may use a bilingual dictionary.	

Question: Give each student a set of objects (e.g., counters, blocks). Ask them to count and match each object with a number card from 1 to 10. Observe if they correctly pair each object with a number and understand that the last number named represents the total count.

At Risk: Individualized as needed IEP/504:

Modifications/Accommodations a stated in IEP

Formative Assessment Question 2

Standards Covered: K.CC.C.6, K.CC.C.7

Question: Provide students with two groups of objects (e.g., pictures, objects). Ask them to compare the groups and identify which group has more, fewer, or if they are equal. Then, show them two written numerals between 1 and 10 and ask them to compare and determine which is greater.

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Summative Assessment Question 1 Standards Covered: K.CC.A.1, K.CC.A.2, K.CC.A.3 Question: On a worksheet, have students count and write the numbers from 1 to 20. Then, ask them to count by tens up to 100. Finally, provide them with pictures of objects in different arrangements and ask them to write the correct numeral for the quantity shown.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated
Summative Assessment Question 2 Standards Covered: K.CC.B.5, K.CC.C.6, K.CC.C.7 Question: Present students with scenarios where they need to count objects in various configurations (line, circle, scattered) and answer "how many?" questions. Then, provide pairs of objects or numerals and ask students to compare and determine which is greater, less, or equal.	in IEP

Interdisciplinary Connections

I	Interdisciplinary Connections	Modifications (ELL, Special
		Education, Gifted, At-risk of Failure,
		504) and Reflections

Activity: Number Stories

Description: Read a story that incorporates counting or number concepts, such as "The Very Hungry Caterpillar" by Eric Carle. After reading, ask students to count the objects mentioned in the story and write down the corresponding numerals. They can also create their own number stories, using objects or drawings to represent quantities.

ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed

Interdisciplinary Connection 2: Math and Science

IEP/504: Modifications/Accommodations a stated

in IEP

Activity: Nature Counting

Description: Take students on a nature walk and ask them to count natural objects like leaves, rocks, or flowers. Have them record the numbers they count and then compare their findings with those of their

classmates. This activity not only reinforces counting skills but also encourages observation, data

collection, and comparison.

Unit Title: Mathematics – Counting to 20, Addition and Subtraction – Unit 2 – Module B

Grade level: Kindergarten Timeframe: 4 Weeks

Rationale

Kindergarten – Counting to 20, Addition and Subtraction – Unit 2

In unit 2, learners continue to develop an understanding of number names and the count sequence. They extend the count sequence to 20, starting at various numbers and represent up to 20 objects with written numbers. Counting objects in a scattered arrangement is introduced in this unit. Learners demonstrate spatial reasoning and understanding of the count sequence to answer "how many" questions about a group of up to 10 scattered objects. They classify objects into given categories, find totals for each category and compare numbers up to 10. Learners also determine whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.

Throughout the unit, learners use concrete objects to count and to represent addition and subtraction. Addition and subtraction, including solving word problems using objects and drawings, is extended to up to 10 objects. Learners begin decomposing numbers less than or equal to 5 into pairs in multiple ways using objects or drawings. This leads them towards building fluency (accuracy and efficiency) for addition and subtraction within 5.

To extend spatial reasoning skills, learners describe objects in the environment using names of shapes and describe their relative positions. They identify and describe both two and three-dimensional shapes, recognizing that two dimensional shapes are flat, and three-dimensional shapes are solid.

Guiding Questions

K.OA.A.1 How can you show addition and subtraction using objects, drawings, or your fingers?

Why is it important to use different methods, like mental images or acting out situations, to solve addition and subtraction problems?

K.OA.A.2 How can you solve a word problem that involves adding or subtracting objects?

What strategies can you use to add and subtract within 10, such as using drawings or objects to help you understand the problem?

Climate Change Example Interdisciplinary Connection: How do trees help to reduce the warming effect of sunlight?

How can you use math skills, like counting and addition, to understand the impact of trees on climate change?

K.OA.A.3 How can you break down the number 5 into different pairs, using objects or drawings?

Why is it helpful to show different ways to break down a number into smaller parts, like equations or pictures?

K.OA.A.5 What does it mean to be fluent in addition and subtraction within 5?

How can you practice addition and subtraction so that you become faster and more accurate within 5?

Standards

Standards (Taught and Assessed):

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.

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.

Climate Change Example: Students may use counters when adding to find the total number of trees that they and a partner observed (e.g., from their front door, in a backyard, from a classroom window). With prompting and support, they may ask and answer questions about how trees may reduce the warming effect of sunlight.

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).

K.OA.A.5 Demonstrate fluency for addition and subtraction within 5.

Kev:	Major Cluster	Supporting Cluster	Additional Cluster
ixcy.	Iviajoi Ciusici	Supporting Clusici	- Additional Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.
- Social-Emotional Learning Competencies

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment Pre-Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of
	Failure, 504) and Reflections
Pre-Assessment Question 1	ELL: Model and Provide Example.
Standards Covered: K.OA.A.1, K.OA.A.2	Establish a non-verbal cue to redirect
Question: Show students a picture of two groups of objects (e.g., apples and oranges) and ask them to	students when not on task. Students
represent the total number by using counters or drawings. Then, ask them to explain how they found the	may use a bilingual dictionary.
total using objects, drawings, or verbal explanations.	At Risk: Individualized as needed

Objective: To assess students' ability to represent addition and subtraction within 10 using various	IEP/504:
methods and their understanding of solving word problems with objects or drawings.	Modifications/Accommodations a stated in IEP
Pre-Assessment Question 2	
Standards Covered: K.OA.A.3	
Question: Provide students with the number 7 and ask them to decompose it in more than one way using objects or drawings. Have them record each decomposition with a drawing or equation (e.g., $7 = 4 + 3$ and $7 = 5 + 2$). Objective: To evaluate students' ability to decompose numbers less than or equal to 10 into pairs using concrete objects or drawings, and to record their decompositions accurately.	
Pre-Assessment Question 3 Standards Covered: K.OA.A.5 Question: Give students a series of addition and subtraction problems within 5 (e.g., 2 + 3, 4 - 1). Have them solve these problems using objects or drawings to demonstrate fluency in addition and subtraction	

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

Objective: To assess students' fluency in performing addition and subtraction operations within 5 using

within 5.

concrete materials or visual representations.

SLO – WALT	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL,
				Special Education,
We are learning to/that				Gifted, At-risk of
				Failure, 504) and
				Reflections

K.OA.A.1 - WALT

represent addition within 10 with objects, fingers, mental images, drawings, sounds, acting out problems, verbal explanations, expressions and equations

WALT represent subtraction within 10 with objects, fingers, mental images, drawings, sounds, acting out problems, verbal explanations, expressions and equations

K.OA.A.2 🌌

WALT 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 - WALT

decompose numbers less than or equal to 5 in pairs e.g. by using objects or drawings

- Pattern in numbers, repeat 1-19 as you count
- Model and count using cubes and 2 ten frames, drawings
- Use mathboard to draw objects and write their numbers
- Restate key vocabulary

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.

Using your fingers, can you show me what 3 plus 2 equals?

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.

If you have 4 apples and pick 3 more, how many apples do you have now? You can use these blocks to help you solve 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 + 3and 5 = 4 + 1).

Can you show me two different ways to make the number 6 using these counters?

Hands-on Addition and Subtraction Activity: Begin by presenting a simple addition problem (e.g., 3 + 2). Ask students to use counters or objects to represent each number, then combine them to find the total. Encourage them to also draw a picture of the objects and explain their solution verbally. Next, introduce a subtraction problem (e.g., 5 - 1). Have students use objects to show the starting quantity and subtract the specified number, using verbal explanations and drawing to illustrate their process.

ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP

Elimate Change

Example: Students may use counters when adding to find the total number of trees that they and a partner observed (e.g., from their front door, in a backyard, from a classroom window). With prompting and support, they may ask and answer questions about how trees may reduce the warming effect of sunlight.

ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP

Number Pairs Activity: Students will explore different ways to decompose numbers up to 5 into pairs using concrete objects such as cubes or buttons. Begin by giving each student 5 counters and a sheet of paper. Guide them to arrange the ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed

K.OA.A.3 –	K.OA.A.5 Demonstrate fluency for addition and	counters into pairs (e.g., $5 = 2 + 3$) and record each	IEP/504:
WALT record the decomposition of numbers less than or equal to 5 in pairs with a drawing or equation. WALT decompose numbers less than or equal to 5 in pairs in more than one way e.g., by using objects or drawings and record the decompositions with a drawing or equation	what is 2 plus 3? Now, what is 5 minus 2? Can you answer these without using your fingers or blocks?	decomposition with drawings. Encourage students to explore various combinations for each number from 1 to 5, fostering their understanding of number composition and mathematical relationships through hands-on exploration and visual representation.	Modifications/Accommo dations a stated in IEP
K.OA.A.5 – WALT represent addition and subtraction within 5 using objects, pictures, numbers, and words (working towards accuracy and efficiency)		Mixed Modality Math Exploration: Students will engage in activities that reinforce addition and subtraction within 5 using diverse approaches such as objects, pictures, numbers, and words. Begin by providing each student with a set of counters and a sheet of paper. Demonstrate how to add two groups of counters to find the total (e.g., 2 + 3 = 5) and then encourage students to represent this operation with drawings, numbers, and words. Next, demonstrate subtraction by removing counters from a group to find the difference (e.g., 5 - 2 = 3), guiding students to use objects, pictures, numbers, and words to depict their solutions.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure,
	504) and Reflections
Standards Covered: K.OA.A.1	ELL: Model and Provide Example.
Question: Provide students with a set of objects (e.g., counters). Ask them to demonstrate addition and	Establish a non-verbal cue to redirect
subtraction up to 10 by using the objects to solve simple problems. Observe their use of objects,	students when not on task. Students
mental images, or drawings to represent the operations.	may use a bilingual dictionary.
	At Risk: Individualized as needed
Standards Covered: K.OA.A.3	IEP/504:
Question: Present students with the number 7 and ask them to decompose it in more than one way	Modifications/Accommodations a stated
using objects or drawings. Have them record each decomposition with a drawing or equation (e.g., 7 =	in IEP
5+2 and $7=4+3$).	

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure,
	504) and Reflections
Summative Assessment Question 1	ELL: Model and Provide Example.
	Establish a non-verbal cue to redirect
Standards Covered: K.OA.A.2	students when not on task. Students
Question: Provide students with addition and subtraction word problems within 10. Ask them to use	may use a bilingual dictionary.
objects or drawings to solve the problems and write down their solutions. Example: "Sara had 5 apples.	At Risk: Individualized as needed
She ate 2. How many apples does she have left?"	IEP/504:
Objective: To assess the student's ability to solve addition and subtraction word problems within 10	Modifications/Accommodations a stated
using concrete materials and representational strategies.	in IEP
Summative Assessment Question 2	
Standards Covered: K.OA.A.5	
Question: Administer a timed assessment where students are asked to solve a series of addition and	
subtraction problems within 5. Evaluate their accuracy in solving these problems.	
Objective: To measure the student's fluency in addition and subtraction within 5.	

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure, 504) and Reflections
Activity: Climate Change and Addition Description: Using the climate change example provided, have students count and add the number of trees observed in different locations (e.g., front door, backyard). Discuss with students how trees help reduce the warming effect of sunlight and have them represent their findings with objects or drawings. Objective: To integrate mathematical skills such as addition with scientific concepts like climate change, fostering a deeper understanding of both subjects.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504:
Interdisciplinary Connection 2: Math and Language Arts Activity: Math Story Problems Description: Have students create their own addition and subtraction word problems based on stories they write or read. Encourage them to use objects or drawings to illustrate their problems and solutions, linking math skills with literacy and creative expression. Objective: To combine mathematical problem-solving with language arts skills, promoting critical thinking and communication abilities.	Modifications/Accommodations a stated in IEP

Unit Title: Mathematics – Counting to 20, Addition and Subtraction – Unit 2 – Module C

Grade level: Kindergarten Timeframe: 4 weeks

Rationale

Kindergarten – Counting to 20, Addition and Subtraction – Unit 2

In unit 2, learners continue to develop an understanding of number names and the count sequence. They extend the count sequence to 20, starting at various numbers and represent up to 20 objects with written numbers. Counting objects in a scattered arrangement is introduced in this unit. Learners demonstrate spatial reasoning and understanding of the count sequence to answer "how many" questions about a group of up to 10 scattered objects. They classify objects into given categories, find totals for each category and compare numbers up to 10. Learners also determine whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.

Throughout the unit, learners use concrete objects to count and to represent addition and subtraction. Addition and subtraction, including solving word problems using objects and drawings, is extended to up to 10 objects. Learners begin decomposing numbers less than or equal to 5 into pairs in multiple ways using objects or drawings. This leads them towards building fluency (accuracy and efficiency) for addition and subtraction within 5.

To extend spatial reasoning skills, learners describe objects in the environment using names of shapes and describe their relative positions. They identify and describe both two and three-dimensional shapes, recognizing that two dimensional shapes are flat, and three-dimensional shapes are solid.

Guiding Questions

K.DL.A.1 How can you classify objects into different categories?

Why is it important to count the number of objects in each category and sort them by count?

Climate Change Example Interdisciplinary Connection:

What objects can be reused, recycled, or must be placed in the trash?

How can you classify used objects into these categories, ensuring no more than 10 objects in each category?

K.G.A.1- How can you describe where objects are located using shape names and positional terms?

What shapes do you see around you, and how can you describe their positions relative to other objects?

K.G.A.2 - Why is it important to be able to name shapes regardless of their orientations or sizes?

How do you know if an object is a square, circle, triangle, rectangle, hexagon, cube, cone, cylinder, or sphere, even if it looks different?

K.G.A.3 - What makes a shape two-dimensional (flat) or three-dimensional (solid)?





Standards (Taught and Assessed):

K.DL.A.1 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Clarification: Limit category counts to be less than or equal to 10)

Climate Change Example: With prompting and support, students may ask and answer questions about objects that may be recycled, and objects that must be placed in the trash. Students may classify used objects into those categories with no more than 10 objects in each category. Students may count the number of objects in each category and sort the categories by count.

• 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.

Note: shapes include squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres.

- 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, "flat") or three-dimensional ("solid").

Key: Major Cluster Supporting Cluster OAdditional Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment Pre-Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure,
	504) and Reflections
Standards Covered: K.DL.A.1	ELL: Model and Provide Example.
Question: Provide students with a collection of objects (e.g., toys, classroom items). Ask them to sort	Establish a non-verbal cue to redirect
these objects into categories such as toys, books, and stationery. Can they count how many objects	students when not on task. Students may
are in each category and arrange the categories by the number of objects?	use a bilingual dictionary.
Objective: To assess students' ability to classify objects into categories, count objects within each	At Risk: Individualized as needed
category, and sort categories by count.	IEP/504:
	Modifications/Accommodations a stated
Pre-Assessment Question 2	in IEP
Standards Covered: K.G.A.1, K.G.A.2	
Question: Show students pictures or real objects of various shapes (e.g., square, circle, triangle, cube,	
cone). Can they name each shape correctly regardless of its orientation or size? Then, ask them to	
describe the positions of these shapes using positional terms like above, below, beside, in front of,	
behind, and next to.	
Objective: To evaluate students' ability to recognize and name shapes accurately and describe their	
relative positions using positional language.	

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
K.DL.A.1	Use manipulativesUse a variety of objects up to 10	Standard K.DL.A.1 Question:	Climate Change Example: With prompting and support, students may	ELL: Model and Provide Example. Establish a non-verbal cue to redirect
WALT Classify objects into given categories; count the numbers of	● Flashcards	Classify these 10 objects into three categories: items that	ask and answer questions about objects that may be reused, objects that may be	students when not on task. Students may use a bilingual dictionary.

K.G.A.1 – WALT identify cubes, cones, cylinders and spheres	Standard K.G.A.1 Question: Look at the objects on the table. Describe each object using the names of shapes (square, circle, triangle, rectangle, hexagon, cube, cone, cylinder, and sphere) and describe their positions using terms such as above, below, beside, in front of, behind, and next to.	Shape Identification Activity: Students will explore and identify cubes, cones, cylinders, and spheres using both real objects and pictures. Begin by displaying pictures or drawings of each shape on a board or paper, and discuss their unique characteristics (e.g., cubes have flat faces, cones have a pointed end, cylinders are like cans, spheres are round). Next, show real objects representing these shapes (e.g., wooden blocks for cubes, traffic cones for cones, cardboard tubes for cylinders, balls for spheres) and ask students to match each object with its corresponding picture. Encourage them to describe and compare the attributes of each shape as they make their matches. This activity reinforces shape recognition	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP
K.G.A.1 – WALT describe the attributes of cubes, cones, cylinders and spheres		reinforces shape recognition skills and helps students understand the distinct features of cubes, cones, cylinders, and spheres through visual and hands-on exploration. Shape Identification Activity: Students will explore and identify cubes, cones, cylinders, and spheres using a combination of real objects and visual aids. Begin by presenting pictures or drawings of each shape on a board or paper, discussing their unique characteristics (e.g., cubes have flat faces,	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed

K.G.A.1 – WALT describe objects in the environment using names of shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)		Standard K.G.A.2 Question: Identify and correctly name each of the shapes shown, regardless of their orientation or size.	cones have a pointed end, cylinders are cylindrical like cans, spheres are perfectly round). Next, display real objects that represent these shapes (e.g., wooden blocks for cubes, traffic cones for cones, cardboard tubes for cylinders, balls for spheres). Ask students to match each object with its corresponding picture, encouraging them to describe and compare the attributes of each shape as they make their matches. Describing Shapes in the Environment: Students will identify and describe objects in the classroom or outdoors using names of shapes such as squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres. Begin by taking students on a short walk around the school grounds or classroom. Encourage them to point out objects that match each shape category. For example, they might identify a clock as a circle, a book as a rectangle, a ball as a sphere, or a box as a cube. As they find objects, have students verbally describe each shape they identify, emphasizing the specific characteristics that define each shape category (e.g., a square has four equal sides, a cone has a pointed end and a circular base).	IEP/504: Modifications/Accommo dations a stated in IEP ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP
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K.G.A.2 – WALT	Understanding Shape	ELL: Model and Provide
orientation and size do	Characteristics:	Example. Establish a
not change the shape	Students will explore and	non-verbal cue to redirect
(cubes, cones, cylinders	understand that the	students when not on
and spheres)	orientation and size of shapes	task. Students may use a
and spheres)	like cubes, cones, cylinders,	bilingual dictionary.
	and spheres do not change their fundamental shape.	At Risk: Individualized
	Begin by showing students	as needed
	examples of these shapes in	IEP/504:
	different orientations and	Modifications/Accommo
	sizes (e.g., a small cube, a	dations a stated in IEP
	large cube, a cube placed	*************************************
	upright, a cube placed	
	sideways). Discuss with	
	students how despite these	
	variations, all these objects	
	are still cubes because they	
	have the same basic	
	characteristics: six square	
	faces. Repeat this process for	
	cones, cylinders, and spheres,	
	demonstrating how changes in size or orientation do not	
	alter their inherent shape	
	qualities (e.g., a tall cone, a	
	short cone, a wide cylinder, a	
	narrow cylinder). Encourage	
	students to observe and	
	compare these variations,	
	reinforcing their	
	understanding that the shape	
	itself remains consistent	
	regardless of how it is	
	oriented or scaled.	
K.G.A.2 - WALT	Naming Shapes Activity:	ELL: Model and Provid
correctly name cubes,	Students will practice identifying and correctly	Example. Establish a
cones, cylinders, and	naming cubes, cones,	non-verbal cue to redirec
spheres	cylinders, and spheres	students when not on
	through a hands-on	task. Students may use a
	exploration. Begin by	bilingual dictionary.
	displaying real objects or	

		pictures representing each	At Risk: Individualized
		shape (e.g., wooden blocks	as needed
		for cubes, traffic cones for	IEP/504:
		cones, cardboard tubes for	Modifications/Accommo
		cylinders, balls for spheres).	dations a stated in IEP
		Introduce each shape one by	dations a stated in 1121
		one, showing its unique	
		characteristics (e.g., cubes	
		have flat faces, cones have a	
		pointed end, cylinders are like	
		cans, spheres are perfectly	
		round). Encourage students to	
		repeat the names of the	
		shapes as you show them and	
		discuss their defining	
		features. Next, ask students to	
		point to or pick up objects	
		around the classroom or	
		outdoors that match each	
		shape category. Provide	
		positive reinforcement as they	
		correctly name each shape	
		and discuss their findings	
		together.	
K.G.A.3 – WALT		Flat Shape Exploration:	ELL: Model and Provide
two-dimensional shapes		Students will explore and	Example. Establish a
are "flat" (lying in a		identify two-dimensional	non-verbal cue to redirect
plane)		shapes, also known as "flat"	students when not on
piane)		shapes, that lie in a plane.	task. Students may use a
		Begin by presenting various	bilingual dictionary.
		examples of two-dimensional	At Risk: Individualized
		shapes such as squares,	as needed
		circles, triangles, rectangles,	
		and hexagons. Discuss with	IEP/504:
		students how these shapes are	Modifications/Accommo
		flat and do not have depth or	dations a stated in IEP
		thickness. Show real-life	
		examples of each shape, such	
		as a square tile, a circular	
		clock face, a triangular slice	
		of pizza, a rectangular book,	
		and a hexagonal nut.	
		Encourage students to touch	

K.G.A.3 – WALT three-dimensional shapes are "solid"	Standard K.G.A.3 Question: Look at the shapes on the board. Identify which shapes are two-dimensional (flat) and which are three-dimensional (solid).	and examine these objects to understand their flat nature. Then, ask students to find and point out other flat shapes in their environment, such as shapes on posters, windows, or classroom objects. Discuss the characteristics of each shape and reinforce their understanding that two-dimensional shapes lie flat on a surface. Solid Shape Exploration: Students will explore and identify three-dimensional shapes, also known as "solid" shapes, that have depth and volume. Begin by presenting various examples of	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary.
		cylinders, and spheres. Discuss with students how these shapes are solid and occupy space, unlike flat shapes which lie in a plane. Show real-life examples of each shape, such as a cube-shaped block, a cone-shaped party hat, a cylinder-shaped can, and a sphere-shaped ball. Encourage students to touch and examine these objects to understand their solid nature. Then, ask students to find and point out other solid shapes in their environment, such as objects on their desks, toys, or classroom decorations. Discuss the characteristics of each shape and reinforce their understanding that	IEP/504: Modifications/Accommo dations a stated in IEP

	three-dimensional shapes are	
	solid and occupy space.	
K.G.A.3 – WALT	Shape Identification Activity:	ELL: Model and Provid
identify shapes as	Students will explore and	Example. Establish a
two-dimensional or	identify shapes as either	non-verbal cue to redire
three-dimensional		students when not on
	three-dimensional (solid).	task. Students may use
	Begin by presenting various	bilingual dictionary.
	examples of shapes such as	At Risk: Individualized
	squares, circles, triangles,	as needed
	rectangles, cubes, cones,	
	cymiders, and spheres.	IEP/504:
		Modifications/Accomm
		dations a stated in IEP
	shape: two-dimensional	
	shapes lie flat in a plane,	
	while three-dimensional	
	shapes are solid and occupy	
	space. Show real-life	
	examples of each type of	
	shape, such as a square tile	
	(2D), a cube-shaped block	
	(3D), a circular clock face	
	(2D), a cone-shaped party hat	
	(3D), a triangular slice of pizza (2D), a cylinder-shaped	
	can (3D), and a spherical ball	
	(3D). Encourage students to	
	touch and examine these	
	objects to understand their	
	dimensional characteristics.	
	Then, ask students to sort and	
	classify each shape into the	
	appropriate category of	
	two-dimensional or	
	three-dimensional on a	
	sorting mat or worksheet.	
	Discuss their reasoning	
	behind each classification,	
	reinforcing their	
	understanding of shape	
	dimensions.	

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of
	Failure, 504) and Reflections
K.DL.A.1 Formative Assessment Question:	ELL: Model and Provide Example.
Show students a collection of objects (e.g., toys, classroom items) and ask them to classify them into	Establish a non-verbal cue to redirect
three categories: objects that can be reused, objects that can be recycled, and objects that must be	students when not on task. Students
placed in the trash. Have students explain their reasoning for placing each object into its category,	may use a bilingual dictionary.
focusing on their understanding of reuse, recycling, and waste management.	At Risk: Individualized as needed
	IEP/504:
K.G.A.1 Formative Assessment Question:	Modifications/Accommodations a
Present students with pictures of objects in the classroom or outdoors and ask them to describe the	stated in IEP
shapes of each object using specific shape names (e.g., square, circle, triangle). Then, prompt them to	
use positional terms (above, below, beside, in front of, behind, next to) to describe the relative positions	
of these objects in relation to each other.	

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure,
	504) and Reflections
K.DL.A.1 Summative Assessment Question:	ELL: Model and Provide Example.
Provide students with a set of objects and ask them to classify them into categories of reuse, recycling,	Establish a non-verbal cue to redirect
and trash. Limit each category to a maximum of 10 objects. Students should count the number of objects	students when not on task. Students
in each category and then sort the categories by count from least to greatest or vice versa. This question	may use a bilingual dictionary.
evaluates their ability to classify, count, and sort objects based on specific criteria.	At Risk: Individualized as needed
	IEP/504:
K.G.A.2 Summative Assessment Question:	Modifications/Accommodations a
Show students pictures of shapes in various orientations and sizes (e.g., rotated squares, different-sized	stated in IEP
cylinders). Ask them to correctly name each shape regardless of its orientation or overall size. This	
assesses their understanding that the name of a shape remains consistent despite changes in its	
appearance.	

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure,
	504) and Reflections
Math and Environmental Science Integration:	ELL: Model and Provide Example.
Implement a recycling project where students collect and classify objects from their homes or school	Establish a non-verbal cue to redirect
into categories of reuse, recycling, and waste. They can count and tally the number of items in each	students when not on task. Students
category, then create graphs to visually represent their findings. This activity integrates mathematics	may use a bilingual dictionary.
(classification, counting, graphing) with environmental science (recycling awareness).	At Risk: Individualized as needed
	IEP/504:
Art and Geometry Exploration:	Modifications/Accommodations a stated
Have students create collages using shapes cut out from magazines or construction paper. Ask them to	in IEP
describe each shape they use (e.g., square for a window, circle for a sun) and position the shapes	
relative to each other (e.g., place the triangle above the square). This activity encourages creativity	
while reinforcing shape recognition and spatial relationships.	

Unit Title: Math - Count, Compose and Compare Numbers - Unit 3 - Module A

Grade level: Kindergarten Timeframe: 6 weeks

Rationale

Kindergarten – Count, Compose and Compare Numbers – Unit 3

In unit 3, learners continue to develop an understanding of number names and the count sequence by extending the count sequence to 50. They count by tens to 50 and represent up to 20 objects with written numbers. Learners continue to answer "how many" questions about groups of objects, explore the meaning of "equal," and use strategies to identify when the number of objects is equal to, greater than, or less than the number of objects in another group. As learners use written numerals, the abstract representation of groups of objects, more frequently, they understand that written numerals have a value and can be compared.

Learners reinforce their understanding of addition and subtraction within 10, and continue to model addition and subtraction using objects, fingers, mental images, drawings, sounds, acting out, verbal explanations, expressions or equations. They decompose larger numbers (up to 10) into pairs in multiple ways using objects or drawings and discover the number that makes 10 when added to a given number from 1 to 9. These experiences support fluency (accuracy and efficiency) for addition and subtraction within 5.

Foundational place value concepts are introduced in unit 3. Learners explore different ways to compose and decompose numbers 11 through 19 into ten ones and some additional number of ones using both concrete objects and drawings.

Spatial reasoning in this unit engages learners in comparing two and three-dimensional shapes and using informal language to describe their similarities and differences. Learners again classify objects into given categories, count the number of objects in each category, and sort the categories according to the number of objects in each.

Guiding Questions

- K.CC.A.1 How can we count to 100 by ones and by tens, and why is it important to understand both counting sequences?
- K.CC.A.2 What strategies can we use to count forward from any given number within our counting sequence, and why is this skill useful in everyday situations?
- K.CC.B.4 How do we connect the act of counting to understanding the quantity or cardinality of objects, and why is this understanding important in mathematics?

Why is it essential to pair each object with a unique number name and understand that the order of counting does not affect the total quantity?

K.CC.B.5 - How can we use counting to answer questions about quantities in different arrangements (line, array, circle, scattered), and why is this skill valuable for solving real-world problems?

K.CC.C.6 - How can we determine if one group of objects has more, fewer, or the same number as another group, and why is this skill important in comparing quantities?

K.CC.C.7 - How do we compare two numbers written as numerals between 1 and 10, and what strategies can we use to make these comparisons meaningful?

Standards

Standards (Taught and Assessed):

- **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.B.4** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - 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.

Key: Major Cluster Supporting Cluster OAdditional Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.

- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- <u>CRP4</u>. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- <u>CRP11</u>. Use technology to enhance productivity.
- Social-Emotional Learning Competencies

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure,
	504) and Reflections
Pre-assessment Question 1: K.CC.A.1	ELL: Model and Provide Example.
Can you count aloud from 1 to 100? Please demonstrate by counting by ones and then by tens.	Establish a non-verbal cue to redirect
	students when not on task. Students may
Pre-assessment Question 2: K.CC.B.4	use a bilingual dictionary.
Show me how you would count a group of five objects. Describe how you pair each object with a	At Risk: Individualized as needed
number name and ensure each number name corresponds to one object.	IEP/504:
	Modifications/Accommodations a stated
Pre-assessment Question 3: K.CC.C.7	in IEP
Compare the numbers 3 and 7 using written numerals. Explain which number is greater and how you	
determined your answer.	

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
WALT count by ones to 50 WALT count by tens to 50	*Pattern in numbers, repeat 1-9 as you count *Sing Counting by 10s song- Jack Hartmann on YouTube	Standard K.CC.A.1 Question: Count aloud from 1 to 100 by ones. Now count aloud from 10 to 100 by tens.	Counting to 50 Activity: Students will engage in a counting activity using two different methods: counting by ones and counting by tens up to 50. Begin by providing a number line or a chart with numbers 1 to 50 displayed prominently. Start with counting by ones together as a group, encouraging students to say each number clearly and sequentially. After practicing counting by ones, introduce counting by tens. Model how to count by tens starting from 10 up to 50, emphasizing the pattern of skipping digits and focusing on the ending digits (e.g., 10, 20, 30, 40, 50). Then, divide students into pairs or small groups and provide them with number cards or a hundred chart. Ask them to take turns counting aloud by ones and by tens,	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP
K.CC.A.2 – WALT count on from a number other than 1 to 50	-Use Hundreds chart -Pattern in numbers	Standard K.CC.A.2 Question: Start counting from the number 7 and continue up to 20.	using the resources provided. Counting On Activity: Students will practice counting on from different starting points to reach 50. Begin by choosing a starting number (e.g., 20) and display it prominently. Ask students to take turns counting aloud, continuing from the chosen number up to 50. Encourage them to use clear and sequential counting, emphasizing each number as they progress. Provide support as needed to ensure students understand the concept of counting on from a given number. Repeat the activity with different starting numbers (e.g., 30,	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP

K.CC.B.4.A- WALT when counting, each object is paired with only one number name. WALT say the number name for each object in a group up to 20 objects when counting	Count and cross off as counting	Standard K.CC.B.4a Question: Count the objects in this group, saying the number names in order. Pair each object with one and only one number name.	40) to reinforce the skill of counting on effectively. Counting with Objects Activity: To reinforce the concept of pairing each object with a unique number name and saying the number name for each object in a group up to 20: Begin by gathering a collection of objects such as counters, toys, or classroom items. Place them in a visible location where all students can see them clearly. Assign each student a turn to pick up an object and state its corresponding number name aloud. For example, a student might pick up a toy car and say "one," then another student might pick up a book and say "two," and so on. Emphasize that each object should be counted in order without skipping or repeating number names. After each student has had a turn, encourage the class to count together as a group, ensuring each object is paired with the correct number name. This activity helps students practice	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP
			as a group, ensuring each object is paired with the correct number name.	
WALT when counting a set of objects up to 20, the last number tells the total number of objects	Last number said strategy Count and cross off as counting	Standard K.CC.B.4b Question: Count the objects in this group. What is the total number of objects? Does this number change if we	• i-ready	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed

WALT after counting a set of objects up to 20, the total is the same even when the arrangement or order is changed		rearrange the objects? Standard K.CC.B.4c Question: If we have 5 objects		IEP/504: Modifications/Accommodations a stated in IEP
K.CC.B.4.C – WALT when given a number between 0 and 20, the next number is one larger than the given number	Pattern in numbers when counting	and add one more, what number do we have now? Explain how each successive number name refers to a quantity that is one larger.	In this activity, students will practice counting sequentially from a given number between 0 and 20. Begin by displaying a number card showing a number within this range, such as 12. Ask students to identify the number and then state the next number in the sequence, reinforcing that each successive number is one larger than the previous one. Encourage students to take turns drawing number cards, identifying the numbers, and verbally stating the next number in the sequence. This hands-on approach helps students grasp the concept of numerical order and counting progression, promoting fluency in counting from any given number up to 20.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP
K.CC.B.5 – WALT answer "how many" questions about groups of objects up to 20 in a line, rectangular array, and circle by counting	-Count and cross off as count	Standard K.CC.B.5 Question: Count to answer "how many?" questions about these 15 things arranged in a circle. Now, given the number 12, count out 12 objects from this pile.	In this activity, students will practice answering "how many" questions about groups of objects arranged in different formations, up to a total of 20 objects. Begin by displaying several arrangements of objects, including a line, rectangular array, and circle. Prompt students to select one arrangement and count the objects methodically, ensuring they count each item and accurately determine the total. Encourage them to verbally state the number of objects they counted. Rotate through the different arrangements, providing opportunities for each student to engage in counting and answering	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP

K.CC.C.6 WALT equal means the same amount WALT identify when the number of objects is equal to, greater than, or less than the number of objects in another group by matching or counting the number of objects in both groups	Vocabulary flashcards for greater/lesser/equal to	Standard K.CC.C.6 Question: Look at these two groups of objects. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in the other group using matching and counting strategies.	"how many" questions independently. This hands-on approach fosters numerical fluency and reinforces the skill of counting objects in various configurations, preparing students to confidently respond to questions about quantities in real-world contexts. i-ready	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP
K.CC.C.7 – WALT compare two written numbers between 1 and 10	Vocabulary flashcards for greater and lesser	Standard K.CC.C.7 Question: Compare these two numbers: 6 and 9. Which number is greater? Which number is less?	In this activity focused on comparing written numbers between 1 and 10, students will engage with pairs of number cards displayed in random order. Each pair will consist of two distinct numerals, and students will be prompted to select a pair, identify both numbers, and then determine their comparative value (greater than, less than, or equal to). Through this hands-on exercise, students will articulate their reasoning behind each comparison, fostering a deeper understanding of numerical relationships and strengthening their ability to interpret and compare written numerals effectively within the specified range.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of
	Failure, 504) and Reflections
Question for K.CC.A.1: Ask students to count aloud by ones up to a random number between 50 and	ELL: Model and Provide Example.
100. Observe their accuracy and fluency in counting.	Establish a non-verbal cue to redirect
Question for K.CC.A.2: Provide students with a starting number within a known sequence (e.g., 30)	students when not on task. Students
and ask them to count forward to 50. Assess their ability to continue counting accurately from a given	may use a bilingual dictionary.
starting point.	At Risk: Individualized as needed
	IEP/504:
	Modifications/Accommodations a
	stated in IEP

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Question for K.CC.B.5: Present students with a picture of objects arranged in a line, rectangular array, and circle. Ask them to choose one arrangement and count the objects, then write down the total number counted. Question for K.CC.C.7: Show students two written numerals between 1 and 10 (e.g., 5 and 8) and ask them to circle the greater number. This assesses their understanding of numerical comparisons using written numerals.	ELL: Model and Provide Example.

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Math and Science Connection:	ELL: Model and Provide Example.
Explore counting and cardinality in the context of ecological studies. Students can count and categorize	Establish a non-verbal cue to redirect
objects found in nature (e.g., leaves, rocks) and compare their quantities using counting strategies	students when not on task. Students
learned in math.	may use a bilingual dictionary.
	At Risk: Individualized as needed
Math and Physical Education Connection:	

Integrate counting exercises into physical activities such as relay races or obstacle courses where students count objects or steps as they move through different stations. This reinforces counting skills in a dynamic and engaging way.

IEP/504:

Modifications/Accommodations a stated in IEP

Unit Title: Math - Count, Compose and Compare Numbers - Unit 3 - Module B

Grade level: Kindergarten Timeframe: 5 weeks

Rationale

Kindergarten – Count, Compose and Compare Numbers – Unit 3

In unit 3, learners continue to develop an understanding of number names and the count sequence by extending the count sequence to 50. They count by tens to 50 and represent up to 20 objects with written numbers. Learners continue to answer "how many" questions about groups of objects, explore the meaning of "equal," and use strategies to identify when the number of objects is equal to, greater than, or less than the number of objects in another group. As learners use written numerals, the abstract representation of groups of objects, more frequently, they understand that written numerals have a value and can be compared.

Learners reinforce their understanding of addition and subtraction within 10, and continue to model addition and subtraction using objects, fingers, mental images, drawings, sounds, acting out, verbal explanations, expressions or equations. They decompose larger numbers (up to 10) into pairs in multiple ways using objects or drawings and discover the number that makes 10 when added to a given number from 1 to 9. These experiences support fluency (accuracy and efficiency) for addition and subtraction within 5.

Foundational place value concepts are introduced in unit 3. Learners explore different ways to compose and decompose numbers 11 through 19 into ten ones and some additional number of ones using both concrete objects and drawings.

Spatial reasoning in this unit engages learners in comparing two and three-dimensional shapes and using informal language to describe their similarities and differences. Learners again classify objects into given categories, count the number of objects in each category, and sort the categories according to the number of objects in each.

Guiding Questions

K.OA.A.2 Solve addition and subtraction word problems within 10:

- How can we use objects or drawings to solve addition and subtraction problems within 10?
- What strategies can we use to understand and solve word problems involving addition and subtraction?

K.OA.A.5 Demonstrate fluency for addition and subtraction within 5:

- How can we practice adding and subtracting within 5 to become quicker and more accurate?
- Why is it important to know how to add and subtract small numbers fluently?

K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way:

- How can we break down numbers into different pairs to add up to 10?
- Why is it useful to know multiple ways to decompose numbers?

K.OA.A.4 Find the number that makes 10 when added to a given number (1 to 9):

- How can we find the missing number that adds up to 10 with a given number?
- What strategies can we use to solve problems involving making 10?

K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones:

- How can we break down numbers from 11 to 19 into groups of ten and some ones?
- What are different ways we can show the composition and decomposition of these numbers?

Standards

Standards (Taught and Assessed):

- **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.
- Climate Change Example: Students may use counters when adding to find the total number of trees that they and a partner observed (e.g., from their front door, in a backyard, from a classroom window). With prompting and support, they may ask and answer questions about how trees may reduce the warming effect of sunlight.
- **K.OA.A.5** Demonstrate fluency for addition and subtraction within 5.
- **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).
- **K.OA.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.
- **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.

Key: Major Cluster Supporting Cluster OAdditional Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.
- Social-Emotional Learning Competencies

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment Pre-Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure,
	504) and Reflections
Pre-assessment for K.OA.A.2 (Solve addition and subtraction word problems within 10):	ELL: Model and Provide Example.
	Establish a non-verbal cue to redirect
• Show a picture of two groups of objects (e.g., 3 apples in one group and 4 apples in another).	students when not on task. Students
Ask: "How many apples are there in total?" Encourage students to use objects or drawings to	may use a bilingual dictionary.
solve the problem.	At Risk: Individualized as needed
	IEP/504:
Pre-assessment for K.OA.A.3 (Decompose numbers less than or equal to 10 into pairs):	Modifications/Accommodations a
Provide a number (a.c. () and ask students to show two different ways to decompose it into	stated in IEP
• Provide a number (e.g., 6) and ask students to show two different ways to decompose it into pairs using objects or drawings (e.g., $6 = 2 + 4$ and $6 = 3 + 3$). Record their responses with	
pairs using objects of drawings (e.g., $6-2+4$ and $6-3+3$). Record their responses with drawings or equations.	
drawings of equations.	
Pre-assessment for K.NBT.A.1 (Compose and decompose numbers from 11 to 19 into ten ones	
and some further ones):	
• Show a number between 11 and 19 (e.g., 15) and ask students to represent it with objects or	
drawings as a combination of ten ones and some additional ones (e.g., $15 = 10 + 5$). Have them	
explain how they decomposed the number.	

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
WALT Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	Model and count using cubes and 2 ten frames and drawings Use mathboard to draw objects and write their numbers Act out the problem	Standard K.OA.A.2 Question: There are 3 apples on the table. You add 4 more apples to the table. How many apples are on the table now? Use objects or drawings to show your answer.	Climate Change Example: Students may use counters when adding to find the total number of trees that they and a partner observed (e.g., from their front door, in a backyard, from a classroom window). With prompting and support, they may ask and answer questions about how trees may reduce the warming effect of sunlight.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP
k.OA.A.3 – WALT decompose numbers less than or equal to 10 in pairs e.g. by using objects or drawings	Model and count using cubes and 2 ten frames and drawings Use mathboard to draw objects and write their numbers		Give each student a set of small objects like counters or cubes. Display a number (e.g., 8) on the board and ask students to find different ways to pair the objects to make that number. They can work individually or in pairs to explore combinations like 5 + 3, 4 + 4, and so on. Encourage them to use their objects to physically represent each pair and record their combinations with drawings or equations (e.g., 8 = 5 + 3). This hands-on activity helps reinforce understanding of number relationships and	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP

K.OA.A.3 – WALT record the decomposition of numbers less than or equal to 10 in pairs with a drawing or equation. K.OA.A.3 – WALT	Model and count using cubes and 2 ten frames and drawings Use mathboard to draw objects and write their numbers	Standard K.OA.A.3 Question: Show two different ways to make the number 7 using objects or drawings. Write a drawing or equation for each way.	different ways numbers can be composed. Provide each student with a worksheet or a piece of paper divided into sections. Display a number (e.g., 7) on the board and ask students to decompose it into pairs using drawings or equations. For example, they can draw 7 circles and then split them into groups to show pairs (e.g., 7 = 5 + 2). Alternatively, they can write equations to represent the	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP
decompose numbers less than or equal to 10 in pairs in more than one way e.g. by using objects or drawings and record the decompositions with a drawing or equation	Pattern in numbers, repeat 1-10 as you count Model and count using cubes and 2 ten frames and drawings Use mathboard to draw objects and write their numbers		equations to represent the pairs (e.g., 7 = 4 + 3). Encourage students to use different colors for each part of the decomposition to visually distinguish between the pairs.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP
K.OA.A.4 – WALT find the number that makes 10 when added to a given number from 1 to 9 (e.g. using objects or drawings) WALT record the numbers that make 10 with a drawing or equation	Model and count using cubes and 2 ten frames and drawings Use mathboard to draw objects and write their numbers Model and count using cubes and 2 ten frames and drawings Use mathboard to draw objects and write their numbers	Standard K.OA.A.4 Question: If you have 6, what number do you need to add to make 10? Use objects or drawings to find the answer and record it with a drawing or equation.	Provide students with a set of counters or small objects. Show them a number from 1 to 9 (e.g., 6) and ask them to find how many more objects they need to add to make 10. Students can use their objects to physically represent the given number and the additional objects needed to reach 10. For example, if they start with 6 objects, they would add 4 more to make 10. They can record their findings by drawing the objects and writing the	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP

K.OA.A.5 – WALT represent addition and subtraction within 5 using objects, pictures, numbers, and words (working towards accuracy and efficiency)	Model and count using cubes and 2 ten frames and drawings Use mathboard to draw objects and write their numbers	Standard K.OA.A.5 Question: What is 3 + 2? Now, what is 5 - 1? Solve these problems quickly and without using objects or drawings.	equation (e.g., 6 + 4 = 10). Encourage them to explore different combinations for each number and document their results clearly with drawings and equations. Give each student a small collection of objects such as counters or cubes. Begin by displaying a simple addition or subtraction problem (e.g., 3 + 2 or 4 - 1) on the board. Ask students to use their objects to physically represent the problem, showing both the starting amount and the result. They should also draw pictures to illustrate the problem and write the corresponding numbers and words to describe their process (e.g., "3 + 2 = 5"). Encourage them to explore different ways to solve each problem and to work towards accuracy and efficiency in their representations.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP
K.NBT.A.1 – WALT compose ten ones and some further ones (e.g. using objects or drawings) into numbers 11 to 19 and record it with a drawing or equation	Model and count using cubes and 2 ten frames and drawings Use mathboard to draw objects and write their numbers	Standard K.NBT.A.1 Question:	Provide students with a collection of counters or small objects. Display a number between 11 and 19 (e.g., 14) on the board. Ask students to use their objects to represent this number by composing it into ten ones and some further ones. For example, for the number 14,	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed

		Compose the number 14 using ten ones and some further ones. Use objects or drawings to show how you can make 14, and write an equation to show your composition.	they can use 1 group of ten objects and 4 additional ones. They should record their composition using both a drawing and an equation. Encourage students to explore different combinations for each number and to articulate their thinking clearly through their representations.	IEP/504: Modifications/Accommo dations a stated in IEP
K.NBT.A.1 – WALT decompose numbers 11 to 19 into ten ones and some further ones (e.g. using objects or drawings) and record it with a drawing or equation	Pattern in numbers, repeat 1-19 as you count Model and count using cubes and 2 ten frames Use mathboard to practice number words		Provide students with a set of counters or small objects. Display a number between 11 and 19 (e.g., 17) on the board. Ask students to decompose this number into ten ones and some further ones using their objects. For example, for the number 17, students can represent it as 1 group of ten objects and 7 additional ones. They should record their decomposition using both a drawing and an equation, such as 17 = 10 + 7. Encourage students to explore different ways to break down each number and to clearly document their work through drawings and equations. This activity helps reinforce understanding of place value and the composition of numbers in the range of 11 to 19 using concrete materials.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP
K.NBT.A.1 – WALT the numbers 11 to 19 are composed of ten ones and one, two, three, four, five,	Pattern in numbers, repeat 1-19 as you count Model and count using cubes and 2 ten frames		Begin by discussing with students that numbers from 11 to 19 are composed of ten ones and some additional ones. Show examples such as $11 = 10 + 1$, $12 = 10 + 2$, up	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on

six, seven, eight, or nine more ones	Use mathboard to practice number words		to $19 = 10 + 9$. Provide students with counters or small objects and ask them to represent each number from 11 to 19 using these objects. For instance, for the number 14, students should use 1 group of ten objects and 4 additional ones. Encourage them to record each composition with a drawing or equation, such as $14 = 10 + 4$. This activity helps reinforce the concept that these numbers are composed of a group of ten ones and some more ones, fostering understanding of place value and number composition.	task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP
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Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure,
	504) and Reflections
Question 1 (K.OA.A.2): Present a word problem involving addition within 10, such as "Tommy has 3	ELL: Model and Provide Example.
apples. He buys 4 more apples. How many apples does Tommy have now?" Ask students to use	Establish a non-verbal cue to redirect
objects or drawings to solve the problem and explain their method.	students when not on task. Students
Question 2 (K.OA.A.2): Give students a subtraction word problem, for example, "Sally had 8	may use a bilingual dictionary.
cookies. She ate 2 cookies. How many cookies does Sally have left?" Have students represent the	At Risk: Individualized as needed
problem with objects or drawings and write an equation to show their solution.	IEP/504:
Question 3 (K.OA.A.3): Provide students with a number, like 7, and ask them to decompose it into	Modifications/Accommodations a stated
pairs in more than one way (e.g., $7 = 4 + 3$ and $7 = 5 + 2$). Have them record each decomposition with	in IEP
a drawing or equation.	

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Question 1 (K.OA.A.2): Present a series of addition and subtraction word problems within 10. Have students solve each problem using objects or drawings to represent the problem, and record their answers with drawings or equations. Question 2 (K.OA.A.4): Give students a scenario where they need to find the number that makes 10 when added to a given number (e.g., 6 + _ = 10). Ask them to demonstrate their solution using objects or drawings and record their answer with a drawing or equation. Question 3 (K.OA.A.3): Provide students with numbers less than or equal to 10 and ask them to decompose each number into pairs in different ways. Have them record each decomposition with drawings or equations, demonstrating their understanding of decomposing numbers.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Activity 1 (Science Integration - K.OA.A.2): Plant Growth Experiment: Students plant seeds and observe their growth over time. They record the number of plants that sprout each day and create addition and subtraction word problems based on their observations. For example, "If 3 plants sprouted today and 2 more sprouted tomorrow, how many plants sprouted in total?" This activity integrates math skills with scientific observation and data recording. Activity 2 (Art Integration - K.OA.A.5): Visual Story Problems: Students create visual story problems related to addition and subtraction within 5. They draw scenes where characters or objects interact (e.g., sharing apples or counting toys) and write corresponding word problems. This encourages creativity while reinforcing fluency in basic arithmetic. Activity 3 (Social Studies Integration - K.OA.A.2): Community Survey: Students conduct a survey in their community to gather data on favorite pets or modes of transportation. They use this data to create addition and subtraction word problems, demonstrating fluency within 5. This activity connects math skills with real-world data collection and analysis.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP

Grade level: Kindergarten Timeframe: 2 weeks

Rationale

Kindergarten – Count, Compose and Compare Numbers – Unit 3

In unit 3, learners continue to develop an understanding of number names and the count sequence by extending the count sequence to 50. They count by tens to 50 and represent up to 20 objects with written numbers. Learners continue to answer "how many" questions about groups of objects, explore the meaning of "equal," and use strategies to identify when the number of objects is equal to, greater than, or less than the number of objects in another group. As learners use written numerals, the abstract representation of groups of objects, more frequently, they understand that written numerals have a value and can be compared.

Learners reinforce their understanding of addition and subtraction within 10, and continue to model addition and subtraction using objects, fingers, mental images, drawings, sounds, acting out, verbal explanations, expressions or equations. They decompose larger numbers (up to 10) into pairs in multiple ways using objects or drawings and discover the number that makes 10 when added to a given number from 1 to 9. These experiences support fluency (accuracy and efficiency) for addition and subtraction within 5.

Foundational place value concepts are introduced in unit 3. Learners explore different ways to compose and decompose numbers 11 through 19 into ten ones and some additional number of ones using both concrete objects and drawings.

Spatial reasoning in this unit engages learners in comparing two and three-dimensional shapes and using informal language to describe their similarities and differences. Learners again classify objects into given categories, count the number of objects in each category, and sort the categories according to the number of objects in each.

Guiding Questions

Standard K.G.B.4 How can we use informal language to describe and compare the similarities and differences between two- and three-dimensional shapes of various sizes and orientations?

Standard K.DL.A.1 How can we classify objects into categories, count the objects in each category, and sort the categories by the number of objects they contain? How does this help us understand and organize the world around us?

Standards
tandards (Taught and Assessed):
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.DL.A.1 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Clarification:
Limit category counts to be less than or equal to 10)
Climate Change Example: With prompting and support, students may ask and answer questions about objects that may be reused, objects that may be recycled, and objects that must be placed in the trash. Students may classify used objects into those categories with no more than 10 objects in each category. Students may count the number of objects in each category and sort the categories by count.
Key: ■ Major Cluster □ Supporting Cluster ○ Additional Cluster Highlighted Career Ready Practices and 21 st Century Themes/Skills
• 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
• 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
• 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
• 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
• CRP1. Act as a responsible and contributing citizen and employee.
CRP2. Apply appropriate academic and technical skills.
• <u>CRP4. Communicate clearly and effectively and with reason.</u>
• CRP6. Demonstrate creativity and innovation.
 CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
<u>CRP11. Use technology to enhance productivity.</u>
Social-Emotional Learning Competencies
Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment Pre-Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure,
	504) and Reflections

Standard K.G.B.4

- 1. **Question:** Look at these two shapes, a square and a cube. Can you describe how they are the same and how they are different using your own words?
- 2. **Question:** Can you find and name a shape in the classroom that has corners and a shape that does not have corners? What makes them different?

Standard K.DL.A.1

- 1. **Question:** Here are 10 objects: 4 toy cars, 3 blocks, and 3 crayons. Can you put them into groups based on what they are? How many objects are in each group?
- 2. **Question:** Look at these pictures of objects. Can you sort them into categories of things that can be reused, recycled, or thrown away? How many objects are in each category?

ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary.

At Risk: Individualized as needed IEP/504:

Modifications/Accommodations a stated in IEP

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
WALT describe the parts of two- and three-dimensional shapes (e.g., number of sides, faces, vertices/ "corners") WALT compare by describing similarities, differences, parts, and other attributes of two- and three-dimensional shapes using informal language	*Use manipulatives *Draw and create *Use a variety of objects	Question: Can you describe the parts of a square and a cube? How are they similar and how are they different? Question: Look at these two shapes: a triangle and a pyramid. Can you tell me what is the same about them and what is different using your own words?	Shape Exploration Centers Set up different centers around the classroom, each with a variety of two- and three-dimensional shapes for students to explore. At one center, provide clay and sticks for students to create their own shapes and discuss the parts (sides, vertices, faces) with a partner. At another center, have a collection of everyday objects (e.g., a ball, a book, a can) and ask students to sort them into	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP

			two- and three-dimensional categories. Provide magnifying glasses and rulers at another center for students to closely examine and measure the shapes, noting their attributes such as the number of sides or faces. Finally, have a drawing center where students can draw their favorite shapes and label their parts. Rotate the students through each center, giving them opportunities to describe and compare the shapes they find, using informal language. After the rotations, gather the class to share their discoveries and discuss the similarities and differences they observed.	
WALT Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Clarification: Limit category counts to be less than or equal to 10)	*Use manipulatives *Draw and create *Use a variety of objects *Use manipulatives *Draw and create *Use a variety of objects *Use a variety of objects Climate Change Example: With prompting and support, students may ask and answer questions about objects that may be reused, objects that may be recycled, and objects that must be placed in the trash. Students may classify used objects into those categories with no more than 10 objects in each category.	Question: Here are 10 buttons. Can you sort them into groups based on their color and count how many are in each group? Question: Can you classify these objects (blocks, crayons, and toy cars) into groups and then tell me how many objects are in each group? Which group has the most, and which has the least?	Recycling Sorting Station Create a recycling sorting station in the classroom with bins labeled for different categories: reusable, recyclable, and trash. Provide students with a collection of items (e.g., paper scraps, plastic bottles, and old toys). Students will work in small groups to classify the items into the correct bins. Each group will count the number of items in each bin and record the totals on a chart. Once all items are sorted and counted, students will	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommo dations a stated in IEP

Students may count the number of objects in each category and sort the categories by count.	compare the counts and discuss which category has the most and the least items. This activity will help students understand how to classify objects, count the number of objects in each category, and sort the categories by count while also learning about recycling and environmental responsibility.
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Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Can you describe the parts of a circle and a sphere? How are they similar and how are they different?	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education,
	Gifted, At-risk of Failure, 504) and
	Reflections
Compare a rectangle and a rectangular prism. Describe their parts (number of sides, faces, vertices) and explain	ELL: Model and Provide Example.
how they are similar and different in terms of their attributes and shapes.	Establish a non-verbal cue to redirect
	students when not on task. Students may
	use a bilingual dictionary.
	At Risk: Individualized as needed
	IEP/504: Modifications/Accommodations
	a stated in IEP

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Math and Language Arts – Shape Stories: Have students choose two- and three-dimensional shapes and create a short story featuring these shapes as characters. They will describe the shapes' parts (sides, vertices, faces) and use informal language to compare their similarities and differences within the story. After writing, students can illustrate their stories. This activity integrates language arts (creative writing and storytelling) with math (describing and comparing shapes). Math and Physical Education – Shape Obstacle Course: Set up an obstacle course in the gym or playground with stations that feature different two- and three-dimensional shapes. Each station will have an activity where students must identify and describe the shapes. For example, they might have to crawl through a tunnel (cylinder), hop between hula hoops (circles), or stack blocks (cubes and rectangular prisms). After completing the obstacle course, students will discuss the shapes they encountered, describing their parts and comparing their attributes. This activity combines physical education (movement and coordination) with math (identifying and comparing shapes).	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a stated in IEP

Unit Title: Math – Represent Number Concepts and Model with Shapes – Unit 4 – Module A

Grade level: Kindergarten Timeframe: 5 weeks

Rationale

Kindergarten – Represent Number Concepts and Model with Shapes – Unit 4

In this unit, learners extend the count sequence to 100. They count by ones and tens and begin at various numbers. Using objects or drawings, learners continue to decompose numbers into pairs in multiple ways. They record numbers that make 10 with drawings and with equations, and demonstrate fluency for addition and subtraction within 5 by accurately and efficiently finding sums and differences. Learners continue to build

place value understanding by exploring different ways to compose and decompose numbers 11 through 19 into a ten and ones using objects and drawings. solve addition and subtraction word problems within 10 using objects, drawings, or other strategies.

Learners use spatial reasoning to model shapes in the world by building shapes from components (e.g., sticks and clay balls). They compose simple shapes to form larger shapes and describe measurable attributes of various objects. Learners explore early ideas about measurement. They understand that an object can have more than one measurable attribute, compare two objects that have a measurable attribute in common, and determine which object has "more of" or "less of" the attribute.

Guiding Questions

Standard K.CC.A.1 How can we count to 100 by ones and by tens, and why is it important to understand counting in sequences?

Standard K.CC.A.2 Why is it useful to be able to start counting from any number within a sequence, and how does this help us understand number patterns?

Standard K.OA.A.2 How can we use objects or drawings to solve addition and subtraction problems within 10, and how does this help us understand real-world situations?

Standard K.OA.A.3 How can we decompose numbers less than or equal to 10 into pairs in different ways, and why is this strategy helpful in solving math problems?

Standard K.OA.A.4 Why is finding the number that makes 10 when added to a given number important, and how does this help us understand number relationships?

Standard K.OA.A.5 How can we demonstrate fluency in adding and subtracting within 5, and why is fluency important in everyday math tasks?

Standard K.NBT.A.1 How can we compose and decompose numbers from 11 to 19 using objects or drawings, and why is understanding these compositions and decompositions important in understanding place value?

Standards

Standards (Taught and Assessed):

- **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.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.

Climate Change Example: Students may use counters when adding to find the total number of trees that they and a partner observed (e.g., from their front door, in a backyard, from a classroom window). With prompting and support, they may ask and answer questions about how trees may reduce the warming effect of sunlight.

- **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).
- **K.OA.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.
- **K.OA.A.5** Demonstrate fluency for addition and subtraction within 5.
- **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.

Key: Major Cluster Supporting Cluster OAdditional Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.
- Social-Emotional Learning Competencies

Instructional Plan				
Pre-Assessment and Reflection				
Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure,			
	504) and Reflections			

Standard K.CC.A.1

Count aloud from 1 to 100 by ones. Now count aloud from 10 to 100 by tens.

Standard K.CC.A.2

Start counting from the number 8 and continue up to 20. Write down the numbers as you count.

Standard K.OA.A.2

Emily had 5 marbles. She found 3 more marbles. How many marbles does Emily have now? Show your answer using objects or drawings.

Standard K.OA.A.3

Show two different ways to decompose the number 7 using objects or drawings. Record each decomposition with a drawing or equation.

ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary.

At Risk: Individualized as needed IEP/504:

Modifications/Accommodations a stated in IEP

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
WALT count by ones to 100 WALT count by tens to 100	Find patterns in numbers to count. *Count by 10's song on Youtube- Jack Hartmann *Use Hundreds chart	Can you count aloud from 1 to 100?	Number Line Hopscotch: Create a large number line on the floor using tape or chalk, extending from 1 to 100. Divide the class into small groups. Each group takes turns having one student at a time hop along the number line, counting aloud as they go from 1 to 100. Encourage students to help each other if they get stuck. This activity not only reinforces counting by ones to 100 but also adds a physical and interactive element to keep students	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodati ons a stated in IEP

			engaged and focused on the sequence of numbers.	
K.CC.A.2 – WALT count on from a number other than 1 to 100	*Use pattern in numbers to	Start counting from 15 and continue up to 30. Write down the numbers as you count.	Number Sequence Relay: Divide the class into teams and assign each team a starting number (e.g., Team A starts from 10, Team B starts from 20, etc.). Each team member takes turns counting aloud from their assigned starting number up to 100, continuing where the previous teammate left off. For example, if Team A starts at 10, the first student says "10," the next says "11," and so on up to 100. This activity encourages students to practice counting forward from various starting points and reinforces the concept of counting within a known sequence.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodati ons a stated in IEP

WALT Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	*Look for key terms Climate Change Example: Students may use counters when adding to find the total number of trees that they and a partner observed (e.g., from their front door, in a backyard, from a classroom window). With prompting and support, they may ask and answer questions about how trees may reduce the warming effect of sunlight.	Amy has 4 apples, and then she gets 3 more apples from her friend. How many apples does Amy have now? Show your answer using objects or drawings.	Math Story Problems Gallery Walk: Create several addition and subtraction word problems, each involving numbers within 10, and display them around the classroom. Provide students with sticky notes or small whiteboards. In pairs or small groups, students will rotate around the room, reading each problem, solving it using objects or drawings to represent the problem, and recording their answers on the sticky notes or whiteboards. Encourage students to discuss their solutions with each other and explain how they arrived at their answers.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodati ons a stated in IEP
K.OA.A.3 WALT decompose numbers less than or equal to 10 in pairs e.g. by using objects or drawings WALT record the decomposition of numbers less than or equal to 10 in pairs with a drawing or equation WALT decompose numbers less than or equal to 10 in pairs in more than one way e.g. by using objects or	*Reverse the pair order when adding to find turnaround fact * Trade cube color one cube at a time * Use a pattern.	Show two different ways to decompose the number 8 using objects or drawings. Record each decomposition with a drawing or equation.	Math Manipulative Exploration: Provide students with a set of math manipulatives such as counters, blocks, or cubes. Ask them to work in pairs to explore different ways to decompose numbers less than or equal to 10 into pairs using the manipulatives. For example, for the number 6, they might use 4 and 2, or 3 and 3. Each pair should record their decompositions using drawings or equations on a piece of paper. Afterward, have pairs share	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodati ons a stated in IEP

drawings and record the decompositions with a drawing or equation			their findings with the class, discussing the different ways they decomposed each number. This activity encourages hands-on exploration of number decomposition while reinforcing the use of drawings or equations to record mathematical thinking.	
WALT find the number that makes 10 when added to a given number from 1 to 9 (e.g. using objects or drawings) WALT record the numbers that make 10 with a drawing or equation	*Use a pattern	If you have 7 blocks, how many more blocks do you need to make 10? Show your answer using objects or drawings.	Make 10 Puzzles: Create a set of puzzle cards, each showing a number from 1 to 9. On the back of each card, students will use objects or drawings to illustrate how many more objects are needed to make 10 with the number shown on the front of the card. For instance, if the card shows the number 8, students will illustrate 8 objects and then show 2 more objects needed to make 10, recording their solution with a drawing or equation. This activity encourages students to explore different combinations that add up to 10 while reinforcing the use of objects or drawings to visualize mathematical concepts.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodati ons a stated in IEP
K.NBT.OA.A.5 – WALT represent addition and subtraction within 5 with accuracy and efficiency	*Draw a picture	Emma has 3 marbles, and then she receives 2 more marbles from her friend. How many marbles does Emma have now? Show your answer with a drawing or equation.	-Math Race to 5: Divide the class into pairs or small groups. Provide each group with a set of small objects (e.g., counters, beans, or cubes). Place a number line or a mat labeled from 0 to 5	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary.

			in front of each group. One student starts with a certain number of objects (e.g., 3) and adds or removes objects to reach a total of 5, showing their moves with objects or drawings on the number line or mat. The other student in the pair checks for accuracy and efficiency in solving the problem. They switch roles for the next round. This activity helps reinforce addition and subtraction within 5 while promoting accuracy and efficiency in mathematical operations.	At Risk: Individualized as needed IEP/504: Modifications/Accommodati ons a stated in IEP
K.NBT.A.1 – WALT compose and record numbers from 11 to 19 into a ten and some further ones (e.g. using objects or drawings) WALT decompose and record numbers 11 to 19 into a ten and some further ones (e.g. using objects or drawings) WALT the numbers 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones	*Use snapcubes *Use a Pattern	Show how you can decompose the number 14 into a ten and some further ones using objects or drawings. Record your answer with an equation.	Ten Frame Composition: Provide each student with a set of objects (e.g., cubes, counters) and a ten-frame chart. Ask students to use the objects to create different numbers between 11 and 19 by grouping ten objects and adding the remaining ones. For example, for the number 16, students will place 10 objects in the ten-frame and then add 6 more objects beside it. Students will then draw their composition on paper, showing the ten and the additional ones, and write an equation to represent their work (e.g., 16 = 10 + 6). This activity helps students understand the structure of numbers 11 to 19 and reinforces their ability to compose and decompose these numbers using visual	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodati ons a stated in IEP

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Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Counting and Decomposition: James has 5 toy cars. If he gets 2 more cars as a gift, how many cars does he	ELL: Model and Provide Example.
have now? Show your answer using objects or drawings. Then, decompose the number of cars into pairs in	Establish a non-verbal cue to redirect
more than one way. Record each decomposition with a drawing or equation.	students when not on task. Students may
	use a bilingual dictionary.
	At Risk: Individualized as needed
	IEP/504: Modifications/Accommodations a
	stated in IEP

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Addition and Fluency: Sarah has 8 pencils. She gives 4 pencils to her friend. How many pencils does Sarah	ELL: Model and Provide Example.
have left? Show your answer using objects or drawings. Then, demonstrate fluency in addition within 5 by	Establish a non-verbal cue to redirect
showing how you can add 2 more pencils to the remaining ones.	students when not on task. Students may
	use a bilingual dictionary.
	At Risk: Individualized as needed
	IEP/504: Modifications/Accommodations a
	stated in IEP

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education,
	Gifted, At-risk of Failure, 504) and Reflections
Math and Climate Change: Using objects or drawings, count the total number of trees you and a partner	ELL: Model and Provide Example.
observed (e.g., from your front door, in a backyard, or from a classroom window). Discuss how trees may reduce	Establish a non-verbal cue to redirect
the warming effect of sunlight. Then, decompose the total number of trees into groups of ten and some further	students when not on task. Students may
ones. Record each composition or decomposition by a drawing or equation.	use a bilingual dictionary.
	At Risk: Individualized as needed
	IEP/504: Modifications/Accommodations a
	stated in IEP

Unit Title: Math – Represent Number Concepts and Model with Shapes – Unit 4 – Module B

Grade level: Kindergarten Timeframe: 4 weeks

Rationale

Kindergarten – Represent Number Concepts and Model with Shapes – Unit 4

In this unit, learners extend the count sequence to 100. They count by ones and tens and begin at various numbers. Using objects or drawings, learners continue to decompose numbers into pairs in multiple ways. They record numbers that make 10 with drawings and with equations, and demonstrate fluency for addition and subtraction within 5 by accurately and efficiently finding sums and differences. Learners continue to build place value understanding by exploring different ways to compose and decompose numbers 11 through 19 into a ten and ones using objects and drawings, solve addition and subtraction word problems within 10 using objects, drawings, or other strategies.

Learners use spatial reasoning to model shapes in the world by building shapes from components (e.g., sticks and clay balls). They compose simple shapes to form larger shapes and describe measurable attributes of various objects. Learners explore early ideas about measurement. They understand that an object can have more than one measurable attribute, compare two objects that have a measurable attribute in common, and determine which object has "more of" or "less of" the attribute.

Guiding Questions

K.G.B.5 How can we use everyday materials to create and represent shapes, and how does this help us understand their characteristics?

K.G.B.6 What strategies can we use to combine basic shapes into more complex ones, and how does this help us understand the relationships between shapes?

K.G.B.4 How can we describe and compare shapes based on their properties such as sides, vertices, and dimensions, and how does this understanding apply to shapes in the world around us?

K.M.A.1 What are some ways we can measure and describe objects, and how does understanding measurable attributes help us categorize and compare objects?

K.M.A.2 How can we use measurements to compare objects, and what does this comparison tell us about the objects and their attributes?

K.M.B.3 Why is it important to understand the value and purpose of coins and dollar bills, and how does this knowledge help us in daily life?

Standards Standards (Taught and Assessed): K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. Elimate Change Example: Students may use sticks and clay to model trees and umbrellas and may then draw shapes (e.g., triangle, rectangle) to model those objects. With prompting and support, they may ask and answer questions about how trees and umbrellas may be used to reduce the warming effect of sunlight. **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?" L 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.M.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. Note: shapes include squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres. • K.M.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. Note: shapes include squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres. **K.M.B.3** Understand that certain objects are coins and dollar bills, and that coins and dollar bills represent money. Identify the values of all U.S. coins and the one-dollar bill. Supporting Cluster Additional Cluster Major Cluster

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.1.4.A.1 Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
- 9.1.4.A.2 Evaluate available resources that can assist in solving problems.
- 9.1.4.A.5 Apply critical thinking and problem-solving skills in classroom and family settings.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.

- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP11. Use technology to enhance productivity.
- Social-Emotional Learning Competencies

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure,
	504) and Reflections
<i>i-ready</i>	ELL: Model and Provide Example. Establish a non-verbal cue to
Unit summative assessment	redirect students when not on task. Students may use a bilingual
	dictionary.
	At Risk: Individualized as needed
	IEP/504: Modifications/Accommodations a stated in IEP

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
WALT Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	*Use manipulatives *Draw and create Climate Change Example: Students may use sticks and clay to model trees and umbrellas and may then draw shapes (e.g., triangle, rectangle) to model those objects. With prompting and support, they may ask and answer questions about how	*I-Ready *Spiral Review *Standards Assessment	Students will explore shapes by creating models using everyday materials such as sticks and clay balls. Begin by providing students with a variety of materials and ask them to choose two-dimensional shapes they want to create, such as triangles, squares, or circles. Encourage them to use the sticks to outline the shapes and the clay balls to represent vertices or corners. After constructing their	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed

K.G.B.6	trees and umbrellas may be used to reduce the warming effect of sunlight. *Use manipulatives	*I-Ready	models, have students draw these shapes on paper, labeling the sides, vertices, and any other distinguishing features they have incorporated. Students will explore how simple	IEP/504: Modifications/Acco mmodations a stated in IEP ELL: Model and
WALT simple shapes can join to compose larger shapes WALT compose simple shapes to form larger shapes	*Draw and create *Use a variety of objects	*Spiral Review *Standards Assessment	shapes can be combined to create larger shapes. Provide students with various simple shapes such as triangles, squares, rectangles, and circles, cut out from construction paper or cardstock. Start by demonstrating how two triangles with their full sides touching can be arranged to form a rectangle. Then, encourage students to work in pairs or small groups to explore other combinations. They can experiment with different arrangements and discuss how they can combine shapes to form larger ones, such as using triangles and rectangles to create a house shape or using circles and squares to create a clock face. After creating their shapes, students can draw and label their compositions, identifying the simple shapes used and the larger shape they formed. This activity not only reinforces understanding of geometric shapes and their relationships but also promotes teamwork and creative problem-solving skills.	Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Acco mmodations a stated in IEP
K.G.B.4 – WALT analyze two- and three-dimensional shapes in different sizes and orientations using informal language	*Use manipulatives *Draw and create *Use a variety of objects	Imagine you are explaining the differences between a cube and a cylinder to a friend who hasn't seen these shapes before. How would you describe each shape using informal language? Include at least two differences in their attributes such as sides,	Students will analyze two- and three-dimensional shapes in various sizes and orientations using informal language. Begin by providing students with a collection of geometric shapes such as cubes, spheres, cones, cylinders, squares, rectangles, triangles, and hexagons. Ask	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary.

K.G.B.4 – WALT a vertex or "corner" is where two sides meet K.G.B.4 – WALT some shapes (squares, triangles, rectangles, hexagons) have sides. K.G.B.4 – WALT the length of sides is an important attribute when naming shapes K.G.B.4 – WALT identify and describe sides of shapes using informal language K.G.B.4 - WALT analyze and describe the attributes of two dimensional shapes	*Vocabulary flashcards	vertices (corners), or overall shape. Identifying Vertices: Point to where the vertices are on a square and a triangle. How are they similar and different in terms of their vertices? Describing Shapes: Describe the sides of a rectangle and a hexagon. How many sides does each shape have, and are any sides equal in length? Explain using informal language.	students to work in pairs or small groups to examine these shapes closely. They should discuss and describe similarities, differences, and attributes of each shape using informal language. Encourage them to consider aspects like the number of sides, vertices (corners), edges, and whether sides are of equal length or different lengths. Students can rotate the shapes to observe them from different perspectives and discuss how their orientation affects their appearance. Afterwards, each group can present their findings to the class, summarizing their observations and conclusions about the shapes they analyzed. Shape Attribute Hunt: Provide students with a variety of two- and three-dimensional shapes (e.g., cubes, spheres, squares, triangles). Ask them to work in pairs to examine each shape closely. Students should identify and describe the sides, vertices, and any other attributes of each shape using informal language. Encourage them to compare the shapes they observe, noting similarities and differences in their attributes. Afterwards, each pair can present their findings to the class. Shape Comparison Drawing:	At Risk: Individualized as needed IEP/504: Modifications/Acco mmodations a stated in IEP ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary.
attributes of two dimensional shapes (e.g. number of sides, vertices/"corners") using informal language		Attribute Focus: • Why is the length of sides an important	Shape Comparison Drawing: Assign students to choose two shapes from a provided set (e.g., rectangle and hexagon). They should draw each shape and label	bilingual dictionary.

K.G.B.4 – WALT	attribute when	the sides, vertices, and any other	
compare by describing	naming shapes like	relevant attributes. Next, ask	
similarities, differences,	squares and triangles?	students to write a short paragraph	
parts, and other	Provide examples to	comparing the shapes they drew,	
attributes of two and	support your	using informal language to	
three-dimensional	explanation.	describe their similarities,	
shapes using informal	Comparing Shapes	differences, and how the length of sides contributes to their	
language	Comparing Shapes:	classification. This activity	
	 Compare a cube and 	encourages visual representation	
	a sphere by	skills and reinforces understanding	
	describing their	of shape attributes.	
	attributes such as	or shap c attriction.	
	sides, vertices, and		
	whether they have		
	equal sides. Use		
	informal language to		
	explain their		
	similarities and		
	differences.		
	Analyzing Two-Dimensional		
	Shapes:		
	_		
	 Choose two different 		
	shapes from your		
	collection (e.g.,		
	square and triangle).		
	Analyze and describe		
	their attributes, including the number		
	of sides and vertices.		
	How does their		
	orientation affect		
	their appearance?		
	<u> </u>		

K.M.A.1 – WALT objects have measurable attributes, such as length or weight.
K.M.A.1 – WALT describe measurable attributes of objects, such as length or weight.
K.M.A.1 – WALT describe several measurable attributes of a single object

*Use manipulatives

measure

*Use nonstandard units of

Identifying Measurable Attributes:

 Choose an object in the classroom and describe its measurable attributes, such as length or weight. How would you measure these attributes, and why are they important to describe?

Comparing Attributes:

• Compare the length of a pencil and a ruler. How are their lengths similar or different? Describe their lengths using appropriate measurement terms.

Describing Object Attributes:

• Describe several measurable attributes of a single object of your choice (e.g., a book). Include at least three attributes and explain why each attribute is important for understanding the object.

Measuring and Describing:

• Use a ruler to measure the length of

Attribute Exploration: Provide students with a variety of objects (e.g., toys, books, classroom supplies) with different measurable attributes. Ask them to explore each object and describe its measurable attributes, such as length or weight. Students can use rulers, scales, or measuring tapes to quantify these attributes and record their observations in a chart or table. Encourage them to discuss their findings with classmates, emphasizing the importance of each attribute in understanding the objects.

Measuring and Recording:

Assign students to select an object from home or school and measure its length and weight using appropriate tools. They should record their measurements and create a visual representation (e.g., a labeled diagram or chart) that illustrates the measurable attributes of their chosen object. After completing their visual representations, students can share their work with their peers, explaining their observations and the significance of the measured attributes. This activity promotes hands-on measurement skills and reinforces the concept of describing measurable attributes in objects.

ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Acco mmodations a stated in IEP

	a table. Describe the measurement in inches or centimeters, and discuss why understanding the table's length is important. Application of Attributes: Why is it important to describe the weight of objects like a ball and a book? Explain how knowing their weight can be useful in different situations.		
K.M.A.2 – WALT compare two objects that share a measurable attribute to see which object has "more of"/"less of" the attribute	*I-Ready *Spiral Review *Standards Assessment	*Flocabulary *Iready *Think Central on the spot and Interactive lesson *Standards based hands on activity	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Acco mmodations a stated in IEP

K.M.A.2 – WALT describe the difference between two objects that share the same measurable attribute**	*Use manipulatives *Vocabulary Flashcards	*I-Ready *Spiral Review *Standards Assessment	*Flocabulary *Iready *Think Central on the spot and Interactive lesson *Standards based hands on activity	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Acco mmodations a stated in IEP
K.M.B.3 Understand that certain objects are coins and dollar bills, and that coins and dollar bills represent money. Identify the values of all U.S. coins and the one-dollar bill.	Visual Aids and Charts • Posters and Charts: Display posters and charts in the classroom that show the different U.S. coins and dollar bills along with their values. • Coin Identification Chart: Create a chart that includes a picture of each coin, its name, and its value.	Utilize Assessments from the district mandated program. Teacher created assessments: Identification: Show the students a picture of a penny, nickel, dime, quarter, and a one-dollar bill. Ask them to name each one. "What is this coin called?" "What is this bill called?" Value Recognition: "How much is "a penny worth?"	Interactive Lessons with Real and Play Money Hands-On Activities: Provide students with real or play coins and dollar bills. Allow them to handle, observe, and compare the different types of currency. Coin Sorting: Give students mixed piles of coins and ask them to sort them by type (pennies, nickels, dimes, quarters). Matching Games: Use matching games where students pair coins with their values or names. Digital Learning Tools Educational Apps and Games: Utilize apps and online games designed to teach kids about	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Acco mmodations a stated in IEP

"a o "a o "a o "a o "a o "a o Mate pictur bills o value the st conno its co Sort physi coins Ask t	money, such as interactive condition identification games. Interactive Board Activities interactive board activities where the such as and dollar on one side and their es on the other side. Ask toudents to draw a line ecting each coin or bill to orrect value. Interactive Board Activities interactive board activities where the students can drag and drop condition into labeled jars or piggy band Learning Activities: Money Songs Chants and Poems Coin ID worksheets Coin ID worksheets	Use ere is
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Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Can you demonstrate how to build a cube using sticks and clay balls? Describe the attributes of the cube you created. Explain how you would compare a sphere and a cylinder in terms of their shapes and attributes. What similarities and differences do you notice?	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special
	Education, Gifted, At-risk of Failure,
	504) and Reflections

Summative Question 1:

• Build a composite shape using at least three different simple shapes (e.g., triangles, rectangles). Describe the process and the attributes of the resulting shape.

Summative Question 2:

• Compare a cube and a rectangular prism. Describe their similarities and differences using informal language, focusing on attributes like the number of sides, vertices, and whether the sides are of equal length.

ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed IEP/504: Modifications/Accommodations a

stated in IEP

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Shape Modeling and Climate Change Discussion: In pairs, students will create models of trees and umbrellas using sticks and clay. They will then draw the shapes they created and discuss how these objects can help mitigate the warming effect of sunlight. Prompt them to ask questions and brainstorm ideas about the shapes' effectiveness in providing shade or reducing heat absorption.	ELL: Model and Provide Example. Establish a non-verbal cue to redirect students when not on task. Students may use a bilingual dictionary. At Risk: Individualized as needed
Money and Measurement Comparison: Provide students with a variety of U.S. coins and bills. Ask them to measure and compare the sizes of different coins and the one-dollar bill using rulers or measuring tapes. Students should record their findings, noting which objects are larger or smaller and discussing how these measurements relate to the values of the coins and bills. Encourage them to articulate their comparisons using measurement terms such as length and width.	IEP/504: Modifications/Accommodations a stated in IEP

Resources:

Ready Mathematics: Ready mathematics

i-ready: <u>i-ready</u>

Additional Resources:

Khan Academy Kids: <u>Khan Academy Kids</u>
PBS Kids Math Games: <u>PBS Kids Math Games</u>

Math Playground: Math Playground

ABCmouse: <u>ABCmouse</u> SplashLearn: <u>SplashLearn</u> IXL Math: <u>IXL Math</u>