Unit 1

Content Area: **Mathematics**
Course(s): **Mathematics K**
Time Period: **September**
Length: **Trimester 1**
Status: **Published**

Unit Overview

UNIT 1 will include i-Ready Units 1 & 2 and is taught over approximately 4 months.

The Program begins with Lesson 0: Activities for the First Five Days. This lesson was developed as a way to introduce math time at the start of the school year and familiarize students with the steps in the Try-Discuss-Connect instructional routine that will be used throughout the year.

i-Ready Unit 1: Position, Length, Height, and Sorting

This unit introduces students to describing the positions of objects and comparing their relative lengths and heights. It also introduces them to sorting and counting objects.

The major themes of the unit are:

- You can use words to describe the position of an object.

- You can compare objects by telling which is longer (or taller) and which is shorter.

- You can sort objects by their attributes. You can also count how many of each object are in a group and sort the groups by count.

Unit Skills include:

1. Describe the position of objects, using words such as above and below.
2. Place objects in given positions.
3. Describe and compare attributes of objects.
4. Compare the lengths of two objects to tell which is longer or shorter.
5. Compare the heights of two objects to tell which is taller or shorter.
6. Sort objects into groups with common attributes.
7. Describe rules used to sort objects into groups.
8. Count sorted groups of objects and sort groups by count.
9. Use math vocabulary to describe position, length, and height.

i-Ready Unit 2: Numbers to 5, Shapes, Weight

This unit introduces students to counting, writing, and comparing numbers to 5. It also introduces them to shapes and weight.

The major themes of the unit are:

- Counting each object in a group tells you how many are in the group.

- You say one number for each object in the group when you count.

- Knowing how to count helps you know what number is one more than another number.

- Comparing two groups tells you if one group has more, less, or the same number of objects as the other.

- Naming and describing solid shapes can help you describe your world.

Unit Skills include:

1. Count with one-to-one correspondence.
2. Show, write, and count numbers 0 to 5.
3. Understand 0 as representing no objects.
4. Compare two numbers 0 to 5 using the words more, less, or same.
5. Understand that one more refers to the next number in the counting sequence.
6. Name and describe solid shapes.
7. Compare the weights of two objects to tell which is heavier or lighter.
8. Use math vocabulary to describe numbers, shapes, and weight.

Priority Standards

MATH.K.CC.A.1	Count to 100 by ones and by tens.
MATH.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).
MATH.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.
MATH.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.
MATH.K.CC.C.7	Compare two numbers between 1 and 10 presented as written numerals.
MATH.K.M.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
MATH.K.DL.A.1	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
MATH.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.
MATH.K.G.A.2	Correctly name shapes regardless of their orientations or overall size.
MATH.K.G.A.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

Learning Goals (Targets)

- Classify objects into given categories
- Compare the heights of two objects to tell which is taller or shorter
- Compare the lengths of two objects to tell which is longer or shorter
- Compare the weights of two objects to tell which is heavier or lighter
- Count objects and tell how many
- Count objects up to 20
- Count out (up to 20) objects and put them in a pile
- Count the number of objects in each category
- Count to 100 by 1's
- Count to 100 by 10's
- Count to answer "how many?" objects up to 10 in a scattered configuration
- Count to answer "how many?" objects up to 20 arranged in a circle
- Count to answer "how many?" objects up to 20 arranged in a line
- Count to answer "how many?" objects up to 20 arranged in a rectangular array
- Describe measurable attributes of objects
- Describe measurable attributes of objects, such as height
- Describe measurable attributes of objects, such as length
- Describe measurable attributes of objects, such as weight
- Describe objects in the environment using names of shapes
- Describe the relative position of objects using terms such as above, below, beside, in front of, behind, and next to
- Identify a group of objects that has the greater amount
- Identify a group of objects that has the lesser amount
- Identify groups that have an equal amount of objects
- Recognize and name the shape cone
- Recognize and name the shape cube
- Recognize and name the shape cylinder
- Recognize and name the shape sphere
- Recognize if a shape is three-dimensional (solid)
- Represent objects up to 20 with a written numeral
- Sort categories by count
- Tell which number is greater than or less than up to 10
- Understand that the next number (when counting) is larger than the previous number
- Use positional words to describe objects
- Write the numbers 0 to 20

Essential Questions

- Can you count to 100 by 1's and 10's?
- How can I represent how many objects I counted?
- How can we show a number in other ways?
- How can we show how many objects we counted?
- How do I describe and compare objects by height?
- How do I describe and compare objects by length?
- How do I describe and compare objects by weight?
- How do I determine how many objects are in a group?
- How do I know how many objects are in a group?
- How do I write numbers 1-5?
- What different types of shapes are in our world?
- What do numbers tell me?
- What does the succsessive number when counting mean?
- What is the difference between greater than, less than and equal to?
- What positions can shapes be positioned in?
- Which number is larger, smaller?
- Why do we need to count to 100 by 1's?
- Why do we need to count to 100 by 10's?

Materials and Resources

- Centers Library
- Classroom Library read alouds
- Hands on math manipulatives
- iReady App
- iReady Classroom Text
- Student workbooks
- Teacher Toolbox

Assessments

- Class participation
- Comprehension Checks
- Diagnostic Growth assessments
- Group work
- Guided practice
- Individual practice
- Lesson Quizzes

- My Learning Path weekly progress
- Student Workbook
- Teacher observation
- Unit Assessments

Learning Plan

Time Frame	Lesson	Standards	Targets
Unit 1 - (24 Days) Position, Length, Height, and Sorting			
5 Days	Lesson 0 Sessions for the first 5 days		- Understand the rules and routines during math instruction
5 Days	Lesson 1 Describe Position	K.G.A.1	- Describe the relative position of objects using terms such as above, below, in front of, behind and next to - Use positional words to describe objects
5 Days	Lesson 2 Describe and Compare Length and Height	K.M.A.1	- Describe measurable attributes of objects - Describe measurable attributes of objects, such as length - Compare the lengths of two objects to tell which is longer or shorter - Describe measurable attributes of objects, such as height - Compare the lengths of two objects to tell which is taller or shorter
5 Days	Lesson 3 Sort and Count Objects	K.DL.A.1	- Classify objects into given categories - Count the number of objects in each category - Sort categories by

			count
3 Days	Math in Action - Imagine a Rainforest	K.CC.B.5, K.G.A.1, K.DL.A.1	- Count objects and tell how many - Count to answer "how many?" objects up to 20 arranged in a line - Count to answer "how many?" objects up to 20 arranged in a rectangular array - Count to answer "how many?" objects up to 20 arranged in a circle - Count to answer "how many?" objects up to 10 arranged in a scattered configuration - Describe the relative position of objects using terms such as above, below, in front of, behind and next to - Use positional words to describe objects - Classify objects into given categories - Count the number of objects in each category - Sort categories by count
1 Day	Comprehension Check / Unit Assessments		
Unit 2 - (19 Days) Numbers to 5, Shapes, Weight			
5 Days	Lesson 4 Count, Show, and Write Numbers to 5	K.CC.A.1, K.CC.A.3, K.CC.B.5	- Count to 100 by 1's - Count to 100 by 10's - Write the numbers 0 to

			20 - Count objects up to 20 - Represent objects up to 20 with a written numeral - Count objects and tell how many - Count to answer "how many?" objects up to 20 arranged in a line - Count to answer "how many?" objects up to 20 arranged in a rectangular array - Count to answer "how many?" objects up to 20 arranged in a circle - Count to answer "how many?" objects up to 10 arranged in a scattered configuration
5 Days	Lesson 5 Compare Numbers to 5	K.CC.C.6, K.CC.C.7	- Identify a group of objects that has the greater amount - Identify a group of objects that has the lesser amount - Identify groups that have an equal amount of objects - Tell which number is greater than or less than up to 10
5 Days	Lesson 6 Three-Dimensional Shapes and Weight	K.G.A.2, K.G.A.3, K.M.A.1	- Recognize and name the shape sphere - Recognize and name the shape cube - Recognize and name the shape cylinder - Recognize and name the

			shape cone - Recognize if a shape is three-dimensional (solid) - Describe measurable attributes of objects, such as weight - Compare the weights of two objects to tell which is heavier or lighter
3 Days	Math in Action - Play with Puppets	K.CC.A.1, K.CC.A.3, K.CC.C.7, K.DL.A.1	- Count to 100 by 1's - Count to 100 by 10's - Write the numbers 0 to 20 - Count objects up to 20 - Represent objects up to 20 with a written numeral - Tell which number is greater than or less than up to 10 - Classify objects into given categories - Count the number of objects in each category - Sort categories by count
1 Day	Comprehension Check / Unit Assessments		

Strategies for Multilingual Learners

- Chunking material
- Extended Time
- Graphic Organizers
- Higher level vocabulary incorporation
- Individual Goal Setting

- Peer Modeling
- Peer Tutoring
- Preferential Seating
- Provide desk number line
- Provide pictures and visuals
- Repetition of directions
- Tasks broken down into small sequential steps
- Tiered Assignments / Activities with individual goals
- Use of word wall

Strategies for Students in Need of Intervention

- Anchor chart
- Block designs
- Build and break activity (unifix cubes)
- Clip cards
- Dominoes, legos, links, unifix cubes, two sided counters
- Extended pacing of lessons
- Hands on manipulatives (straws, popsicle sticks, geo boards, wiki sticks)
- I have... who has games
- Incorporate centers to reinforce new skills
- Multisensory approach to lessons
- Number bond activities
- Number formation rhymes
- Number mazes
- Number puzzles
- Number recognition and counting rhymes
- Reduce amount of problems
- Roll and solve with dice
- Shake and spill activity (two sided counters)
- Small group instruction for students who struggle
- Use approaching level materials/assignments
- Use of number line
- Use of visual aids

Technology Integration

- Animal Circus (ipad app) - learning games
- Create a classroom Math Word Wall

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

Interdisciplinary Connections

- Connection to Art: Students can draw objects to discuss measurement, sorting, and positional words.
- Connection to Music: Students sing counting songs, number rhymes, number writing songs, etc.
- Connection to PE: Students apply different types of movement to count.
- Connection to Reading Comprehension by using the 3 read strategy.
- Connection to Writing: Students apply drawing and writing skills when writing numbers, drawing shapes.
- Connection to Writing: Students apply writing skills to explain an object's position, to explain how objects are sorted/classified, and to compare objects by length, height, and weight.

21st Century Skills or Career Ready Practices

CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.
WRK.9.1.2.CAP.1	Make a list of different types of jobs and describe the skills associated with each job.
CAEP.9.2.4.A.4	Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
TECH.9.4.2.TL.3	Enter information into a spreadsheet and sort the information.
TECH.9.4.2.IML.1	Identify a simple search term to find information in a search engine or digital resource.
TECH.9.4.2.IML.2	Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10).
TECH.9.4.2.IML.4	Compare and contrast the way information is shared in a variety of contexts (e.g., social, academic, athletic) (e.g., 2.2.2.MSC.5, RL.2.9).