

Unit 3

Content Area: **Mathematics**
Course(s): **Mathematics K**
Time Period: **March**
Length: **Trimester 3**
Status: **Published**

Unit Overview

UNIT 3 will include i-Ready Units 5, 6, & 7 and is taught over approximately 3 months.

i-Ready Unit 5: Numbers to 100

This unit introduces students to counting objects and writing numbers to 20. It also introduces them to counting to 100 as well as decomposing 6 to 9.

The major themes of the unit are:

- Teen numbers are the numbers 11 to 19.
- Knowing how to count by 10s can help you learn how to count to 100.
- Number partners combine to make a new number. You can find number partners by breaking apart a number into smaller parts.

Unit Skills include:

1. Count, read, and write numbers 11 to 20.
2. Count to 100 by 1s and by 10s.
3. Count on from any number less than 100.
4. Decompose 6 and 7 into number partners.
5. Write equations to represent number partners for 6 and 7.
6. Decompose 8 and 9 into number partners.
7. Write equations to represent number partners for 8 and 9.
8. Use math vocabulary to describe counting, composing, and decomposing numbers.

i-Ready Unit 6: Addition and Subtraction Within 10

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

The major themes of the unit are:

- Knowing how to add and subtract with numbers to 5 can help you learn how to add and subtract with numbers to 10.

- You can use different tools to help you tell and solve addition and subtraction story problems.
- You can write an equation to show what is happening in a problem.

Unit Skills include:

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

i-Ready Unit 7: Teen Numbers and Shapes

This unit introduces students to composing and decomposing teen numbers. It also introduces them to building objects from two-dimensional or three-dimensional shapes.

The major themes of the unit are:

- Teen numbers are the numbers 11 to 19.
- Teen numbers are made of ten ones and some more ones.
- You can identify shapes as flat or solid. You can put together two or more shapes to make larger shapes.

Unit Skills include:

1. Compose teen numbers from 10 ones and some more ones.
2. Decompose teen numbers into 10 ones and some more ones.
3. Identify shapes as flat or solid.
4. Make pictures with two-dimensional shapes.
5. Build objects with three-dimensional shapes.
6. Write equations to show composing teen numbers.
7. Write equations to show decomposing teen numbers.
8. Use math vocabulary to describe teen numbers and two- and three-dimensional shapes.

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.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.
MATH.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.
MATH.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.
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.B.6	Compose simple shapes to form larger shapes.

Learning Goals (Targets)

- Classify objects into categories
- Compose numbers 11 to 19 into ten ones and some further ones by using objects or drawings
- Compose simple shapes to form larger shapes
- 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
- Decompose numbers 11 to 19 into ten ones and some further ones by using objects or drawings
- 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 the symbols +, -, =
- Record compositions using a drawing or equation
- Record decompositions using a drawing or equation
- Represent addition up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations

- Represent objects up to 20 with a written numeral
- Represent subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations
- Solve addition word problems, and add within 10 by using objects or drawings to represent the problem.
- Solve subtraction word problems, and subtract within 10 by using objects or drawings to represent the problem.
- Sort categories by count
- Tell which number is greater than or less than up to 10
- Understand addition as putting together and adding to
- Understand subtraction is taking away and taking apart
- Understand that the next number (when counting) is larger than the previous number
- Understand that the numbers 11-19 are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
- Write the numbers 0 to 20

Essential Questions

- Can you count to 100 by 1's and 10's?
- How can I figure out the answer when I am adding?
- How can I figure out the answer when I am subtracting?
- How can I represent how many objects I counted?
- How can I show numbers beyond 10?
- How can I show that I am adding?
- How can I show that I am subtracting?
- How can I use objects or drawings to add?
- How can I use objects or drawings to subtract?
- How can numbers be broken down into smaller parts?
- How can smaller shapes be used to build bigger shapes?
- How can we show a number in other ways?
- How can we show how many objects we counted?
- How do I compose numbers?
- How do I decompose numbers?
- 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 organize objects into categories?
- How do I understand teen numbers as ten ones and some more ones?
- How do I write numbers to 20?
- How do we show numbers 11 to 19 in another way?
- What do numbers tell me?
- What do the - and = symbols mean?

- What do the + and = symbols mean?
- What does the successive number when counting mean?
- What is the difference between greater than, less than and equal to?
- 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 5 - (24 Days) Numbers to 100			
5 Days	Lesson 16 Count, Read, and Write Numbers 11 to 20	K.CC.B.5, K.CC.C.6	- Count objects and tell how many

			<ul style="list-style-type: none"> - Count to answer "how many?" objects up to 20 arranged in a line - Count to answer "how many?" objects up to 20 arranged in a rectangular array - Count to answer "how many?" objects up to 20 arranged in a circle - Count to answer "how many?" objects up to 10 arranged in a scattered configuration - Identify a group of objects that has the greater amount - Identify a group of objects that has the lesser amount - Identify groups that have an equal amount of objects
5 Days	Lesson 17 Count Within 100	K.CC.A.1	<ul style="list-style-type: none"> - Count to 100 by 1's - Count to 100 by 10's
5 Days	Lesson 18 Compose and Decompose 6 and 7	K.OA.A.1	<ul style="list-style-type: none"> - Represent addition up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations - Represent subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations
5 Days	Lesson 19 Compose and Decompose 8 and 9	K.OA.A.1	<ul style="list-style-type: none"> - Represent addition up to 10 with objects, fingers, mental images, drawings,

			<p>sounds, acting out situations, verbal explanations, expressions, or equations</p> <p>- Represent subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations</p>
3 Days	Math in Action - Grow a Garden	K.CC.B.5, K.CC.A.3, K.OA.A.1, K.DL.A.1	<p>- Count objects and tell how many</p> <p>- Count to answer "how many?" objects up to 20 arranged in a line</p> <p>- Count to answer "how many?" objects up to 20 arranged in a rectangular array</p> <p>- Count to answer "how many?" objects up to 20 arranged in a circle</p> <p>- Count to answer "how many?" objects up to 10 arranged in a scattered configuration</p> <p>- Write the numbers 0 to 20</p> <p>- Count objects up to 20</p> <p>- Represent objects up to 20 with a written numeral</p> <p>- Represent addition up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations</p> <p>- Represent subtraction up to 10 with objects, fingers, mental images,</p>

			<p>drawings, sounds, acting out situations, verbal explanations, expressions, or equations</p> <ul style="list-style-type: none"> - Classify objects into given categories - Count the number of objects in each category - Sort categories by count
1 Day	Comprehension Check / Unit Assessments		
Unit 6 - (19 Days)			
Addition and Subtraction Within 10			
5 Days	Lesson 20 Add Within 10	K.OA.A.1	<ul style="list-style-type: none"> - Recognize the symbols + and = - Represent addition up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations - Understand addition is putting together and adding to
5 Days	Lesson 21 Subtract Within 10	K.OA.A.1	<ul style="list-style-type: none"> - Recognize the symbols - and = - Represent subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations - Understand subtraction is taking away and taking apart
5 Days	Lesson 22 Add and Subtract to Solve Word	K.OA.A.2	<ul style="list-style-type: none"> - Solve addition word problems, and add within

	Problems		<p>10 by using objects or drawings to represent the problem</p> <ul style="list-style-type: none"> - Solve subtraction word problems, and subtract within 10 by using objects or drawings to represent the problem
3 Days	Math in Action - Design a Dance	K.CC.B.5, K.OA.A.1, K.DL.A.1	<ul style="list-style-type: none"> - Count objects and tell how many - Count to answer "how many?" objects up to 20 arranged in a line - Count to answer "how many?" objects up to 20 arranged in a rectangular array - Count to answer "how many?" objects up to 20 arranged in a circle - Count to answer "how many?" objects up to 10 arranged in a scattered configuration - Recognize the symbols + and = - Represent addition up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations - Understand addition is putting together and adding to - Recognize the symbols + and = - Represent subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting

			<p>out situations, verbal explanations, expressions, or equations</p> <ul style="list-style-type: none"> - Understand subtraction is taking away and taking apart - Classify objects into given categories - Count the number of objects in each category - Sort categories by count
1 Day	Comprehension Check / Unit Assessments		
Unit 7 - (19 Days)			
Teen Numbers and Shapes			
5 Days	Lesson 23 Compose and Decompose Teen Numbers with Tools and Drawings	K.NBT.A.1	<ul style="list-style-type: none"> - Compose numbers 11 to 19 into ten ones and some further ones by using objects or drawings - Decompose numbers 11 to 19 into ten ones and some further ones by using objects or drawings - Record compositions using a drawing or equation - Record decompositions using a drawing or equation - Understand that the numbers 11 to 19 are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones
5 Days	Lesson 24 Build with Shapes	K.G.B.6	<ul style="list-style-type: none"> - Compose simple shapes to form larger shapes

5 Days	Lesson 25 Compose and Decompose Teen Numbers with Symbols	K.NBT.A.1	<ul style="list-style-type: none"> - Compose numbers 11 to 19 into ten ones and some further ones by using objects or drawings - Decompose numbers 11 to 19 into ten ones and some further ones by using objects or drawings - Record compositions using a drawing or equation - Record decompositions using a drawing or equation - Understand that the numbers 11 to 19 are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones
3 Days	Math in Action - Build for Birds	K.CC.A.3, K.CC.B.5, K.NBT.A.1, K.DL.A.1	<ul style="list-style-type: none"> - 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

			<p>arranged in a scattered configuration</p> <ul style="list-style-type: none"> - Compose numbers 11 to 19 into ten ones and some further ones by using objects or drawings - Decompose numbers 11 to 19 into ten ones and some further ones by using objects or drawings - Record compositions using a drawing or equation - Record decompositions using a drawing or equation - Understand that the numbers 11 to 19 are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones - 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
- Math Bingo (ipad app) - addition and subtraction
- 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 - addition, counting, shapes, numerical order, number sense, composing and decomposing numbers, math bingo
- www.funbrain.com - number recognition to 20, counting
- www.gonoodle.com - Counting to 100, Skip counting
- www.IXL.com - counting, skip counting, shapes, addition, subtraction, composing and decomposing numbers
- www.mathplayground.com - addition, subtraction, counting, shapes, number bonds to 20
- www.pbskids.org - Counting (Peg's Pizza Place, Rock Art, Martha Seeks), Shapes (Paint-a-long, Stack to the Sky)
- www.starfall.com - addition, subtraction, shapes, calendar skills, math songs, counting to 20

Interdisciplinary Connections

- Connection to Art: Students can draw and build objects using two- and three-dimensional shapes.
- 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 Reading: Students apply reading strategies and comprehension skills to iReady word problems.
- Connection to Writing: Students apply drawing and writing skills when writing numbers, drawing shapes, writing addition and subtraction number sentences, and drawing visuals to compose and decompose numbers.

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).