Grade K Math Curriculum Overview

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **School Year**
Length: **10 months**
Status: **Not Published**

Course Overview

The Kindergarten Math Program focuses on many areas to engage student's mathematical thinking.

Counting and Cardinality:

Students will learn how to count and identify numbers from 0-100. Students count objects by saying numbers in the standard order, relate each object counted to a number in the counting sequence, keep track of objects counted, and use a number or other representation to tell how many objects there are. Counting forward by ones builds students' understanding of subsequent numbers. This skill is foundational for the addition strategy of counting on. Topic 10 builds a foundation for understanding of place value. The operations of composition and decomposition are visualized with objects, drawings, and equations. In Topic 11, students will utilize a hundred chart when counting forward by tens. Students will practice writing numbers 0-20. Students will compare numbers 0-10 by using a variety of strategies. This work allows for a deep understanding of the concepts greater than, less, than, equal and not equal to.

Addition and Subtraction Strategies:

Understanding addition as "put together" and "add to" is critical mathematical skill. In kindergarten, students will practice addition up to ten. Students will solve simple addition problems to increase fluency using objects, drawings, and equations. Topic 7 and 8 focus on a deep understanding of subtraction as "take apart" and "take from". Students will begin to develop fluency with subtraction by finding patterns in subtraction facts. Through use of drawings, objects, and written equations, students will solve word problems.

Geometry:

Topic 12 exposes students to many geometric ideas. Such as identifying shapes as two-dimensional, or three-dimensional, name squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres. Students are exposed to the idea that a shape can belong to two categories when they learned that a square is also a rectangle. Throughout this topic students will learn how to describe objects using terms such as "above, below, besides, next to, in front of and behind". Topic 13 deepens geometric understanding of two-dimensional and three-dimensional shapes. Students specifically analyze and compose shapes based on attributes.

Measurement and Data:

Interpreting data is a very useful concept, students will count the number of objects in each category and record the results by writing numerals in a chart. Students can use tally marks to help with counting objects. Students will sort data by showing the categories in order according to their respective counts. Then students compare two unequal counts and identify which is greater in number and which is less. Topic 14 introduces measurement by teaching students that objects can be directly compared by length, height, capacity, or weight. Throughout the topic students compare two objects by their attributes and build understanding that some objects may be described by more than one measurable attribute.

Money:

Students will learn how to identify the U.S coins including a penny, nickel, dime, quarter and the dollar bill. Counting money requires mental mathematics.

Course Name, Length, Date of Revision and Curriculum Writer

Math Kindergarten Curriculum, Entire Year, 6/30/24, Danielle Gardner and Holly Bruens

Table of Contents

Topic 1 Numbers 0-5

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **1st Trimester**
Length: **12 days**
Status: **Published**

Course Overview

Topic 1 introduces counting as more than just a verbal skill. The principles associated with counting are crucially important throughout mathematics. In this topic, students count up to 5 objects in various arrangements, tell how many, and write the numeral. Throughout Topic 1, quantities are represented visually in an effort to build mental representations. Students consider many different arrangements of objects and come to understand that the number of objects in a group remains the same regardless of how they are counted. They also come to understand that the number of objects is the same regardless of the order in which they are counted.

Enduring Understandings

- Counting tells how many are in a group, regardless of their arrangement or the order in which they were counted.
- The last number said when counting a group is the total.
- Counting is cumulative.
- There is a unique symbol that goes with each number word.
- Zero is a number that tells how many objects there are when there are none.
- There is a specific order to set the whole numbers.
- Good math thinkers use math to explain why they are right and discuss math others do, too.

Essential Questions

- How can you count objects?
- How do you know the number of objects doesn't change when you arrange them in a different way?
- Why does each number need its own symbol?
- Why can you start counting with different objects in a group?

- Does changing the way objects are arranged change the number of objects?
- Why do you write each number in a different way?
- What number can you say to tell there are none?
- Why is zero a special number?
- Do numbers have an order?
- How can you explain your answer to a math problem?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
1-1 Count 1, 2, 3 (1 Day)	SWBAT count 1, 2, and 3 objects.	**Solve and Share**: Students identify a representation of 2 objects. **Visual Learning**: How can you count objects? **Convince Me**: Show students a group of 3 objects, such as buttons. Students will explain how they know how many objects are in a group. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**:	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-1

		Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
1-2 Recognize 1, 2 and 3 in Different Arrangements	SWBAT count groups of 1, 2, and 3 objects shown in different ways.	**Solve and Share**: Students analyze the relationship between two groups to see if the arrangements affect the total numbers. **Visual Learning**: How do you know the number of objects doesn't change when you arrange them in a different way? **Convince Me**: Show two groups of 3 objects in different arrangements. Students will explain how the number of objects changed. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-2

		Literacy” • “Enrichment” • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
1-3 Read, Make, and Write 1, 2, and 3 (1 day)	SWBAT read and write the numbers 1, 2, and 3.	**Solve and Share**: Students choose how to make a group of 2 in different ways. **Visual Learning**: Why does each number need its own symbol? **Convince Me**: Students will count objects to understand that there is a number word and a matching symbol that tells how many items are in a group. **Guided Practice**: portion of “Guided Practice” for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional “Guided	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-3

		Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • enVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
1-4 Count 4 and 5 (1 day)	SWBAT count 4 and 5 objects.	**Solve and Share**: Students represent a group of 5 in different ways. **Visual Learning**: Why can you start counting with different objects in a group? **Convince Me**: Students continue to learn that it is the last number used in counting that gives the number of objects in a group, no matter the size of the group. **Guided Practice**: portion of	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-4

		"Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • enVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
1-5 Recognize 4 and 5 in Different Arrangements (1 day)	SWBAT count groups of 4 and 5 objects shown in different ways.	**Solve and Share**: Students use cubes to see if the arrangement affects the total number. **Visual Learning**: Does changing the way objects	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment

		are arranged change the number of objects? **Convince Me**: Students use counters to explain their thinking of how they can move objects around and the number stays the same. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Optional Activities**: • Build Mathematical Literacy • enVision Enrichment Activity • Pick a Project	Additional Practice Quick Check 1-5

		(Animals, Sports, Transport)	
1-6 Read, Make, and Write 4 and 5 (1 day)	SWBAT read and write the numbers 4 and 5.	**Solve and Share**: Students choose how to make a group of 5 in different ways. **Visual Learning**: Why do you write each number in a different way? **Convince Me**: Students will use number cards to identify that each number has its own special symbol that tells how many objects are in a group. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-6

		• ST Math **Optional Activities**: • Build Mathematical Literacy • enVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
1-7 Identify the Number 0 (1 Day)	SWBAT use zero to tell when there are no objects.	**Solve and Share**: Students represent different numbers, including 0, with counters. **Visual Learning**: What number can you say to tell there are none? **Convince Me**: Students represent zero by showing no counters or objects and by not coloring in any boxes. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Write it! Guess it! (writing numbers in sand, one partner writes, the other	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-7

		guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • enVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
1-8 Read and Write 0 (1 Day)	SWBAT read and write the number 0.	**Solve and Share**: Students match different representations of the numbers 0, 1, 2, 3. **Visual Learning**: Why is zero a special number? **Convince Me**: Students will use an empty container to show zero objects. Students will explain the number zero is special because it means none or nothing. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-8

		• "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Optional Activities**: • Build Mathematical Literacy • enVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
1-9 Count up to the number 5 (1 Day)	SWBAT count up to the number 5.	**Solve and Share**: Students show and write the numbers that come just before and just after 4. **Visual Learning**: Do numbers have an order? **Convince Me**: Students will use counters to show each number comes just after the specific number. Each number represents a quantity that is one larger as they count forward. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-9

		with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
1-10 Problem Solving: Construct Arguments (1 Day)	SWBAT use math to explain what they know about counting.	**Solve and Share**: Students construct mathematical arguments to express their answers. **Visual Learning**: How can you explain your answer to a math problem? **Convince Me**: Students will use counters to show specific numbers of objects. Students will show different ways to express their	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 1-10

		answers and construct mathematical arguments to tell why they are correct. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Animals, Sports, Transport)	
Review (1 Day)	SWBAT recognize, count and write numbers 0-5. SWBAT	**Fluency Practice Activity**: Students will count up to 5 objects in various ways	Reteaching Pages

	review vocabulary words used in the topic. SWBAT use math to explain what they know about counting in preparation for assessment.	during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Number Cubes • Beaded number pipes • Write it! Guess it! (writing numbers in sand, one partner writes, the other guesses the number) • Follow the Dots (writing practice 0-5) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 1 Practice Assessment	
Topic 1 Assessment (1 day)	SWBAT successfully complete Topic 1 assessment independently.	**Topic 1 Assessment**: Students will independently complete Topic 1 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy	Topic 1 Assessment

		Optional Activities: • Topic 1 Practice Assessment	

MATH.K.CC.A	Know number names and the count sequence
MATH.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
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	Count to tell the number of objects
MATH.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
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.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable

with.

- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 2 Compare Numbers 0 to 5

Content Area: **Grade Kindergartn Mathematics**
Course(s): **Math**
Time Period: **1st Trimester**
Length: **7 days**
Status: **Published**

Course Overview

Topic 2 focuses on comparing numbers 0 to 5. Students compare groups of objects as well as the corresponding numbers. Topic 2 builds on the sound understanding of the cardinality principle: when counting a ground of objects, the last number named represent the quantity in the group. This allows for an understanding of the concepts of greater than, less than, and equal or not equal. Students compare groups by matching the objects in one-to-one correspondence. They develop conceptual understanding that one group is greater in number than another when it has at least one object left without a match. These understandings are expanded to the use of counting to compare groups of objects: the further a student counts, the greater the number.

Enduring Understandings

- Two groups of objects are equal in number if they can be directly matched, one-to-one, with no extras in either group.
- Two groups of objects can be directly compared using a matching process.
- Two sets of objects can be compared by number using counting strategies.
- Good math thinkers use math they know to show and solve problems.

Essential Questions

- How can you tell that two groups of objects are equal in number?
- How can you tell whether one group is greater in number than the other?
- How can you tell whether one group is less in number than the other group?
- How can counting help you compare two groups of objects?
- How can you show that a group is greater or less in number?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
2-1 Equal Groups (1 day)	SWBAT compare groups to see whether they are equal by matching.	**Solve and Share**: Students explain how they know if two groups of objects are the same in number. **Visual Learning**: How can you tell that two groups of objects are equal in number? **Convince Me**: Students understand that two groups of objects are equal in number if they can be	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 2-1

		directly matched. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • What's the Order? (give students numbers 0-5 out of order, have them write the numbers in order) • Ordering Numbers (student match number card to number of objects) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Spiders, Flowers,Golf, Picnics)	
2-2 Greater Than	SWBAT to tell whether one group is greater in	**Solve and Share**: Students explain how they know if one	Guided Practice Independent Practice

(1 day)	number than another group.	group of objects has more than another group. **Visual Learning**: How can you tell whether one group is greater in number than the other? **Convince Me**: Students will use counters to understand that two groups of objects can be directly compared using a matching process. The group that has extra objects has a quantity that is greater than the other group. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • What's the Order? (give students numbers 0-5 out of order, have them write the numbers in order) • Ordering Numbers (student match number card to number of objects) • My Math Academy	Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 2-2

		Technology: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Spiders, Flowers,Golf, Picnics)	
2-3 Less Than (1 day)	SWBAT tell whether one group is less in number than another group.	**Solve and Share**: Students explain how they know that one group of objects has fewer than another group. **Visual Learning**: How can you tell whether one group is less in number than the other group? **Convince Me**: Students match two groups of 3 and 5 counters to 1-to-1 to compare. Students will see that two groups of objects can be directly compared using a matching process. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 2-3

		• "Build Mathematical Literacy" • "Enrichment" • What's the Order? (give students numbers 0-5 out of order, have them write the numbers in order) • Ordering Numbers (student match number card to number of objects) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Spiders, Flowers,Golf, Picnics)	
2-4 Compare Groups to 5 by Counting (1 day)	SWBAT compare numbers.	**Solve and Share**: Students compare two groups of objects to find which is less by counting the number in each group. **Visual Learning**: How can counting help you compare two groups of objects? **Convince Me**: Students will work with a partner to compare a group of 3 objects and a group of 5 objects. Students will understand that the last number tells how many there are. **Guided Practice**: portion of "Guided Practice" for the whole group.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 2-4

		Suggested center activities: • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • What's the Order? (give students numbers 0-5 out of order, have them write the numbers in order) • Ordering Numbers (student match number card to number of objects) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Spiders, Flowers,Golf, Picnics)	
2-5 Problem Solving: Model with Math (1 day)	SWBAT use objects, drawings, and numbers to compare numbers.	**Solve and Share**: Students choose a way to show how they know which of two groups is greater in number. **Visual Learning**: How can you show that a group is	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment

		greater or less in number? **Convince Me**: Students use cube trains to compare numbers. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • What's the Order? (give students numbers 0-5 out of order, have them write the numbers in order) • Ordering Numbers (student match number card to number of objects) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project	Additional Practice Quick Check 2-5

		(Spiders, Flowers,Golf, Picnics)	
Review (1 Day)	SWBAT compare numbers 0 to 5. SWBAT review vocabulary words used in the topic. SWBAT use math to explain what they know about comparing numbers in preparation for assessment.	**Fluency Practice Activity**: Students will be able to compare numbers 0-5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • What's the Order? (give students numbers 0-5 out of order, have them write the numbers in order) • Ordering Numbers (student match number card to number of objects) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Topic 2 Practice Assessment	Reteaching Pages
Topic 2 Assessment (1 day)	SWBAT successfully complete Topic 2 assessment independently.	**Topic 2 Assessment**: Students will independently complete Topic 2 assessment. **Suggested center activities:** • My Math Academy	Topic 2 Assessment

		Technology: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Topic 2 Practice Assessment	

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.4.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.
MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
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.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.

- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 3 Numbers 6 to 10

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **1st Trimester**
Length: **10 days**
Status: **Published**

Course Overview

Throughout Topic 3, students use the standard list of counting words in order: one, two, three, four, five, six, seven, eight, nine and ten. This topic, quantities are represented visually in an effort to build mental representations of numbers. These mental representations are important as students begin to recognize that quantities greater than 5 can be related to 5 or 10. Students are shown many different arrangements of objects within the same lesson. This helps students to understand that the number of objects stays the same regardless of how the objects are arranged or in what otter they are counted.

Enduring Understandings

- Counting tells how many are in a set, or group, no matter which order the objects are counted.
- There is more than one way to show a number.
- There is a unique symbol that goes with each number word.
- The last number said when counting a group is the total.
- Counting is cumulative.
- There is a specific order to the set of whole numbers.
- Good math thinkers look for patterns in math to help solve problems.

Essential Questions

- Why do we count?
- How can you show how many are in a group?
- How does counting tell how many are in a group?
- Why does every number look different?
- How can you count a group of objects?

- How can you tell how many without drawing a picture of using objects?
- How can you find the number that is 1 greater than or less than another number?
- How does finding a pattern help you find all the ways to show a number?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
3-1 Count 6 and 7 (1 day)	SWBAT count the numbers 6 and 7.	**Solve and Share**: Students use counters and draw a picture to represent a group of 6. **Visual Learning**: Why do we	Guided Practice Independent Practice Problem Solving Practice Buddy

		count? **Convince Me**: Students will use counters to explain the number of objects there are in a group. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Tower Power (building blocks and number cards 0-10) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Fruits/vegetables,	Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 3-1

		Airplane, Coral reef)	
3-2 Read, Make, and Write 6 and 7 (1 day)	SWBAT read and write the numbers 6 and 7.	**Solve and Share**: Students use cubes to make a group of 6 or 7 in different ways. **Visual Learning**: How can you show how many are in a group? **Convince Me**: Students will know they can show how many by writing the number. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Tower Power (building blocks and number cards 0-10) • My Math Academy **Technology**: Optional Activities: • My Math Academy	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 3-2

		• St Math **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Fruits/vegetables, Airplane, Coral reef)	
3-3 Count 8 and 9 (1 day)	SWBAT count the numbers 8 and 9.	**Solve and Share**: Students represent a group of 8 in different ways. **Visual Learning**: How does counting tell how many are in a group? **Convince Me**: Students explain how they use counters to show a group of 8 and 9 objects. Students continue to learn that counting tells how many are in a group. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 3-3

		• Tower Power (building blocks and number cards 0-10) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Fruits/vegetables, Airplane, Coral reef)	
3-4 Read, Make, and Write 8 and 9 (1 day)	SWBAT read and write the numbers 8 and 9.	**Solve and Share**: Students use counters and draw pictures to make a group of 8 or 9 in different ways. **Visual Learning**: Why does every number look different? **Convince Me**: Students see that as numbers represent different quantities, they need to look different so that they can be told apart. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 3-4

		• "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Tower Power (building blocks and number cards 0-10) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Fruits/vegetables, Airplane, Coral reef)	
3-5 Count 10 (1 day)	SWBAT count to the number 10.	**Solve and Share**: Students represent a group of 10 in different ways. **Visual Learning**: How can you count a group of objects? **Convince Me**: Students will explain how they can use a ten-frame and counters to count 10 objects. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:**	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 3-5

		• Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Tower Power (building blocks and number cards 0-10) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Fruits/vegetables, Airplane, Coral reef)	
3-6 Read, Make, and Write 10 (1 day)	SWBAT read and write the number 10.	**Solve and Share**: Students show a group of 10 in different ways. **Visual Learning**: How can you tell how many without drawing a picture or using objects? **Convince Me**: Students will show 10 using counters. Students will know that there	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 3-6

		is a special symbol that goes with each number word and that writing numbers tells how many objects are in a group. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Tower Power (building blocks and number cards 0-10) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Fruits/vegetables, Airplane, Coral reef)	

3-7 Count Numbers to 10 (1 day)	SWBAT count groups of numbers to 10.	**Solve and Share**: Students write the number that is 1 less than 8 and the number that is 1 greater than 8. **Visual Learning**: How can you find the number that is 1 greater than or 1 less than another number? **Convince Me**: Students will explain which numbers come after 6, 7, 8, etc. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Tower Power (building blocks and number cards 0-10) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 3-7

		Additional Activities: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Fruits/vegetables, Airplane, Coral reef)	
3-8 Problem Solving: Look For and Use Structure (1 day)	SWBAT use counting patterns to solve a problem.	**Solve and Share**: Students use counting patterns to organize representations of the number 3. **Visual Learning**: How does finding a pattern help you find all the ways to show a number? **Convince Me**: Students explain how making a list of counting patterns helps keep track of the ways to make a number. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Tower Power (building blocks and number	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 3-8

		cards 0-10) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Fruits/vegetables, Airplane, Coral reef)	
Review (1 Day)	SWBAT count, read, and write numbers 6 to 10. SWBAT review vocabulary words used in the topic. SWBAT use math to explain counting, reading and writing numbers 6 to 10 in preparation for assessment.	**Fluency Practice Activity**: Students will count, read, make and write numbers 6-10 with a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Number Cubes • Beaded number pipes • My Math Academy **Technology**: Optional Activities: • St Math	Reteaching Pages

		• My Math Academy **Additional Activities**: • Topic 3 Practice Assessment	
Topic 3 Assessment (1 day)	SWBAT successfully complete Topic 3 assessment independently.	**Topic 3 Assessment**: Students will independently complete Topic 3 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Topic 3 Practice Assessment	Topic 3 Assessment

MATH.K.CC.A.1	Count to 100 by ones and by tens.
MATH.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
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	Count to tell the number of objects
MATH.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
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.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (enVision 2020)
- Game Center (enVision 2020)

Topic 4 Compare Numbers 0 to 10

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **1st Trimester**
Length: **7 days**
Status: **Published**

Course Overview

Topic 4 focuses on comparing numbers from 0 to 10. Students use the concepts of "greater than", "less than", "equal", and "not equal" to compare groups of objects and numbers. As Topic 4 progresses, it builds on the sound understanding of the cardinality principle: when counting a group of objects, the last number name represents the quantity in the group. Later in the topic students use more abstract reasoning to compare numbers not associated with given groups of objects. They begin to understand that the greater of two numbers is the one that is farther along in the counting sequence.

Enduring Understandings

- Compare groups of up to 10 objects.
- Compare groups of numbers using numerals to 10.
- Compare groups of numbers by counting.
- Compare two numbers.
- Repeat something from one problem to help solve another problem.

Essential Questions

- How can you compare two groups of objects?
- How can you tell that a number is greater than another number?
- How can you compare two groups?
- How can you compare two numbers by counting?
- How can you solve a problem in which 1 more object is added to a group?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
4-1 Compare Groups to 10 by Matching (1 day)	SWBAT compare groups of up to 10 objects.	**Solve and Share**: Students compare two groups of cubes to find which has more. **Visual Learning**: How can you compare two groups of objects? **Convince Me**: Students work with groups up to 10 as they see that two groups of objects can be compared by being lined up and directly matched.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 4-1

		Guided Practice: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Which is Greater? (use dot cubes, partners roll dice and discuss which number is larger) • Line 'Em Up! (use objects of different sizes. Put them in size order) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (AStronauts, Fruit Salad, Theme Park, Vacation)	
4-2 Compare Numbers Using Numerals to 10 (1 day)	SWBAT compare groups of numbers using numerals to 10.	**Solve and Share**: Students compare two groups of objects and identify the number that tells which	Guided Practice Independent Practice Problem Solving Practice Buddy

		group has more. **Visual Learning**: How can you tell that a number is greater than another number? **Convince Me**: Students see they can draw pictures, use objects, and match objects 1-to-1 to show each group. They know that the group with more is the greater number. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Which is Greater? (use dot cubes, partners roll dice and discuss which number is larger) • Line 'Em Up! (use objects of different sizes. Put them in size order) • My Math Academy **Technology**: Optional Activities: • My Math Academy	Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 4-2

		• St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (AStronauts, Fruit Salad, Theme Park, Vacation)	
4-3 Compare Groups to 10 by Counting (1 day)	SWBAT compare groups of numbers by counting.	**Solve and Share**: Students compare two groups of objects in a scattered configuration to identify which is greater in number. **Visual Learning**: How can you compare two groups? **Convince Me**: Students will explain how to compare by counting the number of objects in each group and finding where each number is in the number sequence. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Which is Greater? (use dot cubes,	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 4-3

		partners roll dice and discuss which number is larger) • Line 'Em Up! (use objects of different sizes. Put them in size order) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (AStronauts, Fruit Salad, Theme Park, Vacation)	
4-4 Compare Numbers to 10 (1 day)	SWBAT compare two numbers.	**Solve and Share**: Students use the number sequence 1-10 to identify numbers less than 7. **Visual Learning**: How can you compare two numbers by counting? **Convince Me**: Students use precise terms such as *greater than, less than*, and *equal* to in order to desire the comparison of quantities. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 4-4

		• "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Which is Greater? (use dot cubes, partners roll dice and discuss which number is larger) • Line 'Em Up! (use objects of different sizes. Put them in size order) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (AStronauts, Fruit Salad, Theme Park, Vacation)	
4-5 Problem Solving: Repeated Reasoning (1 day)	SWBAT repeat something from one problem to help solve another problem.	**Solve and Share**: Students find the number 1 more than 7. **Visual Learning**: How can you solve a problem in which 1 more object is added to a group? **Convince Me**: Students use counters to tell how many there are when adding 1 more. **Guided Practice**: portion of	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 4-5

		"Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Which is Greater? (use dot cubes, partners roll dice and discuss which number is larger) • Line 'Em Up! (use objects of different sizes. Put them in size order) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (AStronauts, Fruit Salad, Theme Park, Vacation)	
Review (1 Day)	SWBAT compare numbers 0 to 10. SWBAT review vocabulary words used in the topic. SWBAT	**Fluency Practice Activity**: Students compare numbers 0-10 with a partner activity. **Vocabulary Review**:	Reteaching Pages

	use math to compare numbers 0 to 10 in preparation for assessment.	Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Which is Greater? (use dot cubes, partners roll dice and discuss which number is larger) • Line 'Em Up! (use objects of different sizes. Put them in size order) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 4 Practice Assessment	

Topic 4 Assessment (1 day)	SWBAT successfully complete Topic 4 assessment independently.	**Topic 4 Assessment**: Students will independently complete Topic 4 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 4 Practice Assessment	Topic 4 Assessment

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.4.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.
MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
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.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 5 Classify and Count Data

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **1st Trimester**
Length: **6 days**
Status: **Published**

Course Overview

In Topic 5, students begin to understand what it means to generate data, display data, and analyze data. Students generate data by classifying and counting objects in two categories: objects that have a certain attribute and objects that do not have that attribute. Students learn to display data in a chart that shows tally marks or numerals, which requires an understanding that this is a one-to-one correspondence between the two objects and the tally marks. Students analyze the data by comparing the numbers of objects in the two categories.

Enduring Understandings

- Objects can be classified into two categories, based on whether they have or do not have a particular attribute.
- Data can be sorted and compared in a variety of ways.
- Objects can be sorted by putting those with particular attributes in one group and those without the attribute in another group. The groups can be counted and the categories can be compared by count.
- Good math thinkers use math to explain why they are right. They can talk about the math that others do too.

Essential Questions

- How can you put objects into categories?
- How can you find the number of objects that belong to each category?
- How do you know which category is greater or less in number?
- How can you decide and explain whether someone’s answer makes sense?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
5-1 Classify Objects into Categories (1 day)	SWBAT classify objects into categories and tell why they are in each category.	**Solve and Share**: Students sort 5 animals into two categories using the attribute 4 legs. **Visual Learning**: How can you put objects into categories? **Convince Me**: Students will classify animals in different ways. They will consider what is common and then look for objects that fit in that category. **Guided Practice**: portion of	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 5-1

		"Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • More or Less (create cube trains of different lengths to compare) • Picture the Stars (students draw up to 10 stars using 3 different colors and compare) • Make It Right (using number cards 0-10 have partners work to place numbers in order) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Flags, Transport, Music) • Climate Change Lesson: Students discuss objects that may be reused, recycled and objects that may be put in the trash. Students classify 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.	
5-2 Count the Number of Objects in Each Category (1 day)	SWBAT count how many objects are in different categories.	**Solve and Share**: Students classify and count creatures into two different categories. They explain the steps they took to count. **Visual Learning**: How can you find the number of objects that belong to each category? **Convince Me**: Students use pictures to classify objects into two categories, then count and write the number in each. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • More or Less (create cube trains of different lengths to compare) • Picture the Stars (students draw up to 10 stars using 3 different colors and compare) • Make It Right (using number cards 0-10 have partners work to place numbers in order)	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 5-2

		• My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Flags, Transport, Music) • Climate Change Lesson: Students discuss objects that may be reused, recycled and objects that may be put in the trash. Students classify 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.	
5-3 Sort the Categories by Counting (1 day)	SWBAT use counting to compare how many objects are in categories.	**Solve and Share**: Students sort objects into two categories, then count and compare the numbers in each category. **Visual Learning**: How do you know which category is greater or less in number? **Convince Me**: Students will use teddy bears/counters to count and find the number of objects in each category, comparing which is greater. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 5-3

		instruction with differentiated groupings • Additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • More or Less (create cube trains of different lengths to compare) • Picture the Stars (students draw up to 10 stars using 3 different colors and compare) • Make It Right (using number cards 0-10 have partners work to place numbers in order) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Flags, Transport, Music) • Climate Change Lesson: Students discuss objects that may be reused, recycled and objects that may be put in the trash. Students classify 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.	
5-4 Problem Solving: Critique Reasoning (1 day)	SWBAT tell whether the way objects have been sorted, counted and compared makes sense.	**Solve and Share**: Students explain whether a given comparison statement makes sense. **Visual Learning**: How can you explain whether someone's answer makes sense? **Convince Me**: Students will use counters to explain how they know someone's answer makes sense. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • More or Less (create cube trains of different lengths to compare) • Picture the Stars (students draw up to 10 stars using 3 different colors and compare) • Make It Right (using number cards 0-10 have partners work to place numbers in order) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 5-4

		Additional Activities: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Flags, Transport, Music) • Climate Change Lesson: Students discuss objects that may be reused, recycled and objects that may be put in the trash. Students classify 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.	
Review (1 Day)	SWBAT classify and count data. SWBAT review vocabulary words used in the topic. SWBAT use math to explain what they know about classifying and counting data in preparation for assessment.	**Fluency Practice Activity**: Students will classify and count data with a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • More or Less (create cube trains of different lengths to compare) • Picture the Stars (students draw up to 10 stars using 3 different colors and compare) • Make It Right (using number cards 0-10 have partners work to place numbers in order)	Reteaching Pages

		• My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 5 Practice Assessment	
Topic 5 Assessment (1 day)	SWBAT successfully complete Topic 5 assessment independently.	**Topic 5 Assessment**: Students will independently complete Topic 5 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 5 Practice Assessment	Topic 5 Assessment

MATH.K.CC.A	Know number names and the count sequence
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.C.7	Compare two numbers between 1 and 10 presented as written numerals.
MATH.K.DL.A	Classify objects and count the number of objects in each category
MATH.K.DL.A.1	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Climate Change Activity

K.DL.A.A.1 Students will begin by viewing the video, "Reduce, Reuse, Recycle", via BrainPop Jr. Students will discuss the 3 R's (Reduce, Reuse, Recycle). Students may ask and answer questions about objects that may be reused, objects that may be recycled, and objects that can be reused. Students may classify 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.

See Resources: Reduce, Reuse, Recyle Sorting Activity

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation

- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 6 Understand Addition

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **1st Trimester**
Length: **10 days**
Status: **Published**

Course Overview

Topic 6 introduces students to the concept of addition. It focuses on a deep understanding of addition as "put together" and "add to". Students learn how to represent addition in different ways and solve addition word problems, all building towards fluently adding within 5. Throughout the topic, students select tools they want to use to help them understand the addition situation. Students learn how to write an equation to find the sum. It is important for students to understand how all of the representations, from tools to words to equation, relate to the addition situation.

Enduring Understandings

- Addition can be shown in different ways, such as with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions or equations.
- Adding one or more objects to an existing group is one interpretation of addition.
- Putting together parts to make a whole is one interpretation of addition.
- Equations using + and = can be used to show parts of a whole.
- Objects, drawings, counting, and equations can be used to help solve addition problems involving adding to or putting together.

Essential Questions

- How can you find the number of objects in all?
- How can you solve addition word problems?
- How can you solve addition problems?
- How can you show addition?
- What can you use to help you solve an addition word problem?
- How can you remember addition facts?

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	Count to tell the number of objects
MATH.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MATH.K.OA.A	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from
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.OA.A.5	Demonstrate accuracy and efficiency for addition and subtraction within 5.

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments

6-1 Explore Addition (1 day)	SWBAT show numbers in many ways.	**Solve and Share**: Students determine the number of flowers n all and represent the total in different ways. **Visual Learning**: How can you find the number of objects in all? **Convince Me**: Students will use drawings to find the total number of objects in two groups by counting to add the parts. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Joining Trains (partner A forms an addition equation with blocks. Partner B writes the equation on paper) • Tower Fun (students work in pairs to create a	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 6-1

		tower using building blocks, have them join both towers to make an equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Baby animals, School bus, Playground, School day)	
6-2 Represent Addition as Adding To (1 day)	SWBAT represent addition as adding to a number.	**Solve and Share**: Students solve and Add To problem and represent the total in different ways. **Visual Learning**: How can you solve addition problems? **Convince Me**: Students will use cubes to understand that they can add the number of objects in one group to another group in order to find the total in an addition story. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:**	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 6-2

		• Teacher led small group instruction with differentiated groupings • Additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Joining Trains (partner A forms an addition equation with blocks. Partner B writes the equation on paper) • Tower Fun (students work in pairs to create a tower using building blocks, have them join both towers to make an equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Baby animals,	

		School bus, Playground, School day)	
6-3 Represent Addition as Putting Together (1 day)	SWBAT represent addition as putting two or more numbers together.	**Solve and Share**: Students show two groups and the number in all for a Put Together story problem. **Visual Learning**: How can you solve addition problems? **Convince Me**: Students will use pictures to find out how many objects there are in all. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Joining Trains (partner A forms an addition equation with blocks. Partner B writes the equation on paper) • Tower Fun (students work in	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 6-3

		pairs to create a tower using building blocks, have them join both towers to make an equation) **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Baby animals, School bus, Playground, School day)	
6-4 Represent and Explain Addition with Equations (1 day)	SWBAT write an equation to show addition.	**Solve and Share**: Students show a way to add to solve a word problem. **Visual Learning**: How can you show addition? **Convince Me**: Students connect that they can write an addition equation as one way to show addition. They see how they can use + and = to show parts of a whole added together. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 6-4

		with differentiated groupings • Additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Joining Trains (partner A forms an addition equation with blocks. Partner B writes the equation on paper) • Tower Fun (students work in pairs to create a tower using building blocks, have them join both towers to make an equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Baby animals, School bus,	

		Playground, School day)	
6-5 Solve Addition Word Problems: Add To (1 day)	SWBAT solve addition problems.	**Solve and Share**: Students show ways to add to solve a word problem. **Visual Learning**: What can you use to help you solve an addition word problem? **Convince Me**: Students explain that there are different ways to show addition word problems such as using objects, drawing pictures, using their fingers, acting out the problem, writing an equation. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Joining Trains (partner A forms an addition equation with blocks. Partner B writes the	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 6-5

		equation on paper) • Tower Fun (students work in pairs to create a tower using building blocks, have them join both towers to make an equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Baby animals, School bus, Playground, School day)	
6-6 Solve Addition Word Problems: Put Together (1 day)	SWBAT use equations to represent and explain addition.	**Solve and Share**: Students demonstrate their understanding of addition by explaining problem solutions in a variety of ways. **Visual Learning**: What can you use to help you solve an addition word problem? **Convince Me**: Students will draw a picture and write an equation to represent an addition number story.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 6-6

		Guided Practice: portion of “Guided Practice” for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Joining Trains (partner A forms an addition equation with blocks. Partner B writes the equation on paper) • Tower Fun (students work in pairs to create a tower using building blocks, have them join both towers to make an equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build	

		Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Baby animals, School bus, Playground, School day)	
6-7 Use Patterns to Develop Fluency in Addition (1 day)	SWBAT use patterns to add numbers together.	**Solve and Share**: Students identify ways to make 3 and generate a list of addition equations with the sums of 3. **Visual Learning**: How can you remember addition facts? **Convince Me**: Students will use cubes to explain that numbers can be added in any order and you still get the same answer. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 6-7

		• Joining Trains (partner A forms an addition equation with blocks. Partner B writes the equation on paper) • Tower Fun (students work in pairs to create a tower using building blocks, have them join both towers to make an equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Baby animals, School bus, Playground, School day)	
6-8 Problem Solving: Model with Math (1 day)	SWBAT model adding different numbers together by drawing, counting, or writing equations.	**Solve and Share**: Students draw a picture to model the solution to an addition word problem. **Visual Learning**: How can you use a model to help solve an addition problem? **Convince Me**: Students will explain how	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 6-8

		information in a problem can be shown using a picture, numbers, objects, or some other model to understand and solve the problem. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Joining Trains (partner A forms an addition equation with blocks. Partner B writes the equation on paper) • Tower Fun (students work in pairs to create a tower using building blocks, have them join both towers to make an equation) • My Math Academy	

		Technology: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Baby animals, School bus, Playground, School day)	
Review (1 Day)	SWBAT understand addition. SWBAT review vocabulary words used in the topic. SWBAT use math to explain addition in preparation for assessment.	**Fluency Practice Activity**: Students practice adding within 5 with a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Joining Trains (partner A forms an addition equation with blocks. Partner B writes the equation on paper) • Tower Fun (students work in	Reteaching Pages

		pairs to create a tower using building blocks, have them join both towers to make an equation) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 6 Practice Assessment	
Topic 6 Assessment (1 day)	SWBAT successfully complete Topic 6 assessment independently.	**Topic 6 Assessment**: Students will independently complete Topic 6 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 6 Practice Assessment	Topic 6 Assessment

MATH.K.CC.A	Know number names and the count sequence
MATH.K.CC.B	Count to tell the number of objects
MATH.K.OA.A	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from
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.OA.A.5	Demonstrate accuracy and efficiency for addition and subtraction within 5.

Climate Change Activity

K.0A.A.2 Students will begin by viewing the video "The Importance of Trees" via Discovery Education. Students will discuss the concept of how trees may reduce the warming of effect of sunglight. Students will use counters when adding to find the total number of trees they and a partner observed (e.g. from their classroom window, the playground, their house).

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math

- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 7 Understand Subtraction

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **1st Trimester**
Length: **9 days**
Status: **Published**

Course Overview

Topic 7 introduces students to the concept of subtraction. It focuses on a deep understanding of subtraction as “take apart” and “take from.” Students learn how to represent subtraction in different ways and solve subtraction word problems, all building towards fluently subtracting within 5. Students learn how to use tools such as objects or drawings to help them understand a subtraction equation. It is important for students to understand how all of the representations, from tools to words to equations, relate to the subtraction situation.

Enduring Understandings

- Subtraction can be shown in different easy, such as with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanation, expressions, or equations.
- Separating parts from a whole is one interpretation of subtraction.
- Taking parts from a whole is one interpretation of subtraction.
- Subtraction equations using - and = can be used to show subtraction situations.
- objects , words, drawings, counting, and equations can be used to help solve subtraction problems involving taking from.
- Patterns can be used to help solve subtraction problems.
- Good math thinkers know how to pick the right tools to solve math problems.

Essential Questions

- How can you show the numbers in problems?
- What happens when you take apart a number?
- What happens when you take a part from the whole?
- How can you show subtraction?

- What can you use to help you solve a subtraction word problem?
- How can patterns help you solve subtraction problems?
- How can you choose a tool to help solve a word problem?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
7-1 Explore Subtraction (1 day)	SWBAT show numbers in many ways.	**Solve and Share**: Students act out a subtraction story and represent the number left in different ways.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching

		Visual Learning: How can you show the numbers in problems? **Convince Me**: Students will use multiple ways such as pictures, drawings, objects etc. to solve subtraction problems. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Get Off the Train! (using counting cubes students create a train, then take some away to create a subtraction equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Jobs,	Build Mathematical Literacy Enrichment Additional Practice Quick Check 7-1

		Counting songs, Night sky)	
7-2 Represent Subtraction as Taking Apart (1 day)	SWBAT take apart a number and tell the parts.	**Solve and Share**: Students break apart a number into two parts and write numerals to tell how many in each. **Visual Learning**: What happens when you take apart a number? **Convince Me**: Students will break apart a number into smaller parts. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Get Off the Train! (using counting cubes students create a train, then take some away to create a subtraction equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 7-2

		• St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Jobs, Counting songs, Night sky)	
7-3 Represent Subtraction as Taking From (1 day)	SWBAT represent subtraction as taking away from a whole.	**Solve and Share**: Students use counters and a picture to solve a subtraction problem involving taking from. **Visual Learning**: What happens when you take a part from the whole? **Convince Me**: Students will use objects to explain how to solve a subtraction problem. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Get Off the Train! (using counting cubes students create a train, then take some away to create a subtraction equation)	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 7-3

		• My Math Academy **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Jobs, Counting songs, Night sky)	
7-4 Represent and Explain Subtraction with Equations (1 day)	SWBAT write an equation to show subtraction.	**Solve and Share**: Students show a way to subtract to solve a word problem. **Visual Learning**: How can you show subtraction? **Convince Me**: Students connect that they can write a subtraction equation as one way to show subtraction. They understand how to use - and = to show what is left after some are taken away. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 7-4

		• "Enrichment" • Get Off the Train! (using counting cubes students create a train, then take some away to create a subtraction equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Jobs, Counting songs, Night sky)	
7-5 Solve Subtraction Word Problems: Taking From and Apart (1 day)	SWBAT find the difference between two numbers.	**Solve and Share**: Students demonstrate their understanding of subtraction by explaining problem solutions in a variety of ways. **Visual Learning**: What can you use to help you solve a subtraction word problem? **Convince Me**: Students solve a subtraction word problem using any method they have learned so far (pictures, objects, fingers, writing an equation ect.). **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 7-5

		Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Get Off the Train! (using counting cubes students create a train, then take some away to create a subtraction equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Jobs, Counting songs, Night sky)	
7-6 Use Patterns to Develop Fluency in Subtraction (1 day)	SWBAT find patterns in subtraction equations.	**Solve and Share**: Students generate a list of subtraction equations within 5. They begin to identify some patterns in the subtraction facts. **Visual Learning**: How can patterns help you solve subtraction problems? **Convince Me**: Students will identify a pattern they notice when solving subtraction equations. **Guided Practice**: portion of “Guided Practice” for the	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 7-6

		whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Get Off the Train! (using counting cubes students create a train, then take some away to create a subtraction equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Jobs, Counting songs, Night sky)	
7-7 Problem Solving: Use Appropriate Tools (1 day)	SWBAT use tools to subtract numbers.	**Solve and Share**: Students use manipulatives to solve a subtraction word problem. **Visual Learning**: How can you choose a tool to help solve a word problem? **Convince Me**: Students should explain how they can	Guided Practice Independent Practice Problem Solving Practice Buddy Reteaching Build Mathematical Literacy Enrichment Additional Practice Quick Check 7-7

		think about a problem, what happens in it, and what they need to find out to help them solve it. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Get Off the Train! (using counting cubes students create a train, then take some away to create a subtraction equation) • My Math Academy **Technology**: Optional Activities: • My Math Academy • ST Math **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Jobs, Counting songs, Night sky)	
Review (1 Day)	SWBAT understand subtraction. SWBAT review vocabulary	**Fluency Practice Activity**: Students practice subtracting within 5 with a partner	Reteaching Pages

	words used in the topic. SWBAT use math to explain subtraction in preparation for assessment.	activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Number Cubes • Beaded number pipes • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 7 Practice Assessment	
Topic 7 Assessment (1 day)	SWBAT successfully complete Topic 7 assessment independently.	**Topic 7 Assessment**: Students will independently complete Topic 7 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 7 Practice Assessment	Topic 7 Assessment

MATH.K.CC.A	Know number names and the count sequence
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	Count to tell the number of objects

MATH.K.OA.A	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from
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.OA.A.5	Demonstrate accuracy and efficiency for addition and subtraction within 5.

Climate Change Activity

K.0A.A.2 Students will begin by viewing the video "Feeding the Trees" via Discovery Education. Students will discuss the concept of how trees may reduce the warming effect of sunlight. Students will use counters when subtracting to find the total number of they and a partner observed (e.g. from their classroom window, the playground, their house).

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.

- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 8 More Addition and Subtraction

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **1st Trimester**
Length: **12 days**
Status: **Published**

Course Overview

Topic 8 focuses on both addition and subtraction to build fluency with both operations within 5. This topic also focuses on another type of word problem, both addends unknown, with sums to 10, and finding missing parts of 10. Students will deepen their understanding of the part-whole relationship as they use objects and pictures to solve problems where both addends are unknown. Students will select tools (e.g., objects or drawings) they want to use to help them understand the addition or subtraction situation. Lastly, in Topic 8, students will deepen their understanding of math strategies used in making 10 which will be important for addition and subtraction work in later grades.

Enduring Understandings

- There is more than one way to show a number.
- An addition equation can show the parts and the whole.
- Addition and subtraction facts have an inverse relationship. Equations using +, -, and = can be used to show parts of a whole.
- Good math thinkers know how to think about words and numbers to solve problems.
- Addition and subtraction facts can be solved using different strategies.
- Objects, drawings, counting, and equations can be used to help solve addition problems involving unknown addends.
- For any number from 1-9, there is another number to make 10.

Essential Questions

- How can you use an addition equation to show the parts when you know the whole?
- How does knowing addition help you subtract?
- How does telling a story help to prove an equation is correct?
- What are some ways you can solve addition and subtraction equations?
- How can you solve an addition problem with counters, a drawing, or an equation?
- How can you use an addition equation to show parts of a number in a problem?
- How can you show 10 in more than one way?
- How can you use an addition equation to show parts of 10 in a problem?
- How can you find a missing part to make 10?
- What are the different numbers that when added together equal ten?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
8-1 Decompose 5 to Solve Problems (1 Day)	SWBAT write an addition equation to solve a word problem.	**Solve and Share**: Students see how they can solve a word problem with both addends unknown in different ways. **Visual Learning**: How can you use an addition equation to show the	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-1

		parts when you know the whole? **Convince Me**: Students will use counters to show that different parts can make the same whole. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Paper plate addition • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project	

		(Hens, Gardens, Night sky, Tree house) • Climate Change Lesson: Students use counters when adding to find the total number of trees observed and discuss with a partner	
8-2 Related Facts (1 Day)	SWBAT solve related addition and subtraction equations.	**Solve and Share**: Students match a story problem to an equation. **Visual Learning**: How does knowing addition help you subtract? **Convince Me**: Students will use 2 red and 2 yellow cubes to act out an addition and subtraction story. Students will compare the stories. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Cube trains	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-2

		• Beaded number pipes • Paper plate addition • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Hens, Gardens, Night sky, Tree house) • Climate Change Lesson: Students use counters when adding to find the total number of trees observed and discuss with a partner	
8-3 Problem Solving: Reasoning (1 day)	SWBAT reason about numbers and operations.	**Solve and Share**: Students tell a story to match a given equation. **Visual Learning**: How does telling a story help to prove an equation is correct? **Convince Me**: Students will draw a story to represent an equation. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:**	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-3

		• Teacher led small group instruction with differentiated groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Cube trains • Beaded number pipes • Paper plate addition • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Hens, Gardens, Night sky, Tree house) • Climate Change Lesson: Students use counters when adding to find the total number of trees observed and discuss with a partner	
8-4 Fluently Add and	SWBAT write addition and subtraction	**Solve and Share**: Students write addition and	Guided Practice Independent Practice

Subtract to 5 (1 day)	equations within 5 and remember them..	subtractions using the number 0-5. **Visual Learning**: What are some ways you can solve addition and subtraction equations? **Convince Me**: Students will explain how they solve a problem using objects, draw a picture, count on, or count back. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Cube trains • Beaded number pipes • Paper plate addition • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**:	Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-4

		• Build Mathematical Literacy • EnVision Enrichment Activity	
8-5 Decompose 6 and 7 to Solve Problems (1 day)	SWBAT write an addition equation to solve a word problem.	**Solve and Share**: Students consider the relationship between the whole and number of parts to show one way to solve a word problem. **Visual Learning**: How can you solve an addition problem with counters, a drawing, or an equation? **Convince Me**: Students explain how they can use counters or a drawing to show the parts being added, then add the counters to find the total. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Enrichment" • Cube trains • Beaded number pipes • Paper plate addition	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-5

		• My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Hens, Gardens, Night sky, Tree house) • Climate Change Lesson: Students use counters when adding to find the total number of trees observed and discuss with a partner	
8-6 Decompose 8 and 9 to Solve Problems (1 day)	SWBAT write an addition equation to solve a word problem.	**Solve and Share**: Students use cubes and an equation to model a way to solve a word problem where only the total is known. **Visual Learning**: How can you use an addition equation to show parts of a number in problem? **Convince Me**: Students show a number like 9 in different ways such as 8 and 1, and write an equation to show what they did. **Guided Practice**: portion of "Guided Practice" for the whole group.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-6

		Suggested center activities: • Teacher led small group instruction with differentiated groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Cube trains • Beaded number pipes • Paper plate addition • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Hens, Gardens, Night sky, Tree house) • Climate Change Lesson: Students use counters when adding to find the total number of trees observed and discuss with a partner	

8-7 Ways to Make 10 (1 day)	SWBAT show how to make a group of 10.	**Solve and Share**: Students find multiple representations of the number 10, thinking about parts of the whole. **Visual Learning**: How can you show 10 in more than one way? **Convince Me**: Students will see the parts they show that make 10 can be different as long as they make 10 in all. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Number cubes • Beaded number pipes • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**:	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8–7

		• Build Mathematical Literacy • EnVision Enrichment Activity	
8-8 Decompose 10 to Solve Problems (1 day)	SWBAT /write an addition equation to solve a word problem.	**Solve and Share**: Students use counters and an equation to model a way to solve a word problem where only the total is known. **Visual Learning**: How can you use an addition equation to show parts of 10 in a problem? **Convince Me**: Students will write different equations where the addends equal solve a problem where 10 is the sum. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Number Cubes • Beaded number	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-8

		pipes • Paper plate addition • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Hens, Gardens, Night sky, Tree house) • Climate Change Lesson: Students use counters when adding to find the total number of trees observed and discuss with a partner	
8-9 Find the Missing Part of 10 (1 day)	SWBAT find number partners for 10.	**Solve and Share**: Students use cubes to find pairs of numbers that equal 10, and record their work equations. **Visual Learning**: How can you find a missing part to make 10? **Convince Me**: Students will think about how many more they need to make 10. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center**	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-9

		activities: • Teacher led small group instruction with differentiated groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Number Cubes • Beaded number pipes • Paper plate addition • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Hens, Gardens, Night sky, Tree house) • Climate Change Lesson: Students use counters when adding to find the total number of trees observed and discuss with a partner	
8-10 Continue	SWBAT find a missing	**Solve and Share**: Students	Guided Practice

to Find the Missing Part of 10. (1 day)	part to make 10.	consider the part they know and how this relates to the whole as they solve a word problem. **Visual Learning**: What are different numbers that when added together equal ten? **Convince Me**: Students will respond with as many number pairs as they can: 1 and 9; 2 and 8; 3 and 7; 4 and 6; 5 and 5 **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Number Cubes • Beaded number pipes • Paper plate addition • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy	Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 8-10

		Additional Activities: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Hens, Gardens, Night sky, Tree house) • Climate Change Lesson: Students use counters when adding to find the total number of trees observed and discuss with a partner	
Review (1 day)	SWBAT practice fluently adding and subtracting within 5 during a partner activity. SWBAT review vocabulary words used in the topic. SWBAT review addition and subtraction strategies in preparation for assessment.	**Fluency Practice Activity**: Students practice fluently adding and subtracting within 5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Number Cubes • Beaded number pipes • Paper plate addition • My Math Academy	Reteaching Pages

		Technology: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Topic 8 Practice Assessment	
Topic 8 Assessment (1 day)	SWBAT successfully complete Topic 8 assessment independently.	**Topic 8 Assessment**: Students will independently complete Topic 8 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Additional Activities**: • Topic 8 Practice Assessment	Topic 8 Assessment

MATH.K.OA.A	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from
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.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).
MATH.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.
MATH.K.OA.A.5	Demonstrate accuracy and efficiency for addition and subtraction within 5.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum

- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 9 Count Numbers to 20

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **2nd Trimester**
Length: **9 days**
Status: **Published**

Course Overview

Topic 9 continues the counting sequence with a focus on numbers 11 to 20. It highlights the principle necessary for accurate counting as well as a variety of representations including numeral writing. In Topic 9, students will count quantities 11 to 20 by using number sequence and the one-to-one principle, understand cardinality of a group of objects, draw and count out quantities of objects, and visually picture number quantities 11 to 20. Throughout Topic 9, quantities are represented visually in an effort to build mental representations of numbers. Students will also be shown many different arrangements of objects and will be introduced to two or three successive numbers at a time.

Enduring Understandings

- There is a unique symbol that goes with each number word.
- You use the count sequence to count from any number within 20.
- Numbers become greater when you count on.
- Counting tells how many are in a set, regardless of their arrangement or the order in which they were counted.
- The last number said when counting a set is the total.
- Counting is cumulative.
- Good math thinkers know how to think about words and numbers to solve problems.

Essential Questions

- Why does each number need its own symbol?
- Why do you write every number in a different way?
- What other ways can you show how many besides drawing pictures?
- Why does every number look different?
- When you count from one number to another, which numbers do you count?
- How do you know the number of objects does not change when you rearrange the objects?
- When can you get more than one possible answer to a problem when counting?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
9-1 Count, Read, and Write 11 and 12 (1 Day)	SWBAT count and write the numbers 11 and 12.	**Solve and Share**: Students will represent the number 12 in different ways. **Visual Learning**: Why does each number need its own symbol? **Convince Me**: Students will be shown a ten-frame with 10 counters on it and 1 or 2 counters below it. Students	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 9-1

		will hold up a number card representing the ten-frame. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • More or fewer using cube trains • Make it right-shuffle number cards and then put them in order • Number Picture • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision	

		Enrichment Activity • Pick a Project (gum, sports, and fish)	
9-2 Count, Read, and Write 13, 14 and 15 (1 Day)	SWBAT count and write the numbers 13, 14, and 15.	**Solve and Share**: Students will become familiar with multiple representations of the number 14. **Visual Learning**: Why do you write every number in a different way? **Convince Me**: Students will be shown a ten-frame with 10 counters on it and 3, 4 or 5 counters below it. Students will hold up a number card representing the ten-frame. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • More or fewer	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 9-2

		using cube trains • Make it right- shuffle number cards and then put them in order • Number Picture • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (gum, sports, and fish)	
9-3 Count, Read, and Write 16 and 17 (1 Day)	SWBAT count and write the numbers 16 and 17.	**Solve and Share**: Students will become familiar with multiple representations of the number 16. **Visual Learning**: What other ways can you show how many besides drawing pictures? **Convince Me**: Students will be shown a ten-frame with 10 counters on it and 6 or 7 counters below it. Students will hold up a number card representing the ten-frame. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 9-3

		group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • More or fewer using cube trains • Make it right- shuffle number cards and then put them in order • Number Picture • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (gum, sports, and fish)	
9-4 Count, Read, and Write 18, 19 and 20 (1 Day)	SWBAT count and write the numbers 18, 19 and 20.	**Solve and Share**: Students will become familiar with multiple representations of the number 18. **Visual Learning**: Why does every number look different?	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 9-4

		Convince Me: Students will be shown a double ten-frame with 18, 19, or 20 counters on it. Students will hold up a number card representing the ten-frame. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • More or fewer using cube trains • Make it right-shuffle number cards and then put them in order • Number Picture • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy	

		Optional Activities: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (gum, sports, and fish)	
9-5 Count Forward from Any Number to 20 (1 Day)	SWBAT count forward from any number to a number within 20.	**Solve and Share**: Students will connect the count sequence as they see that each time they place 1 more counter, the number they have in all increases. **Visual Learning**: When you count from one number to another, which numbers do you count? **Convince Me**: Students will start at 6 and count forward until reaching 11 noticing the numbers they count. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 9-5

		Literacy” • “Enrichment” • Beaded number pipes • More or fewer using cube trains • Make it right- shuffle number cards and then put them in order • Number Picture • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (gum, sports, and fish)	
9-6 Count to Find How Many (1 Day)	SWBAT count to find how many are in a group.	**Solve and Share**: Students will use counters and drawings to represent two given numbers. **Visual Learning**: How do you know the number of objects does not change when you rearrange the objects? **Convince Me**: Students will arrange objects in rows that have the same number of objects in each row. **Guided Practice**: portion of “Guided Practice” for the whole group.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 9-6

		Suggested center activities: • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • More or fewer using cube trains • Make it right- shuffle number cards and then put them in order • Number Picture • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (gum, sports, and fish)	
9-7 Problem Solving: Reasoning (1 Day)	SWBAT to use reasoning to count and write numbers to the number 20.	**Solve and Share**: Students will consider information in the problem as they identify possible answers.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical

		Visual Learning: When can you get more than one possible answer to a problem when counting? **Convince Me**: Students identify clues from the problem that the visual learning character used to find three possible answers. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • More or fewer using cube trains • Make it right- shuffle number cards and then put them in order • Number Picture • My Math Academy **Technology**:	Literacy Enrichment Additional Practice Quick Check 9-7

		Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (gum, sports, and fish)	
Review (1 day)	SWBAT practice fluently adding and subtracting within 5 during a partner activity. SWBAT review vocabulary words used in the topic. SWBAT review counting numbers 11-20 in preparation for assessment.	**Fluency Practice Activity**: Students practice fluently adding and subtracting within 5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Beaded number pipes • More or fewer using cube trains • Make it right- shuffle number cards and then put them in order • Number Picture • My Math Academy **Technology**: Optional Activities: • St Math	Reteaching Pages

		• My Math Academy **Optional Activities**: • Topic 9 Practice Assessment • Pick a Project (gum, sports, and fish)	
Topic 9 Assessment (1 day)	SWBAT successfully complete Topic 9 assessment independently.	**Topic 8 Assessment**: Students will independently complete Topic 9 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 9 Practice Assessment • Pick a Project (gum, sports, and fish)	Topic 9 Assessment

MATH.K.CC	Counting and Cardinality
MATH.K.CC.A	Know number names and the count sequence
MATH.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
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	Count to tell the number of objects
MATH.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
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.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic

- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 10 Compose and Decompose Numbers 11-19

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **2nd Trimester**
Length: **9 days**
Status: **Published**

Course Overview

Topic 10 builds a foundation for understanding place value by focusing on the composition and decomposition of numbers 11 to 19 into one group of 10 ones and some further ones. The operations of composition and decomposition are visualized with objects, drawings, and equations. In Topic 10, students are presented with correct, mathematical interpretations of numbers. They also compose and decompose teen numbers using ten-frames or bars of ten objects to develop this foundational place-value concept.

Enduring Understandings

- Numbers from 11-19 can be represented as the sum of 10 and some more.
- The numbers 11, 12, and 13 can be decomposed as the sum of ten and some ones.
- The numbers 14, 15, and 16 can be decomposed as the sum of ten and some ones.
- The numbers 17, 18, and 19 can be decomposed as the sum of ten and some ones.
- Good math thinkers look for patterns in math to help solve problems.

Essential Questions

- How can you write an equation to describe numbers that are greater than 10?
- How can you show numbers that are greater than 10 as 10 ones and some more ones?
- How are numbers 11-19 like numbers 1-9?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
10-1 Make 11, 12, and 13 (1 Day)	SWBAT use drawings and equations to make the numbers 11, 12, and 13.	**Solve and Share**: Students will show a quantity of 10 ones and some more ones, and then write an equation to match. **Visual Learning**: How can you write an equation to describe numbers that are greater than 10? **Convince Me**: Students will work in pairs. Student A holds up 10 fingers. Student B holds up 1, 2, or 3 fingers. Students will say the equation that represents the situation. **Guided Practice**: portion of "Guided Practice" for the whole group.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-1

		Suggested center activities: • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
10-2 Make 14, 15 and 16(1 Day)	SWBAT make the numbers 14, 15, and 16.	**Solve and Share**: Students will show a quantity of 10 ones and some more	Guided Practice Independent Practice Problem Solving

		ones, and then write an equation to match. **Visual Learning**: How can you write an equation to describe numbers that are greater than 10? **Convince Me**: Draw a ten-frame on the board with 10 shaded circles inside it and 4 empty circles below it. Have students write the numbers next to each part and put together an equation. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game	Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-2

		• My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
10-3 Make 17, 18 and 19 (1 Day)	SWBAT make the numbers 17, 18, and 19.	**Solve and Share**: Students will show a quantity of 10 ones and some more ones, and then write an equation to match. **Visual Learning**: How can you write an equation to describe numbers that are greater than 10? **Convince Me**: Students will make 18 on a double ten-frame and point/say the parts. (*10 plus something equals 18)* **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-3

		• "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
10-6 Find Parts of 17, 18, and 19 (1 Day)	SWBAT find parts of the numbers 17, 18, and 19 when one part is 10.	**Solve and Share**: Students use counters and write an equation to show 18 in two parts. **Visual Learning**: How can you show numbers that are greater than 10 as 10 ones and some more ones? **Convince Me**: Give pairs of students a double ten-	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-6

		frame and 18 two-color counters. Have students put 10 red counters in the first ten-frame. Then, 8 yellow counters in the second ten-frame. Write and equation. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build	

		Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
10-7 Problem Solving: Look For and Use Structure (1 Day)	SWBAT look for patterns to make and find the parts of numbers to 19.	**Solve and Share**: Students compare a 1-digit number and a teen number with that many ones. **Visual Learning**: How are numbers 11-19 like numbers 1-9? **Convince Me**: What number patterns do you notice as you look at 1 and 11, 2 and 12, and 3 and 13? **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-7

		addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
Review (1 day)	SWBAT practice fluently adding and subtracting within 5 during a partner activity. SWBAT review vocabulary words used in the topic. SWBAT review composing and decomposing numbers 11 to 19 in preparation for topic assessment.	**Fluency Practice Activity**: Students practice fluently adding and subtracting within 5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Beaded number	Reteaching Pages

		pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 9 Practice Assessment • Pick a Project (camping, mice, collections, and/or snacks)	
Topic 10 Assessment (1 day)	SWBAT successfully complete Topic 10 assessment independently.	**Topic 10 Assessment**: Students will independently complete Topic 10 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 10 Practice Assessment • Pick a Project (camping, mice, collections, and/or snacks)	Topic 10 Assessment

MATH.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
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.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
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.OA.A	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from
MATH.K.NBT.A	Work with numbers 11–19 to gain foundations for place value
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.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.

- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 10 Compose and Decompose Numbers 11-19

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **2nd Trimester**
Length: **9 days**
Status: **Published**

Course Overview

Topic 10 builds a foundation for understanding place value by focusing on the composition and decomposition of numbers 11 to 19 into one group of 10 ones and some further ones. The operations of composition and decomposition are visualized with objects, drawings, and equations. In Topic 10, students are presented with correct, mathematical interpretations of numbers. They also compose and decompose teen numbers using ten-frames or bars of ten objects to develop this foundational place-value concept.

Enduring Understandings

- Numbers from 11-19 can be represented as the sum of 10 and some more.
- The numbers 11, 12, and 13 can be decomposed as the sum of ten and some ones.
- The numbers 14, 15, and 16 can be decomposed as the sum of ten and some ones.
- The numbers 17, 18, and 19 can be decomposed as the sum of ten and some ones.
- Good math thinkers look for patterns in math to help solve problems.

Essential Questions

- How can you write an equation to describe numbers that are greater than 10?
- How can you show numbers that are greater than 10 as 10 ones and some more ones?
- How are numbers 11-19 like numbers 1-9?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
10-1 Make 11, 12, and 13 (1 Day)	SWBAT use drawings and equations to make the numbers 11, 12, and 13.	**Solve and Share**: Students will show a quantity of 10 ones and some more ones, and then write an equation to match. **Visual Learning**: How can you write an equation to describe numbers that are greater than 10? **Convince Me**: Students will work in pairs. Student A holds up 10 fingers. Student B holds up 1, 2, or 3 fingers. Students will say the equation that represents the situation. **Guided Practice**: portion of "Guided Practice" for the whole group.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-1

		Suggested center activities: • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
10-2 Make 14, 15 and 16(1 Day)	SWBAT make the numbers 14, 15, and 16.	**Solve and Share**: Students will show a quantity of 10 ones and some more	Guided Practice Independent Practice Problem Solving

		ones, and then write an equation to match. **Visual Learning**: How can you write an equation to describe numbers that are greater than 10? **Convince Me**: Draw a ten-frame on the board with 10 shaded circles inside it and 4 empty circles below it. Have students write the numbers next to each part and put together an equation. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game	Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-2

		• My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
10-3 Make 17, 18 and 19 (1 Day)	SWBAT make the numbers 17, 18, and 19.	**Solve and Share**: Students will show a quantity of 10 ones and some more ones, and then write an equation to match. **Visual Learning**: How can you write an equation to describe numbers that are greater than 10? **Convince Me**: Students will make 18 on a double ten-frame and point/say the parts. (*10 plus something equals 18)* **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-3

		• "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
10-6 Find Parts of 17, 18, and 19 (1 Day)	SWBAT find parts of the numbers 17, 18, and 19 when one part is 10.	**Solve and Share**: Students use counters and write an equation to show 18 in two parts. **Visual Learning**: How can you show numbers that are greater than 10 as 10 ones and some more ones? **Convince Me**: Give pairs of students a double ten-	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-6

		frame and 18 two-color counters. Have students put 10 red counters in the first ten-frame. Then, 8 yellow counters in the second ten-frame. Write and equation. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build	

		Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
10-7 Problem Solving: Look For and Use Structure (1 Day)	SWBAT look for patterns to make and find the parts of numbers to 19.	**Solve and Share**: Students compare a 1-digit number and a teen number with that many ones. **Visual Learning**: How are numbers 11-19 like numbers 1-9? **Convince Me**: What number patterns do you notice as you look at 1 and 11, 2 and 12, and 3 and 13? **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 10-7

		addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (camping, mice, collections, and/or snacks)	
Review (1 day)	SWBAT practice fluently adding and subtracting within 5 during a partner activity. SWBAT review vocabulary words used in the topic. SWBAT review composing and decomposing numbers 11 to 19 in preparation for topic assessment.	**Fluency Practice Activity**: Students practice fluently adding and subtracting within 5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Beaded number	Reteaching Pages

		pipes • Ten-frame addition • Teetering towers (using connecting cubes) • "Find your partner" card match game • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 9 Practice Assessment • Pick a Project (camping, mice, collections, and/or snacks)	
Topic 10 Assessment (1 day)	SWBAT successfully complete Topic 10 assessment independently.	**Topic 10 Assessment**: Students will independently complete Topic 10 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 10 Practice Assessment • Pick a Project (camping, mice, collections, and/or snacks)	Topic 10 Assessment

MATH.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
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.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
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.OA.A	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from
MATH.K.NBT.A	Work with numbers 11–19 to gain foundations for place value
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.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.

- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 11 Count Numbers to 100

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **3rd Trimester**
Length: **7 days**
Status: **Published**

Course Overview

Topic 11 concludes the development of the count sequence in Kindergarten. This topic focuses on extending the number names and counting to 100. Students learn about verbal and written patterns in the counting sequence, and they count by ones and by tens, beginning from any number.

Enduring Understandings

- Counting patterns can be seen on a hundred chart in both the rows and the columns. Some patterns can also be heard when counting aloud.
- Decade numbers are used to name groups of ten. You can count by tens to 100 by counting only the decade numbers.
- Numbers are counted and written in a specific sequence on a hundred chart.
- Good math thinkers look for patterns in math to help solve problems.

Essential Questions

- How can you find patterns when you count?
- What do you notice about numbers when you count to 50?
- How can you count by tens to 100?
- How does using a hundred chart help you count from any number to another?
- What are ways you can count on a hundred chart?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
11-1 Count Using Patterns to 30 (1 Day)	SWBAT use patterns to count to 30.	**Solve and Share**: Students will look and listen for both auditory and visual patterns as they count to 30. **Visual Learning**: How can you find patterns when you count? **Convince Me**: Students will use the chart to help them count the numbers between 20 and 30. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:**	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 11-1

		• Teacher led small group instruction with differentiated groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Beaded number pipes • Ten-frame addition • The House That Jack Built (using blocks to build a tower with 10) • 100 squares (draw a picture on the grid- how many squares did the picture take up?) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (centipedes, dancing, and/or treasure)	
11-2 Count by Ones and by	SWBAT use patterns to count	**Solve and Share**: Students will look for patterns on a	Guided Practice Independent Practice

Tens to 50 (1 Day)	to 50.	partial hundred chart and identify the hidden numerals using counting patterns. **Visual Learning**: What do you notice about numbers when you count to 50? **Convince Me**: How can you work out which numbers are missing? **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • The House That Jack Built (using blocks to build a tower with 10) • 100 squares (draw a picture on the grid- how many squares did the picture take up?) • My Math Academy	Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 11-2

		Technology: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (centipedes, dancing, and/or treasure)	
11-3 Count by Tens to 100 (1 Day)	SWBAT skip count by tens to 100.	**Solve and Share**: Students identify decade numbers and count by tens to 100. **Visual Learning**: How can you count by tens to 100? **Convince Me**: Students will review a counting sequence and decide what number does not belong. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 11-3

		Literacy” • “Enrichment” • Beaded number pipes • Ten-frame addition • The House That Jack Built (using blocks to build a tower with 10) • 100 squares (draw a picture on the grid- how many squares did the picture take up?) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (centipedes, dancing, and/or treasure)	
11-4 Count by Ones to 100 (1 Day)	SWBAT count forward from any number to 100 by ones.	**Solve and Share**: Students will count by 1s to and from given numbers. **Visual Learning**: How does using a hundred chart help you count from any number to another? **Convince Me**: Students will use a hundred chart to count by 1s noticing the pattern. **Guided Practice**: portion of “Guided Practice” for	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 11-4

		the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • The House That Jack Built (using blocks to build a tower with 10) • 100 squares (draw a picture on the grid- how many squares did the picture take up?) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (centipedes,	

		dancing, and/or treasure)	
11-5 Problem Solving: Look For and Use Structure (1 Day)	SWBAT see patterns when counting.	**Solve and Share**: Students will determine which numbers come just after others when counting. **Visual Learning**: What are ways you can count on a hundred chart? **Convince Me**: Students will use patterns to notice the missing number. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Beaded number pipes • Ten-frame addition • The House That Jack Built (using blocks to build a tower with 10) • 100 squares (draw a picture on the grid- how many squares did the	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 11-5

		picture take up?) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (centipedes, dancing, and/or treasure)	
Review (1 day)	SWBAT practice fluently adding and subtracting within 5 during a partner activity. SWBAT review vocabulary words used in the topic. SWBAT review counting numbers to 100 in preparation for topic assessment.	**Fluency Practice Activity**: Students practice fluently adding and subtracting within 5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • Beaded number pipes • Ten-frame addition • The House That Jack Built (using blocks to build a	Reteaching Pages

		tower with 10) • 100 squares (draw a picture on the grid- how many squares did the picture take up?) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 9 Practice Assessment • Pick a Project (centipedes, dancing, and/or treasure)	
Topic 11 Assessment (1 day)	SWBAT successfully complete Topic 11 assessment independently.	**Topic 11 Assessment**: Students will independently complete Topic 11 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 11 Practice Assessment • Pick a Project (centipedes, dancing, and/or treasure)	Topic 11 Assessment

MATH.K.CC.A	Know number names and the count sequence
MATH.K.CC.A.1	Count to 100 by ones and by tens.
MATH.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
MATH.K.CC.B	Count to tell the number of objects
MATH.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to

	cardinality.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.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.
MATH.K.CC.B.4.c	Understand that each successive number name refers to a quantity that is one larger.
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.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples

- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 12 Identify and Describe Shapes

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **3rd Trimester**
Length: **9 days**
Status: **Published**

Course Overview

Topic 12 explains the distinction between two- and three-dimensional shapes. In this topic, students will name shapes regardless of their orientation or size. It introduces students to the concept names of geometric shapes that are based on attributes of shapes. This topic will also reinforce spatial reasoning by having students describe the relative position of objects.

Enduring Understandings

- Objects have shape. Some shapes are two-dimensional and some are three-dimensional.
- A circle is round and does not have any corners (vertices).
- A triangle has 3 sides and 3 corners (vertices).
- Flat shapes called rectangles have 4 sides and 4 vertices that look the same.
- Squares are special rectangles because their sides are all the same length.
- six-sided flat shapes are called hexagons.
- Spheres, cylinders, cones, and cubes are solid figures.

Essential Questions

- How are objects that have solid shapes different from objects that have flat shapes?
- How do you tell the difference between a circle and a triangle?
- What makes a square a special rectangle?
- How do you know whether a shape is a hexagon?
- How are spheres, cubes, cylinders, and cones the same?
- What words can you use to describe the shape and position of objects in the environment?
- Why is it important to explain your answers?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
12-1 Two-Dimensional (2-D) and Three-Dimensional (3-D) Shapes	SWBAT name shapes as flat or solid.	**Solve and Share**: Students will look for common attributes as they sort a group of shapes. **Visual Learning**: How are objects that have solid shapes different from objects that have flat shapes? **Convince Me**: Students will point to objects in the classroom that are flat or solid. **Guided Practice**: portion	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 12-1

		of “Guided Practice” for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape cut outs • Yarn/pipe cleaner shapes • Pattern block puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (dinosaurs,	

		buildings, shapes, and/or party) • Climate Change Lesson: 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.	
12-2 Circles and Triangles	SWBAT identify and describe circles and triangles.	**Solve and Share**: Students will find objects that have the shape of a circle or triangle and analyze the differences. **Visual Learning**: How do you tell the difference between a circle and a triangle? **Convince Me**: Students will use the words *sides, corners*, and *vertices* to tell what a circle looks like and what a triangle looks like. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 12-2

		groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape cut outs • Yarn/pipe cleaner shapes • Pattern block puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (dinosaurs, buildings, shapes, and/or party) • Climate Change Lesson: 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.	
12-3 Squares and Other Rectangles	SWBAT identify and describe squares and other rectangles.	**Solve and Share**: Students will identify and compare rectangles and squares based on their attributes. **Visual Learning**: What makes a square a special rectangle? **Convince Me**: Students will draw a circle, a square, and a rectangle on the board. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy"	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 12-3

		• "Enrichment" • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape cut outs • Yarn/pipe cleaner shapes • Pattern block puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (dinosaurs, buildings, shapes, and/or party) • Climate Change Lesson: 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.	
12-4 Hexagons	SWBAT describe and identify hexagons.	**Solve and Share**: Students will find 6-sided shapes in different objects. **Visual Learning**: How do you know whether a shape is a hexagon? **Convince Me**: Students will use pattern blocks to identify circles, triangles, rectangles, squares, and hexagons. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape cut outs • Yarn/pipe cleaner shapes • Pattern block	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 12-4

		puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (dinosaurs, buildings, shapes, and/or party) • Climate Change Lesson: 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.	
12-5 Solid figures	SWBAT describe and identify solid figures.	**Solve and Share**: Students will use real objects to draw a connection to solid figures. **Visual Learning**: How are spheres, cubes, cylinders, and cones the same? **Convince Me**: Students	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 12-5

		will name objects in the classroom that are similar to geometric solids. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape cut outs • Yarn/pipe cleaner shapes • Pattern block puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy	

		• EnVision Enrichment Activity • Pick a Project (dinosaurs, buildings, shapes, and/or party) • Climate Change Lesson: 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.	
12-6 Describe Shapes in the Environment	SWBAT describe shapes in the environment.	**Solve and Share**: Students will look for examples of shapes in the environment, and tell where they found them. **Visual Learning**: What words can you use to describe the shape and position of objects in the environment? **Convince Me**: Students will stack objects and describe the position of the shapes. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center**	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 12-6

		activities: • Teacher led small group instruction with differentiated groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape cut outs • Yarn/pipe cleaner shapes • Pattern block puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (dinosaurs, buildings, shapes, and/or party) • Climate Change Lesson: 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.	
12-7 Problem Solving: Precision	SWBAT describe positions of shapes in the environment.	**Solve and Share**: Students will give directions for finding an object. **Visual Learning**: Why is it important to explain your answers? **Convince Me**: Students will connect the importance of explaining answers to show their ideas about math are clear. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 12-7

		manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape cut outs • Yarn/pipe cleaner shapes • Pattern block puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (dinosaurs, buildings, shapes, and/or party) • Climate Change Lesson: 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.	
Review (1 day)	SWBAT practice fluently adding and subtracting within 5 during a partner activity. SWBAT review vocabulary words used in the topic. SWBAT review identifying and describing shapes in preparation for topic assessment.	**Fluency Practice Activity**: Students practice fluently adding and subtracting within 5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape	Reteaching Pages

		cut outs • Yarn/pipe cleaner shapes • Pattern block puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 12 Practice Assessment • Pick a Project (dinosaurs, buildings, shapes, and/or party)	
Topic 12 Assessment (1 day)	SWBAT successfully complete Topic 12 assessment independently.	**Topic 12 Assessment**: Students will independently complete Topic 12 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 12 Practice Assessment • Pick a Project (dinosaurs, buildings, shapes, and/or party)	Topic 12 Assessment

MATH.K.G.A	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)
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”)

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic

- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 13 Analyze, Compare, and Create Shapes

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **3rd Trimester**
Length: **9 days**
Status: **Published**

Essential Questions

- What information can help you identify 2-D shapes?
- Which 3-D shapes can roll? What can stack? What can slide?
- How do 3-D shapes contain 2-D shapes?
- How can you use clues to identify a shape?
- How can you make a new shape by putting together smaller shapes?
- How do you build a given 2-D shape?
- How can you combine 3-D shapes to make other 3-D shapes?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
13-1 Analyze and Compare Two-Dimensional (2-D) Shapes	SWBAT analyze and compare 2-D shapes.	**Solve and Share**: Students will identify 2-D shapes based on a common attribute. **Visual Learning**: What information can help you identify a 2-D shape? **Convince Me**: Students will compare the attributes of three shapes. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • "I Spy" finding classroom objects • Deconstructing/reconstructing shapes • Tracing flat surfaces of 3-D objects • Tangram puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 13-1

13-2 Analyze and Compare Three-Dimensional (3-D) Shapes	SWBAT analyze and compare 3-D shapes.	**Solve and Share**: Students will identify solid figures based on a common attribute. **Visual Learning**: What shapes can roll? What can slide? What can stack? **Convince Me**: Students will identify objects that can roll, stack, and/or slide. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • "I Spy" finding classroom objects • Deconstructing/reconstructing shapes • Tracing flat surfaces of 3-D objects • Tangram puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 13-2
13-3 Analyze and Compare 2-D and 3-D shapes	SWBAT analyze and compare 2-D and 3-D shapes.	**Solve and Share**: Students will use geometric solids to help them identify flat surfaces that are circles. **Visual Learning**: How do 3-D shapes contain 2-D shapes?	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment

		Convince Me: Students will identify the type of surface and shape of solid figures. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • "I Spy" finding classroom objects • Deconstructing/reconstructing shapes • Tracing flat surfaces of 3-D objects • Tangram puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	Additional Practice Quick Check 13-3
13-4 Problem Solving: Make Sense and Persevere.	SWBAT make sense of problems about shapes..	**Solve and Share**: Students will analyze given information to plan and solve a problem. **Visual Learning**: How can you use clues to identify a shape? **Convince Me**: Students will guess objects based on clues of a shape's attributes. **Guided Practice**: portion of "Guided Practice" for the whole group.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 13-4

		Suggested center activities: • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • "I Spy" finding classroom objects • Deconstructing/reconstructing shapes • Tracing flat surfaces of 3-D objects • Tangram puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	
13-5 Make 2-D Shapes from Other 2-D Shapes	SWBAT make 2-D shapes using other 2-D shapes.	**Solve and Share**: Students will combine 4 triangles to make other 2-D shapes they know. **Visual Learning**: How can you make a new shape by putting together smaller shapes? **Convince Me**: Students will use two or more pattern block triangles to make a larger shape. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 13-5

		• additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • “I Spy” finding classroom objects • Deconstructing/reconstructing shapes • Tracing flat surfaces of 3-D objects • Tangram puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	
13-6 Build 2-D Shapes	SWBAT build 2-D shapes that match given attributes.	**Solve and Share**: Students will build two shapes and explain how they are different. **Visual Learning**: How do you build a given 2-D shapes? **Convince Me**: Students will use straws to show a different way to build a shape that is not a rectangle. **Guided Practice**: portion of “Guided Practice” for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy”	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 13-6

		• "Enrichment" • "I Spy" finding classroom objects • Deconstructing/reconstructing shapes • Tracing flat surfaces of 3-D objects • Tangram puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	
13-7 Build 3-D Shapes	SWBAT use materials to build 3-D shapes..	**Solve and Share**: Students will use 3-D shapes and solid figures to model a real-world object. **Visual Learning**: How can you combine 3-D shapes to make other 3-D? **Convince Me**: Students will make a 3-D shape using a cube and cone. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • "I Spy" finding classroom objects • Deconstructing/reconstructing shapes • Tracing flat surfaces of 3-D objects • Tangram puzzles	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 13-7

		• My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	
Review (1 day)	SWBAT practice fluently adding and subtracting within 5 during a partner activity. SWBAT review vocabulary words used in the topic. SWBAT review identifying and describing shapes in preparation for topic assessment.	**Fluency Practice Activity**: Students practice fluently adding and subtracting within 5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Shape Tracing • Act It Out! (Place attribute blocks in a bag and describe each shape as it is taken out) • Play-Doh Shape cut outs • Yarn/pipe cleaner shapes • Pattern block puzzles • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**:	Reteaching Pages

		• Topic 12 Practice Assessment • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	
Topic 13 Assessment (1 day)	SWBAT successfully complete Topic 13 assessment independently.	**Topic 13 Assessment**: Students will independently complete Topic 13 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 13 Practice Assessment • Pick a Project (kitchen shapes, puppets, and/or quilt patterns)	Topic 13 Assessment

MATH.K.G.A	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)
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, behir 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 ("so
MATH.K.G.B	Analyze, compare, create, and compose shapes
MATH.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 number of sides and vertices/"corners") and other attributes (e.g., having sides of eq length).
MATH.K.G.B.5	Model shapes in the world by building shapes from components (e.g., sticks and clay and drawing shapes.
MATH.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?".

Climate Change Activity

K.G.B.5 Students may use sticks and clay to model trees and umbrellas and may then draw shapes (e.g. triangle, rectangel) to model those objects. With prompting and support, students may ask and answer questions about how trees and umbrellas may be used to reduce the warming effect of sunlight.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic

- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Topic 14 Describe and Compare Measurable Attributes

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **3rd Trimester**
Length: **8 days**
Status: **Published**

Enduring Understandings

- Length and height describe how long or tall an object is.
- Capacity describes how much an object holds.
- Weight describes how heavy objects are.
- Objects have measurable attributes.
- Measurement is a process of comparing a unit to the object being measured.
- Good math thinkers are careful about what they write and say so their math ideas are clear.

Essential Questions

- What does it mean to compare the lengths or heights of objects?
- What does it mean to compare the capacities of objects?
- What does it mean to compare the weight of objects?
- What attributes can you use to describe objects?
- How can you describe and compare attributes of objects?
- How can you compare the lengths of two objects?

Summative Assessment and/or Summative Criteria

Topic Test

Quick Checks

Performance Task

Resources

Pearson SuccessNet Math Series (digital and offline)

Math Notebook

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
14-1 Describe and Compare by Length and Height	SWBAT describe and compare objects by length and height.	**Solve and Share**: Students will use real objects to solve problems about length. **Visual Learning**: What does it mean to compare the lengths or heights of objects? **Convince Me**: Students will use cubes to compare length. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 14-1

		manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Cube measuring (measure real objects in classroom with cubes) • create paper chains to compare lengths • Family Line up (draw family in height order) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Handprints, sculptures, footprints, and/or mammals)	
14-2 Describe and Compare by Capacity	SWBAT describe and compare objects by capacity.	**Solve and Share**: Students will compare two cups and explain how they can determine which holds more. **Visual Learning**: What does it mean to compare the capacities of objects? **Convince Me**: Students will use compare two different size glasses.	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 14-2

		Guided Practice: portion of “Guided Practice” for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional “Guided Practice” • “Independent Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Cube measuring (measure real objects in classroom with cubes) • create paper chains to compare lengths • Family Line up (draw family in height order) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project	

		(Handprints, sculptures, footprints, and/or mammals)	
14-3 Describe and Compare by Weight	SWBAT describe and compare objects by weight.	**Solve and Share**: Students will use real objects to solve problems about length. **Visual Learning**: What does it mean to compare the weight of objects? **Convince Me**: Students will answer the question "what animal is heavier than you? What animal is lighter than you?" **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Cube measuring (measure real objects in classroom with cubes) • create paper chains to compare lengths	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 14-3

		• Family Line up (draw family in height order) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Handprints, sculptures, footprints, and/or mammals)	
14-4 Describe Objects by Measurable Attributes	SWBAT use measurable attributes to describe different objects.	**Solve and Share**: Students will identify what can be measured with two different tools. **Visual Learning**: What attributes can you use to describe objects? **Convince Me**: Students will use attributes to describe a large and small book. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 14-4

		Practice” • “Problem solving” • hands on manipulatives • “Reteach to Build” • “Build Mathematical Literacy” • “Enrichment” • Cube measuring (measure real objects in classroom with cubes) • create paper chains to compare lengths • Family Line up (draw family in height order) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Handprints, sculptures, footprints, and/or mammals)	
14-5 Describe and Compare Objects by Measurable Attributes.	SWBAT describe and compare objects by length and height.	**Solve and Share**: Students will think about which attributes of two objects they can measure. **Visual Learning**: How can you describe and compare attributes of objects? **Convince Me**: Students	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 14-5

		will describe and compare objects by length, height, weight, and capacity. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Cube measuring (measure real objects in classroom with cubes) • create paper chains to compare lengths • Family Line up (draw family in height order) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision	

		Enrichment Activity • Pick a Project (Handprints, sculptures, footprints, and/or mammals)	
14-6 Problem Solving: Precision	SWBAT solve math problems about objects with measurable attributes by using precision..	**Solve and Share**: Students will build a cube train using a given number of cubes and compare it to another object. **Visual Learning**: How can you compare the lengths of two objects? **Convince Me**: Students will use 4 cubes to compare objects. **Guided Practice**: portion of "Guided Practice" for the whole group. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice" • "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Cube measuring (measure real objects in classroom with cubes) • create paper	Guided Practice Independent Practice Problem Solving Practice Buddy Reteach Build Mathematical Literacy Enrichment Additional Practice Quick Check 14-6

		chains to compare lengths • Family Line up (draw family in height order) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Build Mathematical Literacy • EnVision Enrichment Activity • Pick a Project (Handprints, sculptures, footprints, and/or mammals)	
Review (1 day)	SWBAT practice fluently adding and subtracting within 5 during a partner activity. SWBAT review vocabulary words used in the topic. SWBAT review identifying and describing shapes in preparation for topic assessment.	**Fluency Practice Activity**: Students practice fluently adding and subtracting within 5 during a partner activity. **Vocabulary Review**: Students review vocabulary words used in the topic. **Reteaching Pages:** Students will complete reteaching pages with teacher support as needed. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • additional "Guided Practice"	Reteaching Pages

		• "Independent Practice" • "Problem solving" • hands on manipulatives • "Reteach to Build" • "Build Mathematical Literacy" • "Enrichment" • Cube measuring (measure real objects in classroom with cubes) • create paper chains to compare lengths • Family Line up (draw family in height order) • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy **Optional Activities**: • Topic 14 Practice Assessment • Pick a Project (Handprints, sculptures, footprints, and/or mammals)	
Topic 14 Assessment (1 day)	SWBAT successfully complete Topic 14 assessment independently.	**Topic 14 Assessment**: Students will independently complete Topic 14 assessment. **Suggested center activities:** • My Math Academy **Technology**: Optional Activities: • St Math • My Math Academy	Topic 14 Assessment

		Optional Activities: • Topic 14 Practice Assessment • Pick a Project (Handprints, sculptures, footprints, and/or mammals)	

MATH.K.M.A	Describe and compare measurable attributes
MATH.K.M.A.1	Describe measurable attributes of objects, such as length or weight. Describe sev measurable attributes of a single object.
MATH.K.M.A.2	Directly compare two objects with a measurable attribute in common, to see wh has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child taller/shorter.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Envision Enrichment printables
- Organize and offer flexible small group learning activities (Pick a Project- Envision)
- Use facts practice center (e.g., zap it)
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.

- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math
- Envision Intervention kit / reteaching

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic
- Envision reteach/intervention kit

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)

Math Extension: Money

Content Area: **Grade Kindergarten Mathematics**
Course(s): **Math**
Time Period: **3rd Trimester**
Length: **6 days**
Status: **Published**

Course Overview

In this topic students will understand that certain objects are coins and dollar bills. They will be introduced to the values of the U.S coins and the one dollar bill. Students will identify and combine values of money in cents and up to one dollar. They will recognize a coin face up or face down. This topic is an extension and is not found in the enVision manal.

Enduring Understandings

- The value of each coin varies.
- The different values of coins means that it takes a different combination to make one dollar.
- The value of a group of pennies and dimes can be found by counting on by 10s and 1s.

Essential Questions

- What is the value of each coin?
- What is the value of one dollar?
- How can you find the value of a group of coins?

Summative Assessment and/or Summative Criteria

Topic Test

Sorting Mat and coins

Class Discussion

Observations

Graphing Coins

Color by Coin

Money ID Bingo

Resources

ST Math online digital platform

My Math Academy online digital platform

Discovery Education math resources

Brain Pop online digital platform

K-5 Math Teaching Resources https://www.k-5mathteachingresources.com/

Unit Plan

Topic/Selection Timeframe	General Objectives	Instructional Activities	Benchmarks/Assessments
Identify pennies, nickels, dimes, and quarters and dollars. (1 Day)	SWBAT identify me the U.S coins.	**Solve and Share**: Give students one of the following: penny, nickel, dime, quarter and dollar. Have students discuss what they notice about their coin(s). • Hold up a picture of a penny. Have students who were given a penny stand up or hold their pennies high. • Record student observations on chart paper. • Continue until all coins and one dollar	Sorting Mat and coins Class Discussion Observations

		have been discussed. **Visual Learning**: Play BrainPop Jr video: Dollars and Cents **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • My Math Academy **Guided Practice**: Students will work in pairs or small group and sort coins. **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Play student vs. teacher (The teacher has a bag of assorted coins. The teacher pulls out one coin at a time and the students correctly identify the coin, make sure to go around the room.) • Money sorting activity (see additional resources attached)	
Identify pennies, nickels, dimes, and quarters and dollars. (1 Day)	SWBAT recognize and count pennies, nickles, quarters and dollars.	**Solve and Share**: Begin by handing each child a coin and some with a dollar. Call students who have pennies to stand up. Discuss if they are correct and review the characteristics of a penny. (Repeat for the others).	Sorting Mat and coins Class Discussion Observations Spin and Cover Penny counting sheet Coin Puzzles

		Suggested center activities: • Teacher led small group instruction with differentiated groupings • My Math Academy **Guided Practice**: For this activity, teacher will choose one of the following to engage in: Spin and cover, penny count sheet, coin puzzles. **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Play student vs. teacher (The teacher has a bag of assorted coins. The teacher pulls out one coin at a time and the students correctly identify the coin, make sure to go around the room.) • Money sorting activity (see additional resources attached)	
Identify pennies, nickels, dimes, and quarters and dollars. (1 Day)	SWBAT identify the amounts of each coin.	**Solve and Share**: Hold up different coins and have students identify the amount of each. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • My Math Academy	Sorting Mat and coins Class Discussion Observations Spin and Cover Penny counting sheet Coin Puzzles

		Guided Practice: For this activity, teacher will choose one of the following to engage in: Spin and cover, penny count sheet, coin puzzles. **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Play student vs. teacher (The teacher has a bag of assorted coins. The teacher pulls out one coin at a time and the students correctly identify the coin, make sure to go around the room.) • Money sorting activity (see additional resources attached)	
Graphing with Coins (1 Day)	SWBAT identify coin values and graph the amount of each coin on a chart.	**Solve and Share**: Briefly review coins. Have students complete the Color by Coin Activity. **Suggested center activities:** • Teacher led small group instruction with differentiated groupings • My Math Academy **Guided Practice**: As a class create a bar graph that shows how many pennies, nickels, dimes and quarters there were on the page. In small groups or the whole class use the pocket chart cards to sort the coin's	Sorting Mat and coins Class Discussion Observations Graphing Coins Color by Coin

		values. **Technology**: Optional Activities: • My Math Academy • St Math **Additional Activities**: • Play student vs. teacher • Money sorting activity (see additional resources attached)	
Money Review (1 Day)	SWBAT recognize pennies, dimes, quarters, nickels and dollars.	**Fluency Practice Activity**: Students will review pennies, dimes, quarters, nickels and dollars. **Vocabulary Review**: Students review vocabulary words used in the topic. **Suggested center activities:** • Teacher will review basic money concepts for assessment in a small group. • Students will engage in a Bingo Coin Review Activity. **Technology**: Optional Activities: • St Math • My Math Academy	Money ID Bingo Game
Money Assessment (1 Day)	SWBAT successfully complete Money Identification assessment independently.	**Topic 1 Assessment**: Students will independently complete the Money Identification assessment. **Technology** Optional Activities: • St Math • My Math Academy	Money Identification Assessment

MATH.K.CC.C	Compare numbers
MATH.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.
MATH.K.DL.A.1	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Suggested Modifications for Special Education, ELL, and Gifted Students

Gifted Learners

- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

Special Education

- Alter assignment lengths if necessary.
- Allow additional time when in full class discussing for processing and discussion.
- Check for understanding by conferencing with the teacher during small group instruction
- Students may choose a partner or teacher may choose a partner to work that student is comfortable with.
- Repeat and clarify any directions given.
- Allow for preferential seating within groups and the whole class.
- Modify amount of vocabulary words used
- Read word problems and directions aloud
- Daily review of facts, skip counting songs, etc.
- Use of manipulatives and real world examples
- Daily lesson Visual Learning Bridge (Envision) and Model with Math

ELL

- Teach vocabulary (Envision- My Word Cards)- Break Apart and Operation
- Use visuals/visual learning videos/"Another Look" videos and the Animated glossary
- "Listen and Look For" when beginning the topic

Suggested Technology Innovations/Use

- My Math Academy
- ST Math
- Tools (Envision 2020)
- Game Center (Envision 2020)