PLANNED INSTRUCTION

A PLANNED COURSE FOR:

Mathematics

Curriculum writing committee:
Paige Fean, Cheryl Hodany, and Kris Zamborsky

Grade Level: Kindergarten

Date of Board Approval: ____2024_____

Marking Period Course Grade
Kindergarten Skills Checklist
Kindergarten Report Card

DELAWARE VALLEY

Student:
Grade Level: Kindergarten
Teacher:
School Year :

Mathematics	QTR	QTR	QTR	QTR
Counting and Cardinality	1	2	3	4
Count to 100 by ones /100				
Count to 100 by tens				
Identify numbers 0-5				
Identify numbers 6-9				
Form/write numbers 0-5				
Form/write numbers 6-9				
Identify numerals in random order 10 - 20				
Identify numerals in random order from 21-100				
Compare numbers				
Operations and Algebraic Thinking	1	2	3	4
Represent addition with objects, fingers or drawing within 10				
Represent subtraction with objects, fingers, or drawing within 10				
Measurement and Data	1	2	3	4
Count to tell the number of objects 0-5				
Count to tell the number of objects 6-9				
Count to tell the number of objects 10-20				
Geometry	1	2	3	4
Identify/describe/create 2-dimensional shapes				
Identify/describe/create 3-dimensional shapes				

Curriculum Map

Overview: The Kindergarten mathematics course covers the Pennsylvania Common Core Math Standards that make sense of problems and persevere in solving them, construct viable arguments and critique the reasoning of others, use appropriate tools strategically, look for and make use of structure, reason abstractly and quantitatively, model with mathematics, attend to precision, and look for and express regularity in repeated reasoning.

Time/Credit for the course: Full Academic Year

Goals:

Marking Period One: Over a 45-day period of time, students will aim to understand:
Unit 0: Routines, Expectations, and Exploration of Materials- (5 days)

Unit 1: Count, Write, Represent, and Compare Numbers Through 5-(24 days)

- Understand the relationship between numbers and quantities; connect counting to cardinality.
- When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Represent a number of objects with a written numeral 0–5 (with 0 representing a count of no objects).
- 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.
- Count to answer "how many?" questions about as many as 5 things arranged in a line, a rectangular array, or a circle, or as many as 5 things in a scattered configuration; given a number from 0-5, count out that many objects.
- Write numbers from 0 to 5. Represent a number of objects with a written numeral 0– 5 (with 0 representing a count of no objects).
- For any number from 1 to 5, find the number that makes 5 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
- Compare two numbers between 0 and 5 presented as written numerals.

Unit 2: Count, Write, Represent, and Compare Numbers 6-10-(16 days)

- Understand the relationship between numbers and quantities; connect counting to cardinality.
- When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Represent a number of objects with a written numeral 6-10.
- Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
- 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.

- Count to answer "how many?" questions about as many as 10 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 6-10, count out that many objects.
- Write numbers from 6 to 10. Represent a number of objects with a written numeral 6-10.
- For any number from 1 to 10, find the number that makes a given number when added to a given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
- Compare two numbers between 0 and 10 presented as written numerals.

Marking Period Two: Over a 45-day period of time, students will aim to understand:

Continue Unit 2: Count, Write, Represent, and Compare Numbers 6-10-(8 days)

- Understand the relationship between numbers and quantities; connect counting to cardinality.
- When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Represent a number of objects with a written numeral 6-10.
- Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
- 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.
- Count to answer "how many?" questions about as many as 10 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 6-10, count out that many objects.
- Write numbers from 6 to 10. Represent a number of objects with a written numeral 6-10.
- For any number from 1 to 10, find the number that makes a given number when added to a given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
- Compare two numbers between 0 and 10 presented as written numerals.

Unit 3: Adding and Subtracting Numbers to 5-(19 days)

- Represent addition and subtraction with objects, fingers, mental images, drawings, acting out situations, verbal explanations, expressions, or equations
- 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 R or equation (e.g., 5=2+3 and 5=4+1)
- For any given 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
- Identify whether the numbers 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

Unit 4: Adding and Subtracting Numbers to 10 -(18 days)

- Represent addition and subtraction with objects, fingers, mental images, drawings, acting out situations, verbal explanations, expressions, or equations
- 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 R or equation (e.g., 5=2+3 and 5=4+1)

- For any given 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
- Identify whether the numbers 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

Marking Period Three: Over a 45-day period of time, students will aim to understand:

Continue Unit 4: Adding and Subtracting Numbers to 10 -(6 days)

- Represent addition and subtraction with objects, fingers, mental images, drawings, acting out situations, verbal explanations, expressions, or equations
- 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 R or equation (e.g., 5=2+3 and 5=4+1)
- For any given 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
- Identify whether the numbers 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

Unit 5: Count, Represent, and Compare Numbers to 20
Count Numbers to 100
Identify Numbers 21-100- (39 days total)

- Compose and decompose numbers from 11 to 19 into ten ones and some more ones
- 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)
- Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20
- Count forward beginning from a given number within the known sequence (instead of having to being at 1)
- 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
- Count to 100 by ones and by tens

Marking Period Four: Over a 45-day period of time, students will aim to understand:

Unit 6 : Geometry-(28 days)

- Correctly name shapes regardless of their orientation or overall size
- Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/corners) and other attributes (e.g., having sides of equal length)
- Compose simple shapes to form larger shapes
- Identify shapes as two-dimensional or three-dimensional
- Model shapes in the world by building shapes from components (e.g. sticks and clay balls) and drawing shapes
- 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

Unit 7 : Measurement and Data-(17 days)

- Directly compare two objects with a measurable attribute in common, to see which object has “more of” or “less of” the attribute, and describe the difference
- Describe measurable attributes of objects, such as length and weight. Describe several measurable attributes of a single object
- Classify objects into given categories; count the number of objects in each category and sort the categories

Big Ideas:

Big Idea #1: Becoming familiar with the basics and setting a solid foundation.
Big Idea #2: Classify, count, and recognize numbers up to 100.
Big Idea #3: Add and subtract within 10
Big Idea #4: Identify shapes and their attributes.
Big Idea #5: Compare, create, and compose shapes.
Big Idea #6: Compare with length, weight, height and volume.
Big Idea #7: Mathematical relationships among numbers can be represented, compared, and communicated.
Big Idea #8: Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.
Big Idea #9: Patterns exhibit relationships that can be extended, described, and generalized.
Big Idea #10: Mathematical relationships can be represented as expressions, equations, and inequalities in mathematical situations.
Big Idea #11: Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization.
Big Idea #12: Measurement attributes can be quantified, and estimated using customary and non-customary units of measure.
Big Idea #13: Mathematical relations and functions can be modeled through multiple representations and analyzed to raise and answer questions.
Big Idea #14: Data can be modeled and used to make inferences.

Textbook and Supplemental Resources:

Name of Textbook: Go Math!
Textbook ISBN#: 978-0-35869478-6
Textbook Publisher & Year of Publication: Houghton Mifflin Harcourt Publishing, 2023
Supplemental Resources: School provided computer programs (may include IXL, Mathseeds, Waggle)

Curriculum Plan

Unit 0: Routines, Procedures, Exploration of Materials **Time Range in Days: 5**

Standards (by number):

Objectives: (Students will be able to)

1. Follow the rules and routines of the classroom as related to mathematics instruction DOK 1
2. Identify and gather the appropriate materials for mathematics lessons DOK 1
3. Use mathematics materials appropriately DOK 1

Core Activities and Corresponding Instructional Methods:

4. Model behaviors that elicit success during math instruction.
5. Introduce center routines, procedures, and expectations. Model center rotations.
6. Introduce classroom materials and discuss expectations of proper use.

Assessments:

Diagnostic:

Teacher questioning and observation

Formative:

Teacher questioning and observation

Curriculum Plan

Unit 1: Count, Write, Represent, and Compare Numbers Through 5
Time Range in Days: 24

Standards (by number): CC.2.1.K.A.1, CC.2.1.K.A.2, CC.2.1.K.A.3

Objectives: (Students will be able to)

1. Count with understanding and recognize "how many" are in sets of objects (DOK 2)
2. Count, with and without objects, forward and backward, within 5(DOK 1)
3. Recognize that a number can be used to represent how many objects are in a set (DOK 2)
4. Connect number words and numerals to the quantities they represent, using various physical models and representations (DOK 2)
5. Solve problems by using the strategy make a model (DOK 3)
6. Solve problems by using the strategy draw a picture (DOK 3)
7. Use matching and counting strategies to compare sets within 5 (DOK 1)
8. Construct a model to solve problems using a matching strategy (DOK 3)
9. Numerical quantities can be analyzed by using appropriate strategies and tools (DOK 4)

Core Activities and Corresponding Instructional Methods:

1. Go Math textbook chapters 1-3 (p 5-130: Listen and Draw and Share and Show activities only)
2. Computer programs may include: Mathseeds, IXL, Waggle
3. Exploring number concepts with unifix cubes, counters, counting bears, etc.
4. Using multi-sensory activities to further supplement number formation practice (plastic grid, shaving cream, sand, play-dough worksheets, etc.)
5. Filling ten-frames to coordinate with number
6. Matching number cards to other visual representations
7. Matching different manipulatives to number representations (counters, counting bears, pom-poms, play-dough etc.)
8. Counting Bingo (using both number and picture representations)
9. Play games where kids identify a missing number
10. Counting boom cards
11. Dice game where students roll and count/record numbers
12. Utilize songs and poems to help students recall proper formations
13. Counting Booklets
14. Number Books and websites:
    a. Count to Five by Annabel Blackledge, Kane Miller Books, 2018.
    b. How Many? Counting to 5 by Miranda Kelly, Crabtree Publishing, 2021.
    c. Five Little Ducks by Raffi, Knopf Books for Young Readers, 1999.

d. Five Little Speckled Frogs by Make Believe Ideas Ltd., Make Believe Ideas, 2017.
e. Look and Count by Julie Dalton. Scholastic Library, 2006.
f. How Many, How Many, How Many by Rick Walton. Candlewick, 1996.
g. 1,2 Zoo: A Counting Adventure by Mindy Heartwell, Independently Published 2024.
h. Sesame Street Counting 1-5 https://www.tinytap.com/activities/g410a/play/counting-numbers-1-5
i. Counting to 5 Pirate Game https://www.math-play.com/counting-to-5/counting-to-5.html
j. Numbers to 5 Counting https://www.tinytap.com/activities/g3s23/play/numbers-to-5-counting

Assessments:

Diagnostic:

Go Math Chapters 1-3 "Show What You Know" assessments
Problem of the day
Teacher questioning and observation

Formative:

Teacher questioning and observation
Workbook pages
Go Math Chapters 1-3 Review

Summative:

Go Math Chapters 1-3 Assessment
Student Data Binders

Extensions:

Problem Solving
Applications pages from Go Math! workbook
Enrichment pages from Go Math! workbook
Mathseeds
IXL
Waggle

Correctives:

Practice and Homework pages from Go Math! workbook
Reteach pages from Go Math! workbook
Mathseeds
IXL
Waggle

Curriculum Plan

Unit 2: Count, Write, Represent, Compare & Order Numbers 6-10

Time Range in Days: 24 days

Standards (by number): CC.2.1.K.A.1, CC.2.1.K.A.2, CC.2.1.K.A.3

Objectives:

1. Count with understanding and recognize "how many" are in sets of objects (DOK 2)
2. Count, with and without objects, forward and backward, within 10 (DOK 1)
3. Recognize that a number can be used to represent how many objects are in a set (DOK 2)
4. Connect number words and numerals to the quantities they represent, using various physical models and representations (DOK 2)
5. Solve problems by using the strategy make a model (DOK 3)
6. Solve problems by using the strategy draw a picture (DOK 3)
7. Use matching and counting strategies to compare sets within 10 (DOK 1)
8. Construct a model to solve problems using a matching strategy (DOK 3)
9. Numerical quantities can be analyzed by using appropriate strategies and tools (DOK 4)

Core Activities and Corresponding Instructional Methods:

10. Go Math textbook chapters 6-10 (p 193-408: Listen and Draw and Share and Show activities only)
11. Computer programs may include: Mathseeds, IXL, Waggle
12. Exploring number concepts with unifix cubes, counters, counting bears, etc.
13. Using multi-sensory activities to further supplement number formation practice (plastic grid, shaving cream, sand, play-dough worksheets, etc.)
14. Filling ten-frames to coordinate with number
15. Matching number cards to other visual representations
16. Matching different manipulatives to number representations (counters, counting bears, pom-poms, play-dough etc.)
17. Counting Bingo (using both number and picture representations)
18. Play games where kids identify a missing number
19. Counting boom cards
20. Dice game where students roll and count/record numbers
21. Utilize songs and poems to help students recall proper formations
22. Counting Booklets
23. Number Books and websites:
    a. http://www.nctm.org
    b. Ten Black Dots by Donald Crew. Greenwillow, 1968.
    c. How Many Snails by Paul Giganti, Jr. Greenwillow, 1988.
    d. Ten Red Apples by Pat Hutchins. Greenwillow, 2000.
    e. The Gummy Candy Counting Book by Amy & Richard Hutchings. Scholastic, 1997.
    f. Look and Count by Julie Dalton. Scholastic Library, 2006.
    g. How Many, How Many, How Many by Rick Walton. Candlewick, 1996.

h. Ten Little Fish by Audrey Wood. Blue Sky Press, 2004.
i. The M & M's Counting Book by Barbara Barbieri McGrath. Scholastic Inc., 1994.

Assessments:

Diagnostic:

Go Math Chapters 7-9 "Show What You Know" assessments
Problem of the day
Teacher questioning and observation

Formative:

Teacher questioning and observation
Workbook pages
Go Math Chapters 7-9 Review

Summative:

Go Math Chapters 7-9 Assessment
Student Data Binders
Go Math Performance Task 1

Extensions:

Problem Solving
Applications pages from Go Math! workbook
Enrichment pages from Go Math! workbook
Mathseeds
IXL
Waggle

Correctives:

Practice and Homework pages from Go Math! workbook
Reteach pages from Go Math! workbook
Mathseeds
IXL
Waggle

Curriculum Plan

Unit 3: Adding and Subtracting Numbers to 5 **Time Range in Days: 19 days**

Standards (by number): CC.2.1.K.A.1, CC.2.1.K.A.2, CC.2.1.K.A.3, CC.2.2.K.A.1

Objectives: (Students will be able to)

1. Use expressions to represent addition within 5(DOK 1)
2. Use objects and drawings to solve addition word problems and record the equations (DOK 1)
3. Solve problems by using the strategy "act it out" (DOK 3)
4. Solve problems by using the strategy "make a model" (DOK 3)
5. Use objects and drawings to solve addition word problems and record the equations (DOK 2)
6. Use objects and drawings to solve subtraction word problems and record the equations (DOK 2)
7. Understand addition as putting together or adding to and subtraction as taking apart or taking from to solve word problems (DOK 1)
8. Decompose numbers into pairs in more than one way and record each decomposition with an equation (DOK 2)

Core Activities and Corresponding Instructional Methods:

1. Go Math textbook chapters 4-6 (p 131-228 Listen and Draw and Share and Show activities only)
2. Computer programs may include: Mathseeds, IXL, Waggle
3. Dice game where students roll and add and record number
4. Addition Puzzles
5. Using manipulatives (counting bears, unifix cubes, counters) to put together and take apart
6. Domino Addition
7. Adding Books and Websites
    a. If You Were a Plus Sign by Trisha Speed Shaskan, Picture Window Books, 2008.
    b. Five Creatures by Emily Jenkins, Square Fish, 2005.
    c. Mission: Addition by Loreen Leedy, Holiday House, 1997.
    d. Pete the Cat and His Four Groovy Buttons by James Dean, HarperCollins, 2012.
    e. If You Were a Minus Sign by Trisha Speed Shaskan, Picture Window Books, 2008.
    f. Beep Beep, Vroom Vroom! by Stuart J Murphy, HarperCollins, 2000.
    g. Elevator Magic by Stuart J Murphy, HarperCollins, 1997.
    h. Monster Magical Chairs by Stuart J Murphy, HarperCollins, 2000.
    i. Bears Addition and Subtraction Adventure https://mental-math-games.net/addition-subtraction/games/5-help-bear/add-subtract.html
    j. Addition and Subtraction to 5 https://www.iknowit.com/lessons/k-addition-and-subtraction-to-5.html
    k. Add Within 5 https://www.splashlearn.com/s/math-games/add-within-5
    l. Subtract Within 5 https://www.splashlearn.com/s/math-games/subtract-within-5

Assessments:

Diagnostic:

Go Math Chapters 4-6 “Show What You Know” assessments
Problem of the Day
Teacher questioning and observation

Formative:

Teacher questioning and observation
Workbook Pages
Go Math Chapters 4-6 Reviews

Summative:

Go Math Chapters 4-6 Assessments
Student Data Binders
Go Math Performance Task 1

Extensions:

Problem Solving
Applications pages from Go Math! workbook
Enrichment pages from Go Math! workbook
Mathseeds
IXL
Waggle

Correctives:

Practice and Homework pages from Go Math! workbook
Reteach pages from Go Math! workbook
Mathseeds
IXL
Waggle

Curriculum Plan

Unit 4: Adding and Subtracting Numbers to 10 **Time Range in Days: 24 days**

Standards (by number): CC.2.1.K.A.1, CC.2.1.K.A.2, CC.2.1.K.A.3, CC.2.2.K.A.1

Objectives: (Students will be able to)

1. Use expressions to represent addition within 10(DOK 1)
2. Use objects and drawings to solve addition word problems and record the equations (DOK 1)
3. Solve problems by using the strategy "act it out" (DOK 3)
4. Solve problems by using the strategy "make a model" (DOK 3)
5. Use objects and drawings to solve addition word problems and record the equations (DOK 2)
6. Use objects and drawings to solve subtraction word problems and record the equations (DOK 2)
7. Understand addition as putting together or adding to and subtraction as taking apart or taking from to solve word problems (DOK 1)
8. Decompose numbers into pairs in more than one way and record each decomposition with an equation (DOK 2)

Core Activities and Corresponding Instructional Methods:

1. Go Math textbook chapters 10-12 (p. 355-480: Listen and Draw and Share and Show activities only)
2. Computer programs may include: Mathseeds, IXL, Waggle
3. Dice game where students roll and add and record number
4. Addition Puzzles
5. Using manipulatives to put together and take apart
6. Domino Addition
7. Adding Books and Websites
    a. Caps for Sale: A Tale of a Peddler, Some Monkeys, and Their Monkey Business by Esphyr Slobodkina, Harper Collins reprint, 2011.
    b. Ten Apples Up On Top! by Dr. Suess, Random House Books for Young Readers, 1961.
    c. Mission: Addition by Loreen Leedy, Holiday House, 1997.
    d. Splash! by Ann Jonas, Greenwillow Books, 1997.
    e. Roosters Off to See the World by Eric Carle, Aladdin, 1999.
    f. The Real Princess by Brenda Williams, Barefoot Books, 2008.
    g. Ready, Set, Hop! by Stuart J Murphy, HarperCollins, 1996.
    h. The Action of Subtraction by Brian P Cleary, Millbrook Press, 2008.
    i. Molly Adds & Subtracts from 10 https://www.abcya.com/games/kindergarten_word_problems_add_subtract
    j. Jet Ski Addition https://www.mathplayground.com/ASB_JetSkiAddition.html
    k. Addition and Subtraction to 10 https://www.tinytap.com/activities/g2tij/play/addition-and-subtraction-to-10
    l. Addition to 10 https://www.topmarks.co.uk/addition/addition-to-10
    m. Subtraction to 10 https://www.topmarks.co.uk/subtraction/subtraction-to-10

Assessments:

Diagnostic:

- Go Math Chapters 10-12 “Show What You Know” assessments
- Problem of the Day
- Teacher questioning and observation

Formative:

- Teacher questioning and observation
- Workbook Pages
- Go Math Chapters 10-12 Reviews

Summative:

- Go Math Chapters 10-12 Assessments
- Student Data Binders
- Performance Task 3

Extensions:

- Problem Solving
- Applications pages from Go Math! workbook
- Enrichment pages from Go Math! workbook
- Mathseeds
- IXL
- Waggle

Correctives:

- Practice and Homework pages from Go Math! workbook
- Reteach pages from Go Math! workbook
- Mathseeds
- IXL
- Waggle

Curriculum Plan

<u>Unit 5</u>: Count, Represent, and Compare Numbers to 20
Count Numbers to 100
Identify Numbers 21-100- **<u>Time Range in Days</u>: 39 Days**

<u>Standards (by number):</u> CC.2.1.K.A.1, CC.2.1.K.A.2, CC.2.1.K.A.3

Objectives: (Students will be able to)

1. Use objects to decompose numbers 11 through 19 into ten ones and some more ones (DOK 1)
2. Represents 11 to 19 objects with number names and written numerals (DOK 2)
3. Solve problems by using the strategy draw a picture (DOK 3)
4. Model and count with objects to show number 20 and Beyond (DOK 2)
5. Represent 20 objects and more with a number name and a written numeral (DOK 2)
6. Count forward to 20 from a given number (DOK 1)
7. Use the number 10 as a benchmark to think about number relationships, such as 12 is 2 more than 10 (DOK 2)
8. Know the count sequence when counting to 50 and to 100 by ones and tens (DOK 1)
9. Solve problems by using the strategy "make a model" (DOK 3)

Core Activities and Corresponding Instructional Methods:

1. Go Math textbook chapters 13, 14, and 16 (p 483-576 and 609-636: Listen and Draw and Share and Show activities only)
2. Computer programs may include: Mathseeds, IXL, Waggle
3. Exploring number concepts with unifix cubes, counters, counting bears, ten frames,etc
4. Using multi-sensory activities to further supplement number formation practice (plastic grid, shaving cream, sand, play-dough worksheets, etc)
5. Filling ten-frames to coordinate with number
6. Matching number cards to other visual representations
7. Matching different manipulatives to number representations (counters, counting bears, pom-poms, play-dough etc)
8. Counting Bingo (using both number and picture representations)
9. Play games where kids identify a missing number
10. Counting boom cards
11. Dice game where students roll and count/record numbers
12. Utilize songs and poems to help students recall proper formations
13. Counting Booklets
14. Number Books and websites:
    a. Count it Higher with Wildflowers 11-20: A Counting Book by Jady Shae, CreateSpace Independent Publishing Platform, 2018.
    b. Journee Knows Numbers 11-20 Vol. 5 by SK Jackson, Independently Published, 2020.
    c. City by Numbers by Stephen T Johnson, Puffin Books, 2003.
    d. 20 Big Trucks in the Middle of the Street by Mark Lee, Candlewick, 2015.
    e. 100 Bugs! A Counting Book by Kate Narita, Farrar, Straus and Giroux (BYR), 2018.

f. 100 Hungry Ants by Elinor J Pinczes, Clarion Books, 1993.
g. Number Track http://www.crickweb.co.uk/ks2numeracy-properties-and-ordering.html#ntrack
h. Two-Digit Number Labeling http://www.crickweb.co.uk/ks1numeracy.html#100square
i. Balloon Count Math: Count to 20 http://www.sheppardsoftware.com/mathgames/earlymath/BalloonCount20.htm
j. Connect the Dots: 1–20 http://www.abcya.com/connect_the_dots_20.htm
k. Number Bingo http://www.abcya.com/number_bingo.htm
l. Number-Cube Count http://www.mathsisfun.com/games/speed-math.html
m. Base-Ten Bingo http://www.abcya.com/base_ten_bingo.htm
n. Counting, Sorting, and Comparing http://www.abcya.com/counting_sorting_comparing.htm
o. Comparing Number Values http://www.abcya.com/comparing_number_values_jr.htm

Assessments:

Diagnostic:

Go Math Chapters 13, 14, 16 "Show What You Know" assessments
Problem of the Day
Teacher questioning and observation

Formative:

Teacher questioning and observation
Workbook Pages
Go Math Chapters 13, 14, 16 Reviews

Summative:

Go Math Chapters 13,14,16 Assessments
Student Data Binders
Go Math Performance Task 2

Extensions:

Problem Solving
Applications pages from Go Math! workbook
Enrichment pages from Go Math! workbook
Mathseeds
IXL
Waggle

Correctives:

Practice and Homework pages from Go Math! workbook
Reteach pages from Go Math! workbook
Mathseeds
IXL
Waggle

Curriculum Plan

Unit 6 : Geometry **Time Range in Days: 28 Days**

Standards (by number): CC.2.3.K.A.1, CC.2.3.K.A.2

Objectives: (Students will be able to)

1. Identify, name, describe and compare two-dimensional shapes including square, circle, triangle, rectangle, and hexagon (DOK 1)
2. Identify, name, describe, and compare three-dimensional shapes including cube, cone, cylinder, and sphere (DOK 2)
3. Analyze, compare, create, and compose shapes (DOK 4)
4. 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, behind, and next to (DOK 1)
5. Model shapes in the world by building shapes from components and drawing shapes (DOK 2)

Core Activities and Corresponding Instructional Methods:

1. Go Math textbook chapters 17-18 (p. 639-764: Listen and Draw and Share and Show activities only)
2. Computer programs may include: Mathseeds, IXL, Waggle
3. Given a variety of 2D shapes, identify the following: circle, square, triangle, rectangle, and hexagon
4. Describe attributes of 2D shapes including the use of terms: flat, side, corner, vertex, and angle
5. Sort and classify 2D shapes by different attributes
6. Construct 2d shapes using different manipulatives, including the combination of other 2D shapes
7. Compare 2D shapes using defining attributes using terms alike and different
8. Given a variety of 3D shapes, identify the following: cone, cube, sphere, and cylinder
9. Describe attributes of 3D shapes including the use of terms: solid, edge, face, and vertex
10. Sort and classify 3D shapes by different attributes
11. Construct 3D shapes using different manipulatives
12. Compare 3D shapes using defining attributes using terms alike and different
13. Shape books and websites:
    a. Patternables Activity Book. Learning Resources, 1997.
    b. Color Zoo by Lois Ehlert. Lippincott, 1989.
    c. Alphabet City by Stephen Johnson. Viking, 1995.
    d. Big Shapes for Little Kids by Susan Mascall and Bob Mascall. Fundangles, 1999.
    e. The Greedy Triangle by Marilyn Burns. Scholastic, 1995.
    f. PBS Magical Shape Hunt https://pbskids.org/peg/games/magical-shape-hunt/

g. Shapes, Shapes, Shapes by Tana Hoban. Greenwillow Books, 1996.
h. Shapes in Nature by J. Feldman. Children's Press, 1991.
i. Circus Shapes by Stuart J. Murphy. HarperCollins, 1997.
j. Patternables Activity Book. Learning Resources, 1997.
k. Color Zoo by Lois Ehlert. Lippincott, 1989.
l. Alphabet City by Stephen Johnson. Viking, 1995.
m. Hands-on Standards. Learning Resources, 2006.
n. Navigating Through Geometry in Prekindergarten–Grade 2, The National Council of Teachers of Mathematics, Inc. NCTM.
o. PBS Cyberchase Tangram Game https://pbskids.org/cyberchase/games/tangram-game

Assessments:

Diagnostic:

Go Math Chapters 17-18 "Show What You Know" assessments
Problem of the Day
Teacher questioning and observation

Formative:

Teacher questioning and observation
Workbook Pages
Go Math Chapters 17-18 Review

Summative:

Go Math Chapters 17-18 Assessment
Student Data Binders
Go Math Performance Task 4

Extensions:

Problem Solving
Applications pages from Go Math! workbook
Enrichment pages from Go Math! workbook
Mathseeds
IXL
Waggle

Correctives:

Practice and Homework pages from Go Math! workbook
Reteach pages from Go Math! workbook
Mathseeds
IXL
Waggle

Curriculum Plan

Unit 7 : Measurement and Data **Time Range in Days: 17 Days**

Standards (by number): CC.2.4.K.A.1, CC.2.4.K.A.4

Objectives: (Students will be able to)

1. Describe measurable attributes of objects, such as length, weight, area, or capacity (DOK 1)
2. Compare the length, height, and weight of two objects (DOK 2)
3. Classify objects by color, shape, and size and count the number of objects in each category (DOK 2)
4. Classify up to 20 objects using one attribute into categories; display the number of objects in each category; count and compare the quantities of each category and describe the difference (DOK 2)
5. Compare two objects with a measurable attribute in common and describe the difference (DOK 2)

Core Activities and Corresponding Instructional Methods:

1. Go Math textbook chapters 19-20 (p 765-824: Listen and Draw and Share and Show activities only)
2. Computer programs may include: Mathseeds, IXL, Waggle
3. Compare lengths of two objects to find which is shorter and longer
4. Compare weights of two objects to find which is heavier and lighter
5. Compare heights of two objects to find which is taller and shorter
6. Compare capacity of two objects to find which has a greater volume
7. Use manipulatives to measure attributes of objects (connecting blocks,etc)
8. Describe several ways to measure the same object
9. Sort objects and classify them by particular attributes
10. Count and compare size of groups (by attributes)
11. Sorting Books and websites:
    a. Animal Scramble by Wild Planet Entertainment Inc. (a game of responding to clues and attributes to learn colors, animal names, and sounds)
    b. Animal Soup by Briarpatch (a game of identifying objects that do not match certain attributes of a set)
    c. Apple Farmer Annie by Monica Wellington. Penguin Group, 2004. (a book of picking, counting, sorting, baking, and selling apples; and trying some of Annie's recipes)
    d. Cat Show (All Aboard Math Reader), Vol. 1 by Jayne Harvey. Harcourt/Rigby, 2003. (a book of decisions about how to sort the cats)
    e. Dave's Down-to-Earth Rock Shop (MathStart) by Stuart J. Murphy. HarperCollins, 2000. (a book to demonstrate that objects can be sorted/organized in many different ways)
    f. Let's Sort by David Bauer. Coughlan, 2002. (a book to show sorting by color, shape, or size)

g. Mouse Match by Fundix (a game of collecting specific colors of cheese to match the colors of each mouse's ears)
h. SET: The Computer Game by SET Enterprises (a sorting and classifying computer game for Windows 98, ME, 95, or Mac)
i. Sort It Out! by Barbara Mariconda. Sylvan Dell, 2008. (a book to demonstrate sorting and stowing objects by similar attributes)
j. Sorting by Henry A. Pluckrose. Scholastic Library Publishing, 1988. (a sorting book in the Math Counts Series)
k. Sorting by Lynn Peppas. Crabtree, 2010. (an activity book for sorting objects)
l. 3 Little Firefighters (MathStart) by Stuart J. Murphy. HarperCollins, 2003. (a book of matching sets of buttons by shape, color, and size)
m. Tripoley for Kids by Cadaco (a multigame collection for sorting, matching, and swapping by attributes)
n. Turn the Wheel Shapes and Sorting by Roger Priddy. St. Martin's Press, 2004. (a sorting book for very young children)
o. Wok 'n Roll by International Playthings (a game of sorting by colors as the wok turns and spins)
p. Whose Shoes?: A Shoe for Every Job by Stephen R. Swinburne. Boyds Mills Press, 2010

Assessments:

Diagnostic:

Go Math Chapters 19-20 "Show What You Know" assessments
Problem of the Day
Teacher questioning and observation

Formative:

Teacher questioning and observation
Workbook Pages
Go Math Chapters 19-20 Reviews

Summative:

Go Math Chapters 19-20 Assessments
Student Data Binders
Go Math Performance Task 5

Extensions:

Problem Solving
Applications pages from Go Math! workbook
Enrichment pages from Go Math! workbook
Mathseeds
IXL
Waggle

Correctives:

Practice and Homework pages from Go Math! workbook
Reteach pages from Go Math! workbook
Mathseeds
IXL
Waggle