



# LYON COUNTY COMMON CORE STANDARDS PACING GUIDE

Mathematics Kindergarten

June 2011

# **Mathematics Grade Kindergarten**



#### COMMON CORE STATE STANDARDS for MATHEMATICS

## **Grade K Overview**

## Counting and Cardinality

- · Know number names and the count sequence.
- · Count to tell the number of objects.
- Compare numbers.

## Operations and Algebraic Thinking

 Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

#### Number and Operations in Base Ten

 Work with numbers 11–19 to gain foundations for place value.

#### Measurement and Data

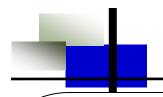
- Describe and compare measurable attributes.
- Classify objects and count the number of objects in categories.

#### Geometry

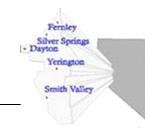
- · Identify and describe shapes.
- Analyze, compare, create, and compose shapes.

#### **Mathematical Practices**

- Make sense of problems and persevere in solving them.
- 2. Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- 4. Model with mathematics.
- 5. Use appropriate tools strategically.
- Attend to precision.
- 7. Look for and make use of structure.
- Look for and express regularity in repeated reasoning.



# Mathematics Kindergarten - Unit 1 (Weeks 1-6)



## CONTENT

Sorting and Classifying Position and Location Using Patterns to Predict What Comes Next

## **KEY VOCABULARY**

Number, count, larger, addition, subtraction, shape, below, beside, in front of, behind, next to

## RESOURCES

**Envision Math Topics:** Topics 1 (all), 2 (all), & 3 (lesson 3-6 only) **Supplemental Materials:** 

Facts practice, flash cards, timed tests, manipulatives, practice tasks, interactive software, number poems/songs, dots, objects, math games, estimation, 100s chart.

## PRE ASSESSMENT

Site-Based Baseline Assessment Placement Test

## FORMATIVE ASSESSMENT

**Daily Spiral Review:** Topics

White Boards/Signaling/Questioning

Teacher Observation, Monitoring Class and Groups

## SUMMATIVE ASSESSMENT

 $\textbf{Topic Tests:} \ \textbf{Topics 1 \& 2 full tests, plus use Exam view CD to assess}$ 

Lesson 3-6 only

## **STANDARDS**

**K.CC.4(a-c):** Understand the relationship between numbers and quantities; connect counting to cardinality.

**a:** When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

**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.

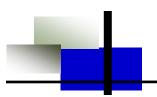
**c:** Understand that each successive number name refers to a quantity that is one larger.

**K.MD.3:** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

**K.OA.1:** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

**K.OA.2:** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

**K.G.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.* 



## Unit 1 (Weeks 1-6) Pacing for a Common Core Curriculum with enVisionMATH

Fernley
Silver Springs
Dayton
Yerington
Smith Valley

Kindergarten Transition Kit 1.0

Pacing for a Common Core Curriculum

## **Pacing for a Common Core Curriculum**

with enVisionMATH™ Kindergarten

This pacing chart is provided to help you plan your course as you look to implement the Common Core (CC) State Standards with enVisionMATH ©2009/2011 in your math classroom. The chart indicates the Standards for Mathematical Content that each lesson addresses and proposes pacing for each topic. Included in the chart are CC Lessons that offer in-depth coverage of certain standards. These lessons, in addition to the lessons in the Student Edition provide comprehensive coverage of all of the Common Core State Standards for Kindergarten.

The suggested number of days for each chapter is based on a 45-minute class period. The total of 150 days of instruction allows time for all of the lessons that address the Common Core State Standards as well as some review and enrichment ✓ Content to meet the Kindergarten Common Core Math Content Standards

▲ Content to prepare for future study or to enrich the curriculum

Standard(s) for

		Mathematical Content	
Topic 1	Sorting and Classifying	7	days
1-1	Same and Different	K.MD.3	<b>✓</b>
1-2	Sorting by One Attribute	K.MD.3	✓
1-3	Sorting the Same Set in Different Ways	K.MD.3	<b>√</b>
1-4	Sorting by More Than One Attribute	K.MD.3	1
1-5	Problem Solving: Use Logical Reasoning	K.MD.3, K.G.1	1

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Pacing for a Common Core Curriculum

## **Pacing for a Common Core Curriculum**

with enVisionMATH™ Kindergarten

This pacing chart is provided to help you plan your course as you look to implement the Common Core (CC) State Standards with enVisionMATH ©2009/2011 in your math classroom. The chart indicates the Standards for Mathematical Content that each lesson addresses and proposes pacing for each topic. Included in the chart are CC Lessons that offer in-depth coverage of certain standards. These lessons, in addition to the lessons in the Student Edition provide comprehensive coverage of all of the Common Core State Standards for Kindergarten.

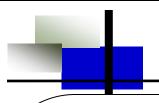
The suggested number of days for each chapter is based on a 45-minute class period. The total of 150 days of instruction allows time for all of the lessons that address the Common Core State Standards as well as some review and enrichment lessons.

✓ Content to meet the Kindergarten Common Core Math Content Standards

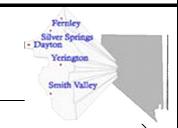
▲ Content to prepare for future study or to enrich the curriculum

		Standard(s) for Mathematical Content	
Topic 1	Sorting and Classifying	7 days	
1-1	Same and Different	K.MD.3	1
1-2	Sorting by One Attribute	K.MD.3	1
1-3	Sorting the Same Set in Different Ways	K.MD.3	1
1-4	Sorting by More Than One Attribute	K.MD.3	1
1-5	Problem Solving: Use Logical Reasoning	K.MD.3, K.G.1	1

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# Mathematics Kindergarten - Unit 2 (Weeks 7-12)



## CONTENT

Zero through Five

## **KEY VOCABULARY**

Number, count, object, greater than, less than, array, pair, equal to

## RESOURCES

**Envision Math Topics:** Topic 4 **Supplemental Materials:** 

Facts practice, flash cards, timed tests, manipulatives, practice tasks, Interactive software, number poems and songs, dots, bingo dotters, dice, math mats, objects, math games, estimation, 100s chart.

## PRE ASSESSMENT

Site-Based Baseline Assessment Placement Test

## FORMATIVE ASSESSMENT

**Daily Spiral Review:** Topic 4 Basic-Facts Timed Tests

White Boards/Signaling/Questioning

Teacher Observation, Monitoring Class and Groups

## SUMMATIVE ASSESSMENT

**Topic Tests:** Topic 4 test

## **STANDARDS**

**K.CC.3:** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

**K.CC.4(a-c):** Understand the relationship between numbers and quantities; connect counting to cardinality.

**a:** When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

**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.

**c:** Understand that each successive number name refers to a quantity that is one larger.

**K.CC.5:** Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

**K.CC.6:** Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

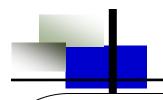
**K.OA.3:** Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).



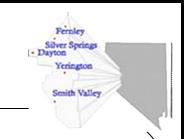


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		Standard(s) for Mathematical Content	
Topic 4	Zero to Five	15	days
4-1	Counting 1, 2, and 3	K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
CC-1	Counting 1, 2, and 3 in Different Arrangements	K.CC.4.b, K.CC.5	1
4-2	Reading and Writing 1, 2, and 3	K.CC.3, K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
4-3	Counting 4 and 5	K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
CC-2	Counting 4 and 5 in Different Arrangements	K.CC.4.b, K.CC.5	1
4-4	Reading and Writing 4 and 5	K.CC.3, K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
4-5	Reading and Writing 0	K.CC.3, K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
4-6	Making 4 and 5	K.OA.3	1
CC-3	Writing Number Sentences for 4 and 5	K.OA.3	1
4-7	More, Fewer, and Same As	K.CC.6	<b>&gt;</b>
4-8	1 and 2 More	K.CC.6	<b>&gt;</b>
4-9	1 and 2 Fewer	K.CC.6	<b>&gt;</b>
4-10	Problem Solving: Make An Organized List	K.CC.5, K.CC.4.b	<b>\</b>



## Mathematics Kindergarten - Unit 3 (Weeks 13-18)



## CONTENT

Numbers Six to Ten Comparing Numbers

## **KEY VOCABULARY**

Compare, count, larger, how many, circle, greater than, less than, equal to, addition, subtraction, pairs

## RESOURCES

**Envision Math Topics:** Topic s 5 & 6

**Supplemental Materials:** Facts practice, flash cards, timed tests, manipulatives, practice tasks, interactive software, number poems/ songs, dots, objects, dice, math mats, math games, estimation, 100s chart.

## PRE ASSESSMENT

**Site-Based Baseline Assessment Placement Test:** Topic s 5 & 6

## FORMATIVE ASSESSMENT

Daily Spiral Review: Topics 5 & 6

**Basic-Facts Timed Tests** 

White Boards/Signaling/Questioning

Teacher Observation, Monitoring Class and Groups

## SUMMATIVE ASSESSMENT

**Topic Tests:** Topic s 5 & 6

## **STANDARDS**

**K.MD.3:** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

**K.CC.2:** Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

**K.CC.3:** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

**K.CC.4(a-c):** Understand the relationship between numbers and quantities; connect counting to cardinality.

**a:** When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

**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.

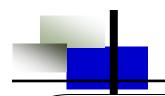
**c:** Understand that each successive number name refers to a quantity that is one larger.

**K.CC.5:** Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

**K.CC.6:** Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

**K.CC.7:** Compare two numbers between 1 and 10 presented as written numerals.

**K.OA.1:** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.



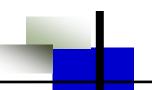
# Mathematics Kindergarten - Unit 3 (Weeks 13-18)



## **STANDARDS**

**K.OA.3:** Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).

**K.OA.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.



# Unit 3 (Weeks 13-18) Pacing for a Common Core Curriculum with enVisionMATH

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Yerington
Smith Valley

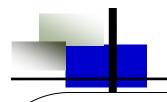
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Pacing for a Common Core Curriculum

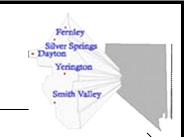
		Standard(s) for Mathematical Content	
Topic 5	Six to Ten	16	days
5-1	Counting 6 and 7	K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
5-2	Making 6 and 7	K.OA.3	1
5-3	Reading and Writing 6 and 7	K.CC.3, K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
CC-4	Writing Number Sentences for 6 and 7	K.OA.3	1
5-4	Counting 8 and 9	K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
5-5	Making 8 and 9	K.OA.3	1
5-6	Reading and Writing 8 and 9	K.CC.3, K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
CC-5	Writing Number Sentences for 8 and 9	K.OA.3	1
5-7	Counting 10	K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
5-8	Making 10	K.OA.3, K.OA.4	1
5-9	Reading and Writing 10	K.CC.3, K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
CC-6	Writing Number Sentences for 10	K.OA.3	<b>\</b>
5-10	Ordering Numbers on a Number Line	K.CC.2	1
5-11	Problem Solving: Make a Graph	K.MD.3	1

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		Standard(s) for Mathematical Content	
Topic 6	Comparing Numbers	7	days
6-1	Comparing Numbers Through 10	K.CC.6, K.CC.7	✓
6-2	Comparing Numbers to 5	K.CC.6, K.CC.7	✓
6-3	Comparing Numbers to 10	K.CC.6, K.CC.7	✓
6-4	1 and 2 More and Fewer	K.CC.6, K.CC.7, K.OA.1	1
6-5	Problem Solving: Use Objects	K.CC.6	✓
Topic 7	Geometry	11	days
7-1	Squares and Other Rectangles	K.G.1, K.G.2, K.G.3, K.G.4	•
7-2	Circles and Triangles	K.G.1, K.G.2, K.G.3, K.G.4	•
7-3	Making Shapes From Other Shapes	K.G.6	✓
CC-7	More Making Shapes from Other Shapes	K.G.4, K.G.6	✓
7-4	Same Size, Same Shape	K.G.2	✓
7-5	Symmetry		<b>A</b>
7-6	Solid Figures	K.G.1, K.G.2, K.G.3	✓
CC-8	Building with Solid Figures	K.G.2, K.G.4	✓
7-7	Comparing Solid Figures	K.G.4	✓
7-8	Flat Surfaces of Solid Figures	K.G.3, K.G.4, K.G.5	✓
7-9	Problem Solving: Use Objects		_



## Mathematics Kindergarten - Unit 4 (Weeks 19-24)



## CONTENT

Geometry

Measurement

## **KEY VOCABULARY**

Shape, below, above, beside, in front of, behind, next to

## RESOURCES

**Envision Math Topics:** Topic s 7 & 9

**Supplemental Materials:** Facts practice, flash cards, timed tests, manipulatives, practice tasks, interactive software, number poems/ songs, dots, objects, dice, math mats, math games, estimation, 100s chart.

## PRE ASSESSMENT

**Site-Based Baseline Assessment Placement Test:** Topic s 7 & 9

## FORMATIVE ASSESSMENT

Daily Spiral Review: Topics 7 & 9

**Basic-Facts Timed Tests** 

White Boards/Signaling/Questioning

Teacher Observation, Monitoring Class and Groups

## SUMMATIVE ASSESSMENT

**Topic Tests:** Topic s 7 & 9

## **STANDARDS**

**K.G.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.* 

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

**K.G.3:** Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

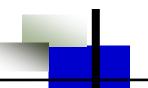
**K.G.4:** Analyze and compare two-and three-dimensional shapes, indifferent sizes and orientation, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).

**K.G.5:** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

**K.G.6:** Compose simple shapes to form larger shapes. For example, "Can you join these tow triangles with three full sides touching to make a rectangle?"

**K.MD.1:** Describe measureable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

**K.MD.2:** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.



## Unit 4 (Weeks 19-24) Pacing for a Common Core Curriculum with enVisionMATH

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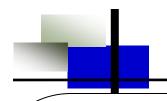
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Pacing for a Common Core Curriculum

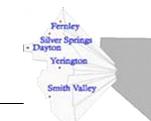
		Standard(s) for Mathematical Content	
Topic 6	Comparing Numbers	7	days
6-1	Comparing Numbers Through 10	K.CC.6, K.CC.7	1
6-2	Comparing Numbers to 5	K.CC.6, K.CC.7	1
6-3	Comparing Numbers to 10	K.CC.6, K.CC.7	1
6-4	1 and 2 More and Fewer	K.CC.6, K.CC.7, K.OA.1	1
6-5	Problem Solving: Use Objects	K.CC.6	1
Topic 7	Geometry	11	days
7-1	Squares and Other Rectangles	K.G.1, K.G.2, K.G.3, K.G.4	1
7-2	Circles and Triangles	K.G.1, K.G.2, K.G.3, K.G.4	1
7-3	Making Shapes From Other Shapes	K.G.6	1
CC-7	More Making Shapes from Other Shapes	K.G.4, K.G.6	1
7-4	Same Size, Same Shape	K.G.2	1
7-5	Symmetry		<b>A</b>
7-6	Solid Figures	K.G.1, K.G.2, K.G.3	1
CC-8	Building with Solid Figures	K.G.2, K.G.4	1
7-7	Comparing Solid Figures	K.G.4	1
7-8	Flat Surfaces of Solid Figures	K.G.3, K.G.4, K.G.5	1
7-9	Problem Solving: Use Objects		<b>A</b>

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		Standard(s) for Mathematical Content	
Topic 8	Fractions and Ordinals	0-4	days
8-1	Equal Parts		•
8-2	Halves		<b>A</b>
8-3	Problem Solving: Act It Out		•
8-4	Ordinal Numbers Through Fifth	Extends K.CC.2	•
8-5	Ordinal Numbers Through Tenth		•
8-6	Problem Solving: Draw a Picture		•
Topic 9	Measurement	12	days
9-1	Comparing and Ordering by Size	K.MD.1, K.MD.2	1
9-2	Comparing by Length	K.MD.1, K.MD.2	1
9-3	Ordering by Length	K.MD.1, K.MD.2	<b>\</b>
9-4	Measuring Length	K.MD.1	<b>\</b>
9-5	Problem Solving: Try, Check, and Revise	K.MD.1, K.MD.2	✓
9-6	Comparing Capacities	K.MD.1, K.MD.2	1
9-7	Measuring Capacity	K.MD.1	1
9-8	Comparing Weights	K.MD.1, K.MD.2	<b>~</b>
9-9	Measuring Weight	K.MD.1	✓
9-10	Problem Solving: Try, Check, and Revise	K.MD.1	1



# Mathematics Kindergarten - Unit 5 (Weeks 25-30)



## **CONTENT**

Addition
Subtraction

## **KEY VOCABULARY**

Add, subtract

## RESOURCES

**Envision Math Topics:** Topic s 10 & 11

**Supplemental Materials:** Facts practice, flash cards, timed tests, manipulatives, practice tasks, interactive software, number poems/ songs, dots, objects, dice, math mats, math games, estimation, 100s chart.

PRE ASSESSMENT

Site-Based Baseline Assessment Placement Test: Topic s 10 & 11

## FORMATIVE ASSESSMENT

Daily Spiral Review: Topics 10 & 11

**Basic-Facts Timed Tests** 

White Boards/Signaling/Questioning

Teacher Observation, Monitoring Class and Groups

## SUMMATIVE ASSESSMENT

**Topic Tests:** Topic s 10 & 11

## **STANDARDS**

**K.OA.1:** Represent addition and subtraction with objects, fingers, mental images, drawings2, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

**K.OA.2:** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. *of two children and describe one child as taller/shorter.* 

K.OA.5: Fluently add and subtract within 5.

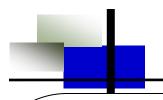


# Unit 5 (Weeks 25-30) Pacing for a Common Core Curriculum with enVisionMATH

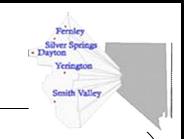
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		Standard(s) for Mathematical Content	
Topic 1	0 Addition	9	days
10-1	Stories About Joining	K.OA.1, K.OA.2, K.OA.5	1
10-2	More Joining	K.OA.1, K.OA.2, K.OA.5	1
10-3	Joining Groups	K.OA.1, K.OA.2, K.OA.5	1
10-4	Using the Plus Sign	K.OA.1, K.OA.2, K.OA.5	1
10-5	Finding Sums	K.OA.1, K.OA.2, K.OA.5	1
10-6	Addition Sentences	K.OA.1, K.OA.2, K.OA.5	1
10-7	Problem Solving: Draw a Picture	K.OA.1, K.OA.2, K.OA.5	1
Topic 1	1 Subtraction	9	days
11-1	Stories About Separating	K.OA.1, K.OA.2, K.OA.5	1
11-2	Stories About Take Away	K.OA.1, K.OA.2, K.OA.5	1
11-3	Stories About Comparing	K.OA.1, K.OA.2, K.OA.5	1
11-4	Using the Minus Sign	K.OA.1, K.OA.2, K.OA.5	1
11-5	Finding Differences	K.OA.1, K.OA.2, K.OA.5	1
11-6	Subtraction Sentences	K.OA.1, K.OA.2, K.OA.5	1
11-7	Problem Solving: Act It Out	K.OA.1, K.OA.2, K.OA.5	•



## Mathematics Kindergarten - Unit 6 (Weeks 31-36)



## CONTENT

Large Numbers Graphing

## **KEY VOCABULARY**

Graph, number, ones, tens, pair, "how many?", greater than, less than, equal to, match, count

## RESOURCES

**Envision Math Topics:** Topic s 12 & 16

**Supplemental Materials:** Facts practice, flash cards, timed tests, manipulatives, practice tasks, interactive software, number poems/ songs, dots, objects, dice, math mats, math games, estimation, 100s chart.

## PRE ASSESSMENT

Site-Based Baseline Assessment Placement Test: Topic s 12 & 16

## FORMATIVE ASSESSMENT

Daily Spiral Review: Topics 12 & 16

**Basic-Facts Timed Tests** 

White Boards/Signaling/Questioning

Teacher Observation, Monitoring Class and Groups

## SUMMATIVE ASSESSMENT

**Topic Tests:** Topic s 12 & 16

## **STANDARDS**

K.CC.1: Count to 100 by ones and by tens.

**K.CC.2:** Count forward beginning from a given number within the known sequence (instead of having to begin at one).

**K.CC.3:** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

**K.CC.4(a-c):** Understand the relationship between numbers and quantities; connect counting to cardinality.

**a:** When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

**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.

**c:** Understand that each successive number name refers to a quantity that is one larger.

**K.CC.5:** Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

**K.CC.6:** Identify whether the number of objects in one group is greater than, less than or equal to the number of objects in another group, e.g., by using matching and counting strategies.

**K.NBT.1:** Compose and decompose number 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.

**K.MD.3:** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.



# Unit 6 (Weeks 31-36) Pacing for a Common Core Curriculum with enVisionMATH

Fernley
Silver Springs
Dayton
Yerington
Smith Valley

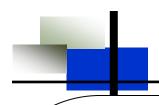
Kindergarten Transition Kit 1.0

Pacing for a Common Core Curriculum

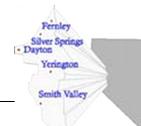
		Standard(s) for Mathematical Content	
Topic 1	2 Large Numbers	19	days
12-1	Counting, Reading, and Writing 11 and 12	K.CC.3, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	•
12-2	Counting, Reading, and Writing 13, 14, and 15	K.CC.3, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	•
CC-9	Making 11, 12, and 13	K.NBT.1	1
12-3	Counting, Reading, and Writing 16 and 17	K.CC.3, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
CC-10	Making 14, 15 and 16	K.NBT.1	1
12-4	Counting, Reading, and Writing 18, 19, and 20	K.CC.3, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5	1
CC-11	Making 17, 18, and 19	K.NBT.1	1
CC-12	Creating Sets to 19	K.NBT.1	✓
CC-13	Parts of 11, 12, and 13	K.NBT.1	1
CC-14	Parts of 14, 15, and 16	K.NBT.1	✓
CC-15	Parts of 17, 18, and 19	K.NBT.1	✓
12-5	Odd and Even	Prepares for 2.OA.3	<b>A</b>
12-6	Counting to 100	K.CC.1, K.CC.2, K.CC.4.a, K.CC.4.b, K.CC.4.c	1
12-7	Counting Groups of Tens	K.CC.1	1
12-8	Patterns on a Hundred Chart	K.CC.1	✓
12-9	Skip Counting By 2 and 5	Prepares for 2.NBT.2	<b>A</b>
12-10	Problem Solving: Look for a Pattern	K.CC.2	✓

Kindergarten Transition Kit 1.0

		Standard(s) for Mathematical Content	
Topic 1	6 Graphing	7-8	days
16-1	As Many, More, and Fewer	K.CC.6	1
16-2	Collecting Data		•
16-3	Real Graphs	K.MD.3	1
16-4	Picture Graphs	K.MD.3	1
16-5	Bar Graphs	K.MD.3	1
16-6	More Likely, Less Likely		•
16-7	Problem Solving: Make a Graph	K.MD.3	1



# Mathematics Kindergarten - Depth of Knowledge



## **Nevada Mathematics Assessment Matrix**

## **Depth of Knowledge (DOK)**

The DOK levels represent a hierarchy based on complexity (rather than difficulty). The hierarchy is based on two main factors:

- 1) sophistication and complexity, and
- 2) the likelihood that students at the grade level tested would have received prior instruction or would have had an opportunity to learn the content. Some problems or tasks have a low depth-of-knowledge level because the knowledge required is commonly known and students with normal instruction at that grade level should have had the opportunity to learn how to routinely perform what is being asked.

## **DOK Level 1: Recall**

Level 1 includes the recall of information such as a fact, definition, term, or a simple procedure, as well as performing a simple algorithm, reading an uncomplicated data display, or applying a formula. A one-step, well-defined, and straight algorithmic procedure should be included at Level 1. Some key words that could signify Level 1 include "identify," "recall," "recognize," "use," and "measure." The action verbs "describe," "interpret," or "explain" could be classified at different DOK levels, depending on the complexity of the task.

## **DOK Level 2: Use of Concepts and skills**

Level 2 includes the engagement of some mental processing beyond a habitual response. A Level 2 task should require students to make some decisions as to how to approach the problem or task. Some keywords that generally distinguish a Level 2 item include "classify," "organize," "estimate," "make observations," "collect and display data," and "compare data." These actions imply more than one step. Interpreting information from a simple graph, or reading information from the graph, also is at Level 2.

## **DOK Level 3: Strategic Thinking and Problem Solving**

Level 3 requires the use of reasoning, justifying, planning, using evidence, and a higher level of thinking than the previous two levels. In most instances, requiring students to explain their thinking is at Level 3. Activities that require students to make conjectures are also at this level. The cognitive demands at Level 3 are complex and abstract. The complexity does not result from the fact that there are multiple answers, but because the task requires more demanding reasoning. An activity, however, that has more than one possible answer and requires students to justify the response they give would most likely be at Level 3. Other Level 3 activities include drawing conclusions from observations; citing evidence and developing a logical argument for concepts; explaining phenomena in terms of concepts; and deciding which concepts to apply in order to solve a complex non-routine problem.