Los Angeles Unified School District
Office of Curriculum, Instruction, and School Support
2013-2014 Elementary Curriculum Maps
Kindergarten

Introduction to the Document:
Welcome to the Los Angeles Unified School District's Elementary Mathematics CCSS Curriculum Map for Kindergarten. The Map is intended to be a one-stop tool for teachers, administrators, parents, and other school support personnel. It blends Common Core State Standards in Mathematics, enVisionMATH Topics which address those standards, additional resources and Instructional Blocks into one easy-to-read resource.
The Map is a living document—it is neither set in stone for all time nor is it perfect. Teachers and other users are encouraged to provide on-going feedback as to its accuracy, usability, and content.

Organization of the Document:
This Curriculum Map for Mathematics has been organized in several ways to provide flexibility to teachers in planning instruction. Teachers and other users are encouraged to review the various versions and to choose the one that best fits their instructional planning needs.

Under the section *Organized by Standards*, the Mathematical Content and Practice standards are listed as they are found in the common Core State Standards. In this section, teachers and other users will be able to see at a glance the mathematics domains, clusters, and standards for the grade level, and in which textbook topics (chapters) the standards can be found.

Under the section *Organized by Instructional Block*, the standards are listed in the developmental sequence outlined in the 2013 *Common Core enVision MATH* series. More complex standards are parsed out over multiple IB's to allow students time to develop their understanding of the concept and the essential skills they will need in order to be successful.

Symbols and Footnotes:
Additional key information has been embedded into this guide to assist teachers and others in instructional decision-making.

General Calendar for Instruction and Assessment:
The four Instructional Blocks (IB) and their periodic assessments reflect the standards or portions of the standards as indicated in the Organized by Instructional Block portion of the guide. The guide is designed to ensure full instruction and assessment of the grade level standards by the end of the school year.

Using the Mathematics Curriculum Map:
The guide can be thought of as a menu. It cannot be expected that one would do every lesson and activity from the instructional resources provided. To try to teach every lesson or use every activity would be like ordering everything on a menu for a single meal. It is not a logical option. Nor is it possible given the number of instructional days and the quantity of resources. And, like a menu, teachers select, based on instructional data, which lessons best fit the needs of their students – sometimes students need more time with a concept and at other times, less.

Look at the "Organized by Instructional Block" chart. From there, teachers would map out how much time they feel is needed to teach the concepts within the block based on the data of their students' needs. For example, some classes may need more time devoted to developing addition concepts, while another class at the same grade level may need more focused time on Counting and Cardinality within an Instructional Block.

Then look at the "Organized by Standards" chart. Match the standard to the recommended Whole Group and Center Resources in enVision and the Additional Resources materials.

The starting point for instructional planning is the standards. The textbook resources are just the first tools for teachers in helping to build mathematical understanding. Like going to a restaurant specializing in customer service, there may be times one wishes to order "off-the-menu". There are hundreds of resources available, both publisher- and teacher-created, that may be used to best teach a concept or skill. Collaborative

planning, both within and among grade levels, is strongly encouraged in order to design effective instructional programs for students.

A Guide to the Column Headings:

The **Domains** are the larger groups of related standards and clusters.

The **Clusters** are groups of related standards.

The **Standards for Mathematical Content** define what students should know and be able to do.

The **Standards for Mathematical Practice** describe the varieties of expertise that mathematics educators at all levels should seek to develop in their students. They are the *habits of mind* to be developed, along with the content, in effective mathematics instruction. In any math task, all eight standards may be present, but some practice standards are more naturally paired with some content standards, and those matches are called out here.

The **Whole Group Resources** are meant to be teacher-guided, whole class activities.

The **Center Resources** are independent of the teacher, and can take place in small groups, pairs, or individually.

The **Formative Assessments** are intended to assist the teacher in providing data to guide instruction.

The **Domain Legend** explains the key that sorts the clusters into Major (▲), and Supporting or Additional (s/a), as denoted by the authors of the CCSS, and used by the testing services Smarter Balanced and PARCC. The standards will be assessed with 70% of the assessment on the major clusters, 20% on the supporting clusters, and 10% on the additional clusters. There may be a temptation to minimize instruction of the additional clusters, but it is important to teach all the standards, as this may be the only grade level where the standard is taught.

Additional Support contains:

- **Language Objectives** to assist with English Learners and Standard English Learners
- **Enduring Understandings** which are the Big Ideas in Mathematics
- **Essential Questions** which engage the students with interacting with the Big Ideas
- **Key Vocabulary**

Daily Routines call out the classroom practices within the particular Domain. They may last through the whole year, or only through that Instructional Block or Domain.

Differentiation (📖) falls into three categories:

- **Front Loading:** strategies to make the content more accessible to all students, including EL, SEL and students with special needs.
- **Enrichment:** activities to extend the content for all learners, as all learners can have their thinking advanced, and to support the needs of GATE students.
- **Intervention:** alternative methods of teaching the standards, in which all students can have a second opportunity to connect to the learning, based on their own learning style.

Additional Documents:

An **Appendix** to the Curriculum Maps includes:

- **First Ten Days of School for Kindergarten** to introduce classroom management and new learning opportunities, including the speaking and listening standards
- **Kindergarten Assessment** to be conducted during the first ten days of school to support the teacher in planning instruction, the Assessment is in English and Spanish
- **Developmental Milestones** to explain the new grade level content to parents

Critical Areas:

In Kindergarten, instructional time should focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

1. Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as 5 + 2 = 7 and 7 – 2 = 5. (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.

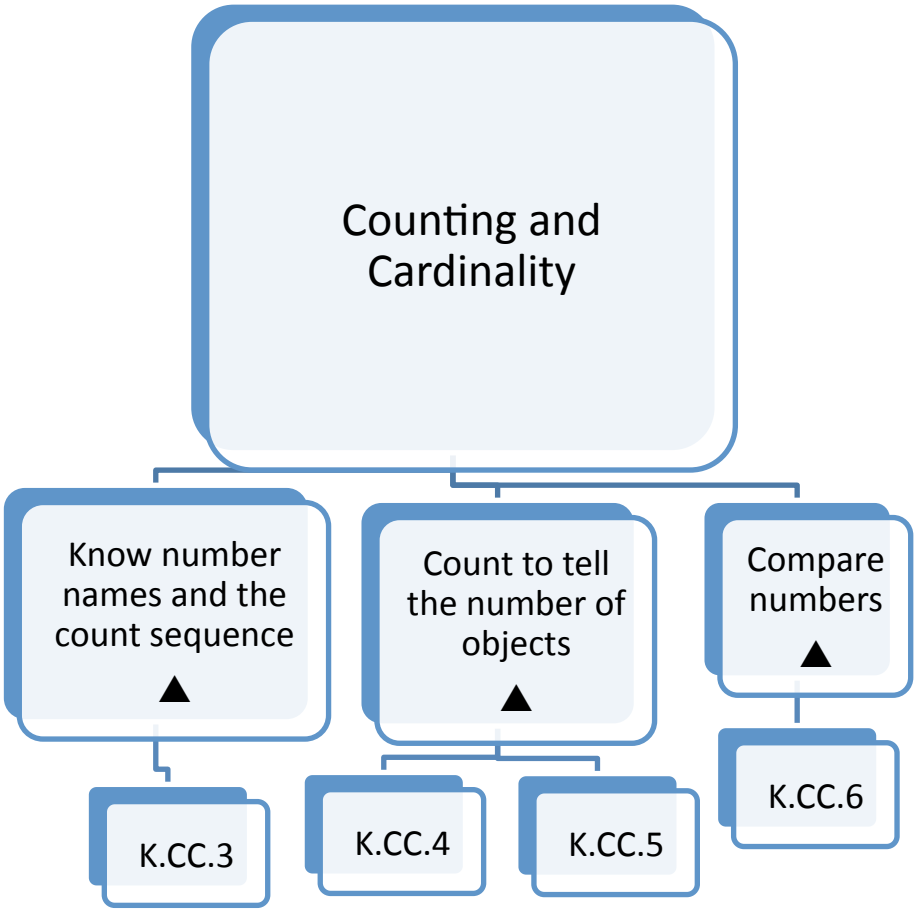
2. Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

Special Thanks: The CCSS-Aligned Curriculum Maps were developed under the auspices of the Assistant Superintendent of Instruction, Dr. Jaime Aquino, the Executive Director of the Office of Curriculum, Instruction and School Support, Gerard Loera, and the Director of the Office of Curriculum, Instruction and School Support, Dr. Susan Tandberg. There are many individuals who participated in the creation of this document, including reviewing and field-testing. We wish to thank everyone, especially:
Mark Duncan, Charity Weber, Charles Cho, Barbara Goodwin, Norma Cantu, Karen Grigsby, Jose Dorado, Laura Acosta, Carina Tsuneta, Daniel Kim, Dr. Jared Dupree, Dina Williams, Michael Blount, Beverly Nichols, Caroline Piangerelli, Shirley Guzman, Dr. Philip Ogbuehi and Lisa Ward.

Los Angeles Unified School District

Kindergarten

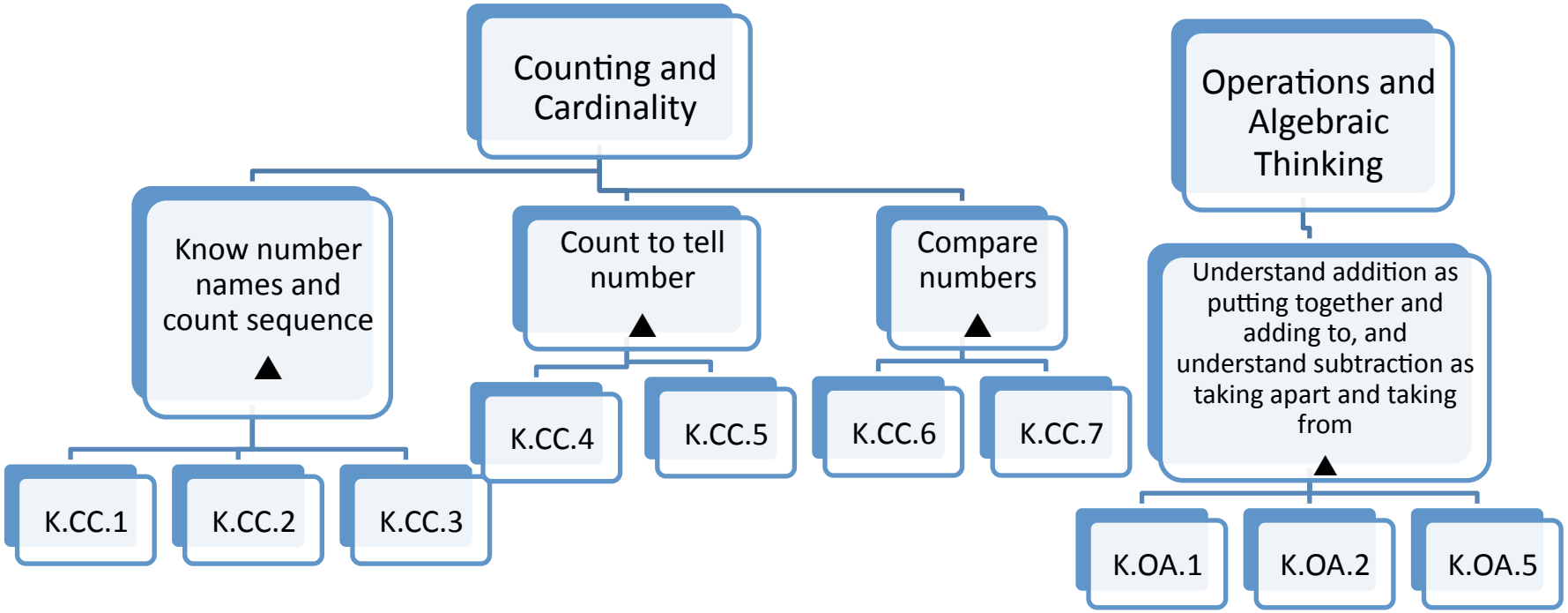
Instructional Block 1



Los Angeles Unified School District

Kindergarten

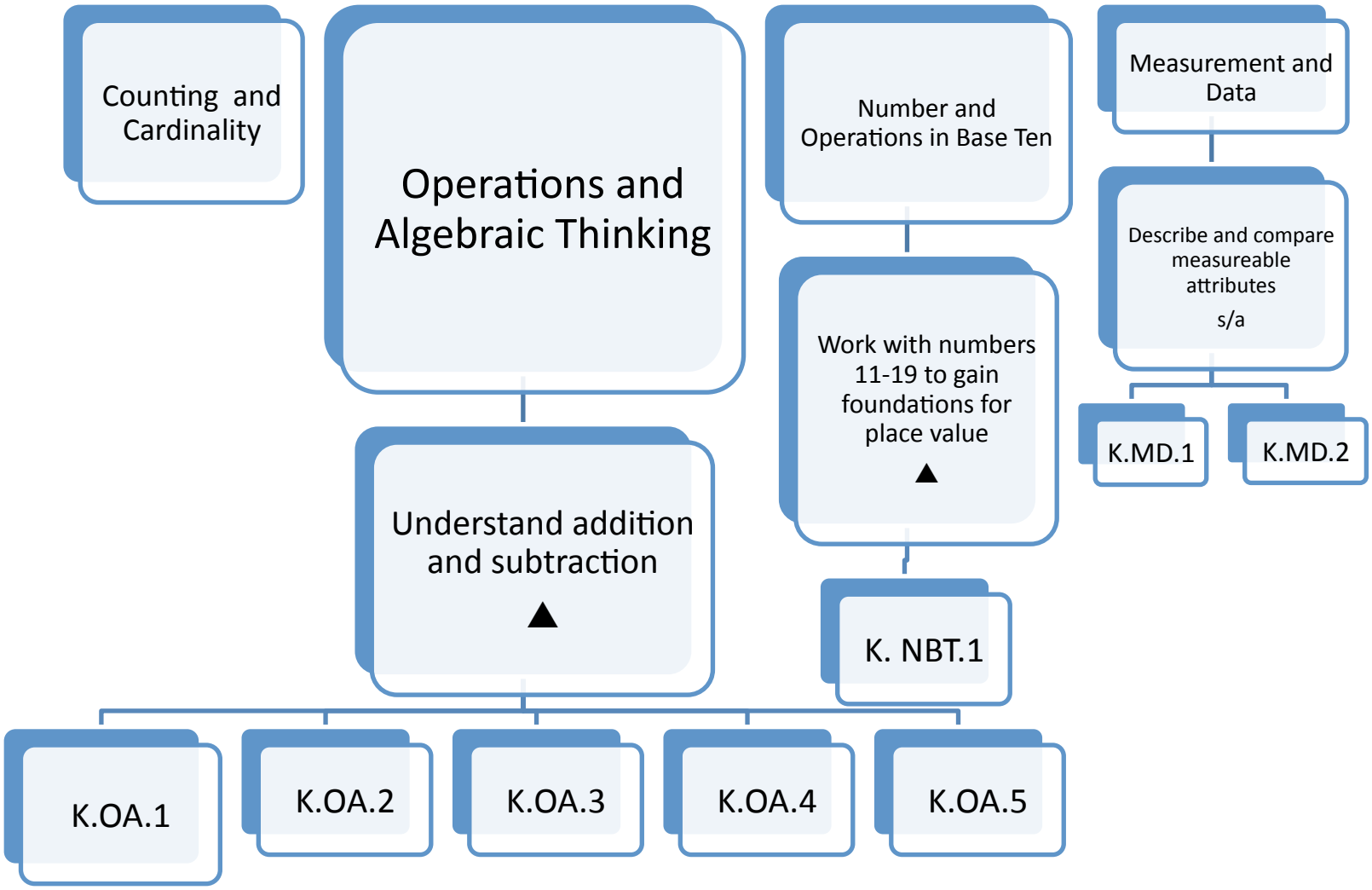
Instructional Block 2



Los Angeles Unified School District

Kindergarten

Instructional Block 3

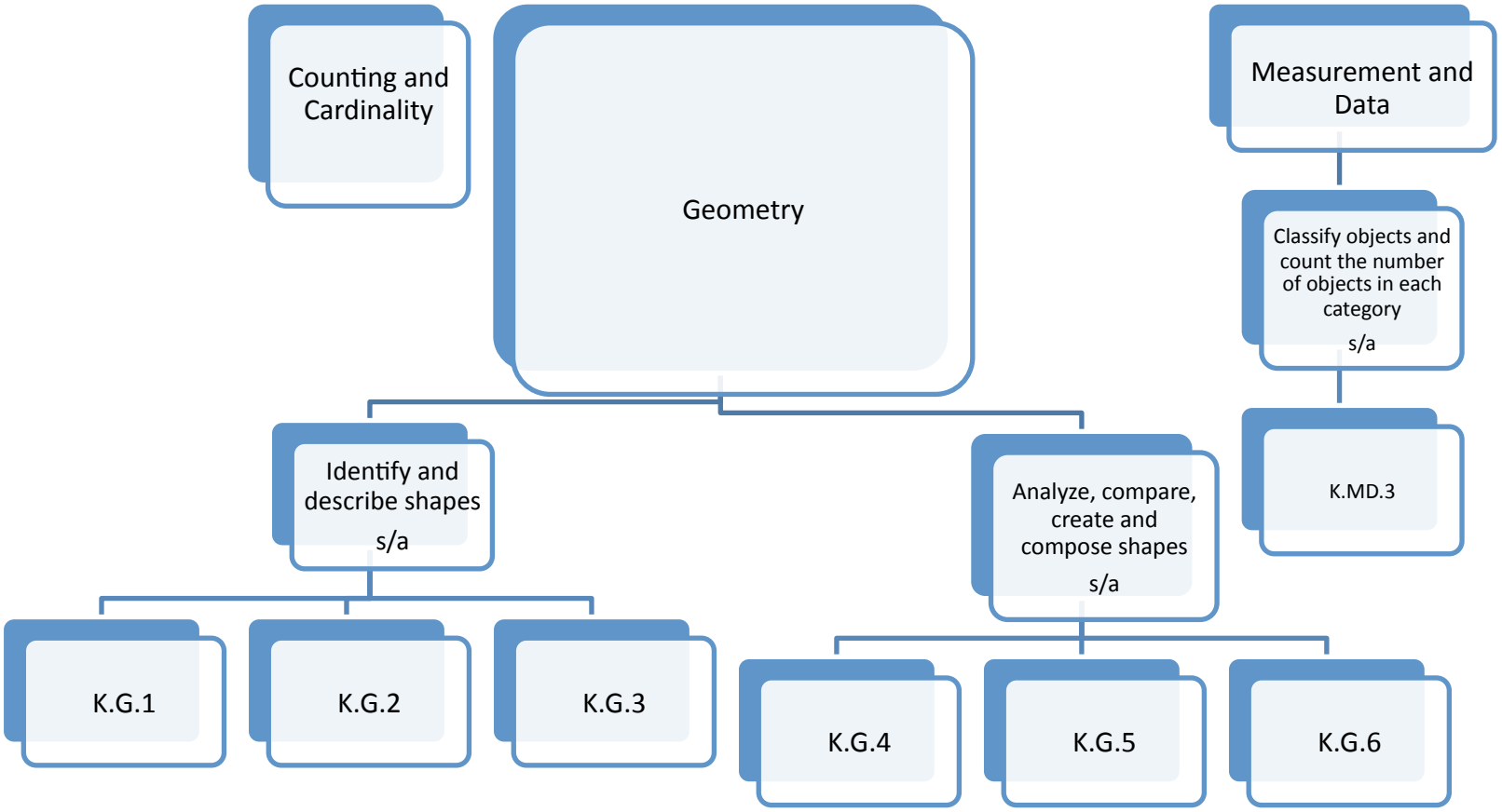


Key: ▲ Major Clusters; s/a: Supporting Clusters - Additional Clusters

Los Angeles Unified School District

Kindergarten

Instructional Block 4



Elementary Mathematics Kindergarten Scope and Sequence 2013-14
By enVision CCSS Topic

	IB1		IB2	IB3	IB4
	8/13 - 10/18 Last day to assess: 10/18		10/21 – 12/20 Last day to assess: 12/18	1/13 – 3/28	4/1 – 6/5 Last day to assess: 5/30
K	First 10 Days	enVision CCSS Topics 1: 1 to 5 2: Compare/ order 1-5 3: 6-10	enVision CCSS Topics 4: Compare/order 0-10 5: Numbers to 20 6: Numbers to 100 7: Understand addition	enVision CCSS Topics 8: Understand subtraction 9: Compose/ decompose 10 10: Compose 11-19 11: Decompose 11-19 12: Measurement	enVision CCSS Topics 13: Data 14: Identify shapes 15: Locations of shapes 16: Composing shapes

Instructional Block 1

08/13/13 – 10/18/13

Final Day for Periodic Assessment: October 18, 2013

enVisionMATH TOPIC	CLUSTER	CONTENT STANDARDS
	First Ten Days of School	
1	Know number names and the count sequence. (1-5)▲	K.CC.3
1	Count to tell the number of objects.▲	K.CC.4, K.CC.4a, K.CC.4b, K.CC.5
2	Know number names and the count sequence. (0-5)▲	K.CC.3
2	Count to tell the number of objects.▲	K.CC.4, K.CC.4b, K.CC.4c, K.CC.5
2	Compare numbers.▲	K.CC.6
3	Know number names and the count sequence.▲	K.CC.3
3	Count to tell the number of objects. (6-10)▲	K.CC.4, K.CC.4a K.CC.4b, K.CC.4c, K.CC.5

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a: **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

Instructional Block 2

10/21/13 – 12/18/13

Final Date for Periodic Assessment: December 18, 2013

enVisionMATH TOPIC	CLUSTER	CONTENT STANDARDS
4	Compare numbers. (0-10)▲	K.CC.6, K.CC.7
4	Know number names and the count sequence.▲	K.CC.2
4	Count to tell the number of objects.▲	K.CC.4c
4	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. (1 more, 1 fewer, 2 more, 2 fewer)▲	K.OA.1
5	Know number names and the count sequence. (numbers to 20)▲	K.CC.2 K.CC.3
5	Count to tell the number of objects.▲	K.CC.4b
6	Know number names and count sequence.(numbers to 100)▲	K.CC.1, K.CC.2
6	Count to tell the number of objects.▲	K.CC.4b, K.CC.4c, K.CC.5
7	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. (understanding addition)▲	K.OA.1, K.OA.2, K.OA.5

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a: **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

Instructional Block 3

01/13/14 – 03/28/14

Final Date for Periodic Assessment: March 28, 2014 (Optional, teacher scored)

enVisionMATH TOPIC	CLUSTER	CONTENT STANDARDS
8	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. (understanding subtraction)▲	K.OA.1, K.OA.2, K.OA.5
9	Work with numbers 11-19 to gain foundations for place value. (composing and decomposing numbers to 10)▲	K.NBT.1
10	Work with numbers 11-19 to gain foundations for place value. (composing numbers 11-19)▲	K.NBT.1
11	Work with numbers 11-19 to gain foundations for place value. (decomposing numbers 11-19)▲	K.NBT.1
12	Describe and compare measurable attributes.s/a	K.MD.1, K.MD.2

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a: **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

Instructional Block 4

04/01/13 – 06/05/14

Final Day for Performance Assessment: May 30, 2014

enVisionMATH TOPIC	CLUSTER	CONTENT STANDARDS
13	Classify objects and count the number of objects in each category.s/a	K.MD.3
13	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).s/a	K.G.1
14	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).s/a	K.G.2, K.G.3
15	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)(position and location of shapes).s/a	K.G.1
16	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).s/a	K.G.2, K.G.3
16	Analyze, compare, create, and compose shapes.s/a	K.G.4, K.G.5, K.G.6

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a: **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

DOMAIN: Counting and Cardinality

CLUSTER: Know number names and the count sequence▲

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.CC.1 Count to 100 by ones and by tens.	**MP7** Look for and make use of structure. **MP8** Look for and express regularity in repeated reasoning.	***enVisionMATH Common Core*** • 109A-110B, Lesson 6-1 • 113A-114B, Lesson 6-3 • 115A-116B, Lesson 6-4 • 117A-118B, Lesson 6-5 • 119A-120B, Lesson 6-6 ***enVisionMATH Common Core Standards Workbook*** • pp. CC1-CC2 ***About Teaching Mathematics, 2nd Ed***. (Burns, 2000) • How Many Fingers? p. 174 • How Many Pockets? pp. 174-175 • Patterns on the 0-99 Chart, p. 176 ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Slide and Check, pp. 26-27 • Count and Dump, p. 28 • Making Towers, p. 29 • Creating a Number Chart, p. 122 http://www.illustrativemathematics.org/illustrations/360 • Choral Counting http://www.illustrativemathematics.org/illustrations/359 • Counting Circles, children on floor keep counting http://www.illustrativemathematics.org/illustrations/754 • Counting by Tens	***enVisionMATH Common Core*** • Center 6-1, 6-3, 6-4, 6-5, 6-6 • Topic 6 Centers, p. 107E-107F • Mindpoint Quizshow ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • Stars, p. 178 • Fill the Cube, p. 178	***enVisionMATH Common Core*** • Quick Checks: 6-1, 6-3, 6-4, 6-5, 6-6 • Topic Test, p. 123 • Performance Assessment, p. 124 • Topic 6 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.CC.2 Count forward beginning from a given numbers within the known sequence (instead of having to begin at 1).	**MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 81A-82B, Lesson 4-8 • 83A-84B, Lesson 4-9 • 101A-102B, Lesson 5-5 ***enVisionMATH Common Core Standards Workbook*** • pp. CC3-CC4 http://www.illustrativemathematics.org/illustrations/373 • Number After Bingo http://www.illustrativemathematics.org/illustrations/927 • Pick a Number, Counting On http://www.illustrativemathematics.org/illustrations/361 • Start, Stop Counting	***enVisionMATH Common Core*** • Center 4-8, 4-9, 5-5 • Topic 4 Centers, p. 65E-65F • Topic 5 Centers, p. 91E-91F • Mindpoint Quizshow ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • Race for 20, p. 111 ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Build a Staircase, pp. 56-57	***enVisionMATH Common Core*** • Quick Checks: 4-8, 4-9, 5-5 • Topic Test, p. 89 • Performance Assessment, p. 90 • Topic 4 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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).	**MP2** Reason abstractly and quantitatively. **MP7** Look for and make use of structure. **MP8** Look for and express regularity in repeated reasoning.	***enVisionMATH Common Core*** • 7A-8B, Lesson 1-3 • 13A-14B, Lesson 1-6 • 29A-30B, Lesson 2-4 • 31A-32B, Lesson 2-5 • 49A-50B, Lesson 3-2 • 53A-54B, Lesson 3-4 • 57A-58B, Lesson 3-6 ***enVisionMATH Common Core Standards Workbook*** • pp. CC5-CC6 ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • One Gorilla and More, p. 167 ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Creations, p. 33 • Grab-Bag Counting, p. 34 • Tell Me Fast, p. 42 http://www.illustrativemathematics.org/illustrations/400 • Tic-Tac-Toe http://www.illustrativemathematics.org/illustrations/399 • Race to the Top http://www.illustrativemathematics.org/illustrations/398 • Rainbow Number Line http://www.illustrativemathematics.org/illustrations/1224 • Dice Addition	***enVisionMATH Common Core*** • Center 1-3, 1-6, 2-4, 2-5, 3-2, 3-4, 3-6 • Topic 1 Centers, p. 1E-1F • Topic 2 Centers, p. 21E-21F • Topic 3 Centers, p. 45E-45F • Mindpoint Quizshow ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Counting Boards, pp. 50-52 • Creations Station, pp. 52-53 • Cover the Dots, p. 53 • Counting with the Number Shapes, p. 54 • Roll-a-Tower Race, pp. 54-55 • Make-a-Train Race, pp. 55-56 • Line Puzzles, p. 61 • Pick a Number, p. 62 • Sorting Collections, pp. 67-68	***enVisionMATH Common Core*** • Quick Checks: 1-3, 1-6, 2-4, 2-5, 3-2, 3-4, 3-6 • Topic Test, p. 19, 43, 63 • Performance Assessment, p. 20, 44, 64 • Topic 1 Alternate Test Master • Topic 2 Alternate Test Master • Topic 3 Alternate Test Master

CLUSTER: Count to tell the number of objects▲

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.CC.4a 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.	**MP2** Reason abstractly and quantitatively. **MP7** Look for and make use of structure. **MP8** Look for and express regularity in repeated reasoning.	***enVisionMATH Common Core*** • 3A-4B, Lesson 1-1 • 9A-10B, Lesson 1-4 ***enVisionMATH Common Core Standards Workbook*** • pp. CC7-CC8 ***Lessons for Algebraic Thinking Grades K-2*** (von Rotz & Burns, 2002) • Chapter 2: Comparing Handfuls, p. 12 ***Developing Number Concepts, Book 1*** **(**(Richardson, 1999) • Grow and Shrink, pp. 35-36 http://www.illustrativemathematics.org/illustrations/1209 • Counting Mat http://www.illustrativemathematics.org/illustrations/1113 • Goody Bags	***enVisionMATH Common Core*** • Center 1-1, 1-4 • Topic 1 Centers, p. 1E-1F • Mindpoint Quizshow ***Developing Number Concepts, Book 1*** (Richardson, 1999) • How Many Does It Hold? p. 65	***enVisionMATH Common Core*** • Quick Checks: 1-1, 1-4 • Topic Test, p. 19 • Performance Assessment, p. 20 • Topic 1 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.CC.4b 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.	**MP1** Make sense of problems and persevere in solving them. **MP2** Reason abstractly and quantitatively. **MP4** Model with mathematics. **MP6** Attend to precision.	***enVisionMATH Common Core*** • 5A-6B, Lesson 1-2 • 11A-12B, Lesson 1-5 • 47A-48B, Lesson 3-1 • 51A-52B, Lesson 3-3 • 55A-56B, Lesson 3-5 • 59A-60B, Lesson 3-7 • 93A-94B, Lesson 5-1 • 95A-96B, Lesson 5-2 • 97A-98B, Lesson 5-3 • 99A-100B, Lesson 5-4 ***Lessons for Algebraic Thinking Grades K-2*** (von Rotz & Burns, 2002) • Dot Cards (version 1), pp. 34-46 ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Finger Counting, p. 34 • Break It Up, p. 43	***enVisionMATH Common Core*** • Center 1-2, 1-5, 3-1, 3-3, 3-5, 3-7, 5-1, 5-2, 5-3, 5-4 • Topic 1 Centers, p. 1E-1F • Topic 3 Centers, p. 45E-45F • Topic 5 Centers, p. 91E-91F • Mindpoint Quizshow ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Sorting Shape Puzzles, p. 68 • Sorting Line Puzzles, p. 69	***enVisionMATH Common Core*** • Quick Checks: 1-2, 1-5, 3-1, 3-3, 3-5, 3-7, 5-1, 5-2, 5-3, 5-4 • Topic Test, p. 19, 63, 105 • Performance Assessment, p. 20, 64, 106 • Topic 1 Alternate Test Master • Topic 3 Alternate Test Master • Topic 5 Alternate Test Master
K.CC.4c Understand that each successive number name refers to a quantity that is one larger.	**MP7** Look for and make use of structure.	***enVisionMATH Common Core*** •35A-36B, Lesson 2-7 ***enVisionMATH Common Core Standards Workbook*** •pp. CC9-CC10 ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • The Rooster's Journey, p. 166-167 • One Gorilla and More, p. 167 ***Lessons for Algebraic Thinking Grades K-2*** (von Rotz & Burns, 2002) • Chapter 2: Comparing Handfuls, p. 12	***enVisionMATH Common Core*** • Center 2-7 • Topic 2 Centers, p. 21E-21F • Mindpoint Quizshow	***enVisionMATH Common Core*** • Quick Checks: 2-7 • Topic Test, p. 43 • Performance Assessment, p. 44 • Topic 2 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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.	**MP2** Reason abstractly and quantitatively. **MP7** Look for and make use of structure. **MP8** Look for and express regularity in repeated reasoning.	***enVisionMATH Common Core*** •15A-16B, Lesson 1-7 •111A-112B, Lesson 6-2 ***enVisionMATH Common Core Standards Workbook*** •pp. CC11-CC12 ***Lessons for Algebraic Thinking Grades K-2*** (von Rotz & Burns, 2002) • Chapter 2: Comparing Handfuls, p. 12 ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Counting Stories, pp. 30-33 • Hide It, p. 37 • Hunt for It, pp. 38-39 • Peek and Count, pp. 39-40 • Find and Match, pp. 40-42	***enVisionMATH Common Core*** • Center 1-7, 6-2 • Topic 1 Centers, p. 1E-1F • Topic 6 Centers, p. 107E-107F • Mindpoint Quizshow ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Shape Puzzles, p. 60 • Grab a Handful, p. 62 • Hide It Station, p. 63 • Sorting Colors, p. 65	***enVisionMATH Common Core*** • Quick Checks: 1-7, 6-2 • Topic Test, p. 19, 123 • Performance Assessment, p. 20, 124 • Topic 1 Alternate Test Master • Topic 6 Alternate Test Master

CLUSTER: Compare numbers▲

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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.	**MP2** Reason abstractly and quantitatively. **MP7** Look for and make use of structure. **MP8** Look for and express regularity in repeated reasoning.	***enVisionMATH Common Core*** •23A-24B, Lesson 2-1 •25A-26B, Lesson 2-2 •27A-28B, Lesson 2-3 •33A-34B, Lesson 2-6 •39A-40B, Lesson 2-9 •67A-68B, Lesson 4-1 •69A-70B, Lesson 4-2 •71A-72B, Lesson 4-3 •73A-74B, Lesson 4-4 •75A-76B, Lesson 4-5 •77A-78B, Lesson 4-6 •79A-80B, Lesson 4-7 ***enVisionMATH Common Core Standards Workbook*** •pp. CC13-CC14 ***Lessons for Algebraic Thinking Grades K-2*** (von Rotz & Burns, 2002) • Chapter 2: Comparing Handfuls, p. 12 ***Developing Number Concepts, Book 1*** (Richardson, 1999) (use academic vocabulary, greater than, less than, equal to) • Tall and Short, pp. 43-44 • One More/One Less, p. 45 • Towers, Towers, Towers, p. 49 http://www.illustrativemathematics.org/illustrations/1210 • Which Number is Greater? Which Number is Less? How Do You Know? http://www.illustrativemathematics.org/illustrations/980 "One More" Concentration	***enVisionMATH Common Core*** • Center 2-1, 2-2, 2-3, 2-6, 2-9, 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 4-7 • Topic 2 Centers, p. 21E-21F • Topic 4 Centers, p. 65E-65F • Mindpoint Quizshow ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • Pinch a 10, p. 180	***enVisionMATH Common Core*** • Quick Checks: 2-1, 2-2, 2-3, 2-6, 2-9, 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 4-7 • Topic Test, p. 43, 89 • Performance Assessment, p. 44, 90 • Topic 2 Alternate Test Master • Topic 4 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.	**MP2** Reason abstractly and quantitatively.	***enVisionMATH Common Core*** • 85A-86B, Lesson 4-10 ***enVisionMATH Common Core Standards Workbook*** • pp. CC15-CC16 http://www.illustrativemathematics.org/illustrations/697 • Guess the Marbles in the Bag	***enVisionMATH Common Core*** • Center 4-10 • Topic 4 Centers, p. 65E-65F • Mindpoint Quizshow ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • Five Tower Game, p. 179	***enVisionMATH Common Core*** • Quick Checks: 4-10 • Topic Test, p. 89 • Performance Assessment, p. 90 • Topic 4 Alternate Test Master

Domain Legend

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

***** Students do not need to learn formal names such as "right rectangular prism."

💻 Online resource located at **PearsonSuccessNet.com**, click ***Other Resources***

💻² Online game located at **envisionmathca.com,** click **Teacher Resources**

💻³ Online game located at **PearsonSuccessNet.com**, click ***Premium***, click ***Search***, type keyword "***game***"

ADDITIONAL SUPPORT

LANGUAGE OBJECTIVES	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	KEY VOCABULARY
• Students will use complete sentences to answer questions about how many objects are counted. • Students will use key vocabulary when comparing quantities of objects. • Students will explain their thinking when asked how they count and compare objects.	• Counting tells how many are in a set no matter which order the objects are counted. The last number said when counting a set is the total. Counting is cumulative. • Numbers are counted and written in a specific sequence on a hundred chart. • The decade numbers are built on groups of ten. The oral names are similar but not the same as the number of tens counted. • Counting patterns (numerical and visual) can be seen on a hundred chart. • Some problems can be solved by identifying elements that repeat in a predicable way. • There is a specific order to the set of whole numbers. • Numbers can be shown by a unique point on the number line. The distance between any two consecutive whole numbers on a given number line is always the same. • There is a unique symbol that goes with each number word. • Zero is a number that describes no objects in a set. • The matching of one word with one object is one-to-one correspondence. • Some problems can be identified by elements that repeat in a predictable way. • There is a unique symbol that goes with each number word. • Counting tells how many are in a set no matter which order the objects are counted. The last number said when counting a set is the total. Counting is cumulative. • Some problems can be solved by using objects to act out the actions in the problem.	• How can objects be counted? • How does understanding four help us understand five? • How can numbers be compared?	about backward column count count by 10s eight eighteen eleven fewer than fifteen five forward four fourteen greater growing pattern hundred chart less more than nine nineteen none number number line one order row same seven seventeen six sixteen ten thirteen three twelve twenty two zero

LANGUAGE OBJECTIVES	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	KEY VOCABULARY
	• If you compare two groups of objects and the number of objects match, the groups have the same number of objects. If one group has items left over, that group has more, or is greater than the other group. The other group has fewer objects, and is less than the greater group. • In a pair of numbers, the number that shows more is greater. The number that shows fewer is less. • You can use 5 as a benchmark to compare numbers. • You can use 10 as a benchmark to compare numbers.		

DAILY ROUTINES	
• Count out loud while lining up, handing out materials etc. • Use hundreds chart to count out loud by 1's, 5's and 10's. • Use cubes to make an "attendance stick" to count how many students are present each day. • Using hundreds chart, start counting forward from a number other than one. • One student says a number and a partner counts up from that number as high as they can.	• Keep track of number of days in school on blank 100's chart. Write number each day. • Use a number line to write the number of days in school. • Teacher flashes a number of dots; students write the numeral on a white board. • Make attendance tags. Student drops attendance tags into bucket. Teacher counts each tag to see how many students are present. • Mathematician's Chair • Problem Solving Notelbook
LITERATURE CONNECTIONS	
• *Every Buddy Counts* by Stuart J. Murphy • *Just Enough Carrots* by Stuart J. Murphy • *One Gorilla* by Atsuko Morozumi • *City 1 2 3* by Zoran Milich • *Chicka Chicka 1,2,3* by Bill Martin • *Ten Little Fish* by Audrey Wood • *Counting Wildflowers* by Audrey Wood • *Ten, Nine, Eight* by Molly Bang • *Anno's Counting Book* by Mistumasa Anno • *One Hungry Monster* by Susan Heyboer O'Keefe • *Mouse Count* by Ellen Stoll Walsh	• *Ten Black Dots* by Donald Crews • *How Many Blue Birds Flew Away? A Counting Book with a Difference* by Paul Giganti, Jr. • *They Added 5 Little Ducks- An Old Rhyme* Illustrated by Pamela Paprone • *The Crayon Counting Book* by Pam Ryan and Jerry Pallotta • *The Napping House* by Audrey Wood • *Ten Little Crocodiles* by Colin West • *Splash!* by Ann Jonas • *Fish Eyes* by Lois Ehlert • *1 Hunter* by Pat Hutchins • *Benny's Pennies* by Pat Brisson

DIFFERENTIATION 🕮

FRONT LOADING	ENRICHMENT	INTERVENTION
enVisionMATH Common Core • The Language of Math – Topic 1, p. 1D – Topic 2, p. 21D – Topic 3, p. 45D – Topic 4, p. 65D – Topic 5, p. 91D – Topic 6, p. 107D • Interactive Math Story – Topic 1, pp. 1G-1H – Topic 2, pp. 21G-21H – Topic 3, pp. 45G-45H – Topic 4, pp. 65G-65H – Topic 5, pp. 91G-91H – Topic 6, pp. 107G-107H • Review What You Know, Home-School Connection, My New Math Words – Topic 1, p. 1 – Topic 2, p. 21 – Topic 3, p. 45 – Topic 4, p. 65 – Topic 5, p. 91 – Topic 6, p. 107 • Count the Birds, Topic 1, p. 2 • School Fun, Topic 2, p. 22 • Counting Fun in the Sun, Topic 3, p. 46 • More and Fewer in the Garden, Topic 4, p. 66 • What Number Is It?, Topic 5, p. 92 • Bananas for Tusk, Topic 6, p. 108	***enVisionMATH Common Core*** • Numbers 1-5 💻[3] • Numbers 6-10 💻[3] • Numbers to 100 💻[3] • Compare and Order Numbers 💻[3] • More and Fewer 💻[3] • Differentiated Instruction – Topic 1, p. 1C – Topic 2, p. 21C – Topic 3, p. 45C – Topic 4, p. 65C – Topic 5, p. 91C – Topic 6, p. 107C • Step 4 Enrichment – Topic 1, pp. 4B, 6B, 8B, 10B, 12B, 14B, 16B – Topic 2, pp. 24B, 26B, 28B, 30B, 32B, 34B, 36B, 38B, 40B, – Topic 3, pp. 48B, 50B, 52B, 54B, 56B, 58B, 60B – Topic 4, pp. 68B, 70B, 72B, 74B, 76B, 78B, 80B, 82B, 84B, 86B – Topic 5, pp. 94B, 96B, 98B, 100B, 102B – Topic 6, pp. 110B, 112B, 114B, 116B, 118B, 120B	***enVisionMATH Common Core*** • Universal Access – Topic 1, p. 1C – Topic 2, p. 21C – Topic 3, p. 45C – Topic 4, p. 65C – Topic 5, p. 91C – Topic 6, p. 107C • Step 4 Intervention – Topic 1, pp. 4B, 6B, 8B, 10B, 12B, 14B, 16B – Topic 2, pp. 24B, 26B, 28B, 30B, 32B, 34B, 36B, 38B, 40B – Topic 3, pp. 48B, 50B, 52B, 54B, 56B, 58B, 60B – Topic 4, pp. 68B, 70B, 72B, 74B, 76B, 78B, 80B, 82B, 84B, 86B – Topic 5, pp. 94B, 96B, 98B, 100B, 102B – Topic 6, pp. 110B, 112B, 114B, 116B, 118B, 120B • Math Diagnosis and Intervention System: Booklets A, B Grades K-3 • Reteaching Sets A-C, pp. 17-18 • Reteaching Sets A-D, pp. 41-42 • Reteaching Sets A–D, pp. 61-62 • Reteaching Sets A–C, pp. 87-88 • Reteaching Sets A–C, pp. 103-104 • Reteaching Sets A–D, pp. 121-122

TRANSITIONAL KINDERGARTEN
• LAUSD-Offices of Curriculum, Instruction, & School Support and Early Childhood Education. *Standards Alignment Document for Transitional Kindergarten*, 2012-13. Tab 5: Mathematics • *California Framework Preschool Curriculum* Vol. 1. Understanding Number and Quantity, pp. 242-250 • *California Preschool Learning Foundations* Vol. 1. Number Sense; Foundations in Mathematics, pp.143-172 • Richardson, Kathy. *Developing Number Concepts* Book 1. 1999. Dale Seymour Publications. Parsippany, NJ. Chapter 1, Activities: 1-1 through 1-20, pp. 26-49 • Richardson, Kathy. *Developing Math Concepts in Pre-Kindergarten*. 2008. Math Perspectives. Bellingham, WA. The Number Concept Activities, pp. 69, 74, 76, and 78 • Eston, Rebeka and Linda Shulman. *Growing Mathematical Ideas in Kindergarten*. 1999. Math Solutions Publications. Sausalito, CA • Baratta-Lorton, Mary, *Mathematics Their Way; An Activity Centered Mathematics Program for Early Childhood Education:* 20th Anniversary Edition.1995. Dale Seymour Publications. Parsippany, NJ. Counting, pp. 88-112 and Number at the Concept Level, pp. 164-210 • Garland, Cynthia, editor. *Mathematics Their Way Summary Newsletter*. 1990; Center for Innovation in Education. Saratoga, CA. Counting, 5.1-5.8 and Numeral Writing, 6.1-6.12

DOMAIN: Operations and Algebraic Thinking

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

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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.	**MP1** Make sense of problems and persevere in solving them. **MP2** Reason abstractly and quantitatively. **MP4** Model with mathematics. **MP5** Use appropriate tools strategically.	***enVisionMATH Common Core*** • 127A-128B, Lesson 7-1 • 129A-130B, Lesson 7-2 • 131A-132B, Lesson 7-3 • 133A-134B, Lesson 7-4 • 135A-136B, Lesson 7-5 • 147A-148B, Lesson 8-1 • 149A-150B, Lesson 8-2 • 151A-152B, Lesson 8-3 • 153A-154B, Lesson 8-4 • 155A-156B, Lesson 8-5 • 157A-158B, Lesson 8-6 ***enVisionMATH Common Core Standards Workbook*** • pp. CC17-CC18 **Developing Number Concepts, Book 2** (Richardson, 1999) • Acting Out Stories: Using Real Things, p. 17 • Acting Out Stories: Using Fantasies, p.19 • Acting Out Stories: Using Counters, p. 20 • Modeling Addition and Subtraction Equations, p. 22 • Related Combinations: Short Stacks, p. 121-123 • What Do You Think: Using Counting Boards, p. 124-125 • What Do You Think: Using Tubs, p. 127-128 **About Teaching Mathematics, 2nd Ed.** (Burns, 2000) • Making Books with Dots, p. 167 • Acting Out Addition and Subtraction Stories, p. 164 • Addition and Subtraction Stories with Cubes, p. 164	***enVisionMATH Common Core*** • Center 7-1, 7-2, 7-3, 7-4, 7-5, 8-1, 8-2, 8-3, 8-4, 8-5, 8-6 • Topic 7 Centers, p. 125E-125F • Topic 8 Centers, p. 145E-145F • Mindpoint Quizshow **Developing Number Concepts, Book 1** (Richardson, 1999) • Grow and Shrink, p. 35 • One More/One Less, p. 45 • Build a Staircase, p. 56 • Build a City, p. 58 • Break It Up (Extension), p. 43 • Creations Station (Extension), p. 52-53 • Shapes Puzzles (Extension), p. 60 • How Many Does It Hold? (Extension), p. 65	***enVisionMATH Common Core*** • Quick Checks: 7-1, 7-2, 7-3, 7-4, 7-5, 8-1, 8-2, 8-3, 8-4, 8-5, 8-6 • Topic Test, pp. 143, 165 • Performance Assessment, pp. 144, 166 • Topic 7 Alternate Test Master • Topic 8 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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.	**MP1** Make sense of problems and persevere in solving them. **MP2** Reason abstractly and quantitatively. **MP3** Construct viable arguments and critique the reasoning of others. **MP4** Model with mathematics.	***enVisionMATH Common Core*** • 139A-140B, Lesson 7-7 • 161A-162B, Lesson 8-8 ***enVisionMATH Common Core Standards Workbook*** • pp. CC19-CC20 **Developing Number Concepts, Book 2** (Richardson, 1999) • Modeling Addition and Subtraction Equations, pp. 22 - 24 • Related Combinations: Short Stacks, pp. 121-123 • What Do You Think: Using Counting Boards, pp. 124-125 • What Do You Think: Using Tubs, pp. 127-128 **About Teaching Mathematics, 2nd Ed.** (Burns, 2000) • Acting Out Addition and Subtraction Stories, p. 164 • Addition and Subtraction Stories with Cubes, p. 164 **Table 1** from CCSS for addition and subtraction word problem types (Use numbers within 10).	***enVisionMATH Common Core*** • Center 7-7, 8-8 • Topic 7 Centers, p. 125E-125F • Topic 8 Centers, p. 145E-145F • Mindpoint Quizshow	***enVisionMATH Common Core*** • Quick Checks: 7-7, 8-8 • Topic Test, pp. 143, 165 • Performance Assessment, pp. 144, 166 • Topic 7 Alternate Test Master • Topic 8 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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).	**MP1** Make sense of problems and persevere in solving them. **MP2** Reason abstractly and quantitatively. **MP4** Model with mathematics. **MP7** Look for and make use of structure. **MP8** Look for and express regularity in repeated reasoning.	***enVisionMATH Common Core*** • 169A-170B, Lesson 9-1 • 171A-172B, Lesson 9-2 • 173A-174B, Lesson 9-3 • 175A-176B, Lesson 9-4 • 177A-178B, Lesson 9-5 • 179A-180B, Lesson 9-6 • 183A-184B, Lesson 9-8 ***enVisionMATH Common Core Standards Workbook*** • pp. CC21-CC22 **Developing Number Concepts, Book 2** (Richardson, 1999) • Internalizing Number Combinations to 10, pp. 42-44 • Describing a Number by Its Parts, pp. 56-57 • The Tub Game, p. 58 • The Wall Game, p. 59 • Bulldozer, p. 60 • The Cave Game, p. 61 • Finger Combinations, p. 63 • Working with Number-Shapes, pp. 64-66 • Number-Shapes On and Off, p. 67 • Working with Number-Trains, p. 68-70 • Number-Trains On and Off, p. 71 • Counting Boards: Number-Combination Stories, p. 73 • Finding and Recording Number-Combinations, pp. 74-76	***enVisionMATH Common Core*** • Center 9-1, 9-2, 9-3, 9-4, 9-5, 9-6, 9-8 • Topic 9 Centers, p. 167E-167F • Mindpoint Quizshow **Developing Number Concepts, Book 2** (Richardson, 1999) • Number Arrangements: Using Cubes, pp. 78-80 • Number Arrangements Using Color Tiles, pp. 80-81 • Number Arrangements Using Toothpicks, pp. 82-83 • Number Arrangements Using Collections, pp. 84-85 • Counting Boards: Making up Number-Combination Stories, pp. 86-87 • Number-Shape Arrangements, pp. 87-88 • Number-Shapes: Using Number Cubes, pp. 89-90 • Number-Shapes: Using Spinners, pp. 90-91 • Number-Train Arrangements, pp. 92-93 • Number-Trains: Using Number Cubes, pp. 93-94 • Number-Trains: Using Spinners, pp. 95-96 • How Many Ways, p. 96 • Number-Train Graph, p. 97 • Building and Rebuilding, p. 98	***enVisionMATH Common Core*** • Quick Checks: 9-1, 9-2, 9-3, 9-4, 9-5, 9-6, 9-8 • Topic Test, p. 189 • Performance Assessment, p. 190 • Topic 9 Alternate Test Master **Developing Number Concepts, Book 2** (Richardson, 1999) • Hiding Assessment, pp. 45-47)

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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 drawing, and record the answer with a drawing or equation.	**MP1** Make sense of problems and persevere in solving them. **MP2** Reason abstractly and quantitatively. **MP4** Model with mathematics.	***enVisionMATH Common Core*** • 181A-182B, Lesson 9-7 ***enVisionMATH Common Core Standards Workbook*** • pp. CC23-CC24	***enVisionMATH Common Core*** • Center 9-7 • Topic 9 Centers, p. 167E-167F • Mindpoint Quizshow	***enVisionMATH Common Core*** • Quick Checks: 9-7 • Topic Test, p. 189 • Performance Assessment, p. 190 • Topic 9 Alternate Test Master
K.OA. 5 Fluently add and subtract within 5.	**MP2** Reason abstractly and quantitatively. **MP7** Look for and make use of structure. **MP8** Look for and express regularity in repeated reasoning.	***enVisionMATH Common Core*** • 137A-138B, Lesson 7-6 • 159A-160B, Lesson 8-7 ***enVisionMATH Common Core Standards Workbook*** • pp. CC25-CC26 **Developing Number Concepts, Book 2** (Richardson, 1999) • Acting Out Stories: Using Real Things, p. 17 • Acting Out Stories: Using Fantasies, p.19 • Acting Out Stories: Using Counters, p. 20 • Modeling Addition and Subtraction Equations, p. 22 • Related Combinations: Short Stacks, pp. 121-123 • What Do You Think: Using Counting Boards, pp. 124-126 • What Do You Think: Using Tubs, pp. 127-128	***enVisionMATH Common Core*** • Center 7-6, 8-7 • Topic 7 Centers, p. 125E-125F • Topic 8 Centers, p. 145E-145F • Mindpoint Quizshow **Developing Number Concepts, Book 2** (Richardson, 1999) • Writing Equations with Counting Boards, p. 38 • Roll and Count, pp. 26-27 • Listen and Count, p. 27 • Grow and Shrink: Using the Plus + and Minus – Signs, p. 28	***enVisionMATH Common Core*** • Quick Checks: 7-6, 8-7 • Topic Test, p. 143, 165 • Performance Assessment, p. 144, 166 • Topic 7 Alternate Test Master • Topic 8 Alternate Test Master

Domain Legend

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

***** Students do not need to learn formal names such as "right rectangular prism."

Online resource located at **PearsonSuccessNet.com**, click ***Other Resources***

Online game located at **envisionmathca.com,** click **Teacher Resources**

Online game located at **PearsonSuccessNet.com**, click ***Premium***, click ***Search***, type keyword "***game***"

ADDITIONAL SUPPORT

LANGUAGE OBJECTIVES	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	KEY VOCABULARY
• Student will use words such as add, subtract, plus, minus, equals, and make, to represent addition or subtraction in real life situations.	• Joining parts to make a whole is one interpretation of addition. • Joining groups can be shown in an addition expression that uses the plus sign (+). • Addition number sentences using + and = can be used to show how many all together and parts of a whole. • Separating parts from a whole is one interpretation of subtraction. • Taking part of a group away is one interpretation of subtraction. • Comparing two quantities to find out how much more/less one quantity is than the other is one interpretation of subtraction. • Separating, take away and comparison subtraction situations can be shown in a subtraction expression that uses the minus sign (-). • Some separating, take away and comparison situations can be represented and solved using subtraction. • Information in a problem can often be shown using a	• How can numbers be taken apart and put together? • Explain how you know whether to add or subtract in a given situation. • How can you show how to solve problems using numbers, words and pictures? • What are the combinations to 10?	add addition altogether difference equal sign in all join left minus sign number story part plus sign put together sentence separate subtract subtraction sum take away whole

LANGUAGE OBJECTIVES	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	KEY VOCABULARY
	picture or diagram and used to understand and solve the problem. • Some problems can be solved by using objects to act out the actions in the problem. • There is more than one way to break a number into parts. • Subtraction number sentences using - and = can be used to show comparison or take-away situations.		

DAILY ROUTINES

- Present addition and subtraction stories based on classroom materials such as books, chairs, pencils and crayons. Call on the children to act out the stories, substituting your children's names for the names in the stories. Remember to include mathematical terms in some of the stories.
- Mathematician's Chair
- Problem Solving Notebook

LITERATURE CONNECTIONS

- *Animals on Board* by Stuart J. Murphy
- *One Gorilla* by Atsuko Morozumi
- *City 1 2 3* by Zoran Milich
- *Chicka Chicka 1,2,3* by Bill Marting
- *Ten Little Fish* by Audrey Wood
- *Counting Wildflowers* by Audrey Wood
- *Ten, Nine, Eight* by Molly Bang
- *Anno's Counting Book* by Mitsumasa Anno
- *Ten Black Dots* by Donald Crews
- *How Many Blue Birds Flew Away? A Counting Book with a Difference* by Paul Giganti, Jr.
- *They Added 5 Little Ducks-An Old Rhyme* illustrated by Pamela Paprone *Ten Little Crocodiles* by Colin West
- *The Crayon Counting Book* by Pam Ryan and Jerry Pallotta
- *The Napping House* by Audrey Wood
- *Splash!* By Ann Jonas
- *Fish Eyes* by Lois Ehlert
- *Bears at the Park* by Niki Yektai
- *Animals on Board* by Stuart J. Murphy
- *Little Quack* by Lauren Thompson

DIFFERENTIATION 🕮

FRONT LOADING	ENRICHMENT	INTERVENTION
enVisionMATH Common Core • The Language of Math – Topic 7, p. 152D – Topic 8, p. 145D – Topic 9, p. 167D • Interactive Math Story – Topic 7, pp. 125G-125H – Topic 8, pp. 145G-145H – Topic 9, pp. 167G-167H • Review What You Know, Home-School Connection, My New Math Words – Topic 7, p. 125 – Topic 8, p. 145 – Topic 9, p. 167 • 2 More At the Music Store, Topic 7, p. 126 • Rabbit Races, Topic 8, p. 146 • Count the Animals, Topic 9, p. 168	***enVisionMATH Common Core*** • Basic Facts 💻3 • Computation Games- Addition 💻3 • Number Jungle 💻3 • Differentiated Instruction – Topic 7, p. 125C – Topic 8, p. 145C – Topic 9, p. 167C • Step 4 Enrichment – Topic 7, pp. 128B, 130B, 132B, 134B, 136B, 138B, 140B – Topic 8, pp. 148B, 150B, 152B, 154B, 156B, 158B, 160B, 162B – Topic 9, pp. 170B, 172B, 174B, 176B, 178B, 180B, 182B, 184B	***enVisionMATH Common Core*** • Universal Access – Topic 7, p. 125C – Topic 8, p. 145C – Topic 9, p. 167C • Step 4 Intervention – Topic 7, pp. 128B, 130B, 132B, 134B, 136B, 138B, 140B – Topic 8, pp. 148B, 150B, 152B, 154B, 156B, 158B, 160B, 162B – Topic 9, pp. 170B, 172B, 174B, 176B, 178B, 180B, 182B, 184B • Math Diagnosis and Intervention System: Booklet B Grades K-3 • Reteaching Sets A-C, pp. 141-142 • Reteaching Sets A-D, pp. 163-164 • Reteaching Sets A-D, pp. 187-188

TRANSITIONAL KINDERGARTEN

- Burns, Marilyn *and* von Rozt, Leyani, *Lesson for Algebraic Thinking* Grades K-2. Comparing Handfuls, pp.12-23 and Dot Cards Version 1, pp.34-46
- *California Preschool Curriculum Framework* Vol. 1; Understanding Number Relationships and Operations, pp. 251-258
- *California Preschool Learning Foundations* Vol. 1; Number Sense, pp.151-152
- Richardson, Kathy, *Developing Number Concepts Book 1;* Beginning Number Concepts Activities: 1-3, 1-16, and 1-17
- Baratta-Lorton, Mary*, Mathematics Their Way; An Activity Centered Mathematics Program for Early Childhood Education*; 20th Anniversary Edition. Number at the Connecting Level activities, pp. 214-25 and 11 Place Value, pp. 274-299
- Garland, Cynthia, editor*, Mathematics Their Way Summary Newsletter*; Center for Innovation In Education. Number Operations 10.1-10.26 and Place Value 11.6

DOMAIN: Number and Operations in Base Ten

CLUSTER: Work with numbers 11-19 to gain foundations for place value.▲

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.NBT.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.	**MP1** Make sense of problems and persevere in solving them. **MP2** Reason abstractly and quantitatively. **MP4** Model with mathematics. **MP7** Look for and make use of structure. **MP8** Look for and express regularity in repeated reasoning.	***enVisionMATH Common Core*** • 193A-194B, Lesson 10-1 • 195A-196B, Lesson 10-2 • 197A-198B, Lesson 10-3 • 199A-200B, Lesson 10-4 • 207A-208B, Lesson 11-1 • 209A-210B, Lesson 11-2 • 211A-212B, Lesson 11-3 • 213A-214B, Lesson 11-4 • 215A-216B, Lesson 11-3 ***enVisionMATH Common Core Standards Workbook*** • pp. CC27-CC28 ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • Pinch a 10, p. 180 • How Many Pockets, p. 174 (Note: Small groups, limit to under 20 cubes) ***A Collection of Math Lessons from Grades 1 through 3*** (Burns & Tank, 1988) • Chapter 6: Making Tens and Ones, pp. 63-70 (Note: Limit quantities to less than 20) ***Developing Number Concepts, Book 3*** (Richardson, 1999) • Patterns on the 00-99 Chart, p. 37	***enVisionMATH Common Core*** • Center 10-1, 10-2, 10-3, 10-4, 11-1, 11-2, 11-3, 11-4, 11-5 • Topic 10 Centers, p. 191E-191F • Topic 11 Centers, p. 205E-205F • Mindpoint Quizshow ***A Collection of Math Lessons from Grades 1 through 3*** (Burns & Tank, 1988) • Chapter 7: A Place Value Menu, pp.71-72 (Note: Limit quantities to less than 20) ***Developing Number Concepts, Book 3*** (Richardson, 1999) • Grab and Add, p. 49 • Rearrange-It!, p. 72 • Build It Fast, p. 73	***enVisionMATH Common Core*** • Quick Checks: 10-1, 10-2, 10-3, 10-4, 11-1, 11-2, 11-3, 11-4, 11-5 • Topic Test, pp. 203, 219 • Performance Assessment, pp. 204, 220 • Topic 10 Alternate Test Master • Topic 11 Alternate Test Master ***About Teaching Mathematics, 2nd Ed.*** (Burns) • Individual Assessments, p. 182, #2

Domain Legend

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

***** Students do not need to learn formal names such as "right rectangular prism."

Online resource located at **PearsonSuccessNet.com**, click ***Other Resources***

Online game located at **envisionmathca.com,** click **Teacher Resources**

Online game located at **PearsonSuccessNet.com**, click ***Premium***, click ***Search***, type keyword "***game***"

ADDITIONAL SUPPORT

LANGUAGE OBJECTIVES	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	KEY VOCABULARY
• Student will use learned phrases to show how a number can be composed and decomposed. Example: ___ equals ___ plus ___; ___ is made of one ten and ____ ones.	• Numbers from 11-19 can be represented as the sum of 10 and some more ones. • Patterns on the hundreds chart can be represented using number sentences and drawings. • There is more than one way to break a number into parts. • Our number system is based on groups of ten. • Ten ones can be grouped together to make a new group called a ten.	• How can we make a new group called a "ten"? • In the teen numbers, what does the one represent? What does the digit in the ones place represent?	double ten-frame group how many more? left over one set ten

DAILY ROUTINES

- Drop a bean into a cup each day. When there are ten in a cup, rename it a "ten." Start adding to another cup. Say "This is a ten and one, etc." Another alternative is to bundle straws or popsicle sticks as a "ten".
- Group objects in the room into groups of ten and some left over.
- Mathematician's Chair
- Problem Solving Notebook

LITERATURE CONNECTIONS	
• *Fish Eyes* by Lois Ehlert	• *Ten Flashing Fireflies* by Philemon Sturges
• *Jack the Builder* by Stuart J. Murphy	• *One Moose, Twenty Mice* by Clare Beaton

DIFFERENTIATION 🕮

FRONT LOADING	ENRICHMENT	INTERVENTION
enVisionMATH Common Core • The Language of Math – Topic 10, p. 191D – Topic 11, p. 205D • Interactive Math Story – Topic 10, pp. 191G-191H – Topic 11, pp. 205G-205H • Review What You Know, Home-School Connection, My New Math Words – Topic 10, p. 191 – Topic 11, p. 205 • Bumblebee Beehive, Topic 10, p. 192 • Take Home the Bears, Topic 11, p. 206	***enVisionMATH Common Core*** • Computation Games- Addition 💻[3] • Number Jungle 💻[3] • Differentiated Instruction – Topic 10, p. 191C – Topic 11, p. 205C • Step 4 Enrichment – Topic 10, pp. 194B, 196B, 198B, 200B – Topic 11, pp. 208B, 210B, 212B, 214B, 216B	***enVisionMATH Common Core*** • Universal Access – Topic 10, p. 191C – Topic 11, p. 205C • Step 4 Intervention – Topic 10, pp. 194B, 196B, 198B, 200B – Topic 11, pp. 208B, 210B, 212B, 214B, 216B • Math Diagnosis and Intervention System: Booklets A, B Grades K-3 • Reteaching Sets A-D, pp. 201-202 • Reteaching Sets A-D, pp. 217-218 ***Developing Number Concepts, Book 3*** (Richardson, 1999) • *Introducing the Plus-One and Minus-One Games, p. 15-19.*

TRANSITIONAL KINDERGARTEN
• *California Preschool Curriculum Framework,* Vol. 1; Understanding Number Relationships and Operations, pp. 251-255 • *California Preschool Learning Foundations* Vol. 1; Number Sense, pp.148-152 • Richardson, Kathy, *Developing Math Number Concepts: Counting, Comparing and Pattern,* Book 1; pp. 29, 34, 45, 46-49 • Baratta-Lorton, Mary, *Mathematics Their Way; An Activity Centered Mathematics Program for Early Childhood Education*; 20th Anniversary Edition. Counting, pp. 88-12 and Number at the Concept Level, pp. 164-210 • Garland, Cynthia, editor, *Mathematics Their Way Summary Newsletter*, Center for Innovation In Education. Counting, 5.1-5.8 and Numeral Writing, 6.1-6.12

DOMAIN: Measurement and Data

CLUSTER: Describe and compare measurable attributes[s/a]

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	**MP5** Use appropriate tools strategically. **MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 223A-224B, Lesson 12-1 ***enVisionMATH Common Core Standards Workbook*** • pp. CC29-CC30	***enVisionMATH Common Core*** • Center 12-1 • Topic 12 Centers, p. 221E-221F • Mindpoint Quizshow	***enVisionMATH Common Core*** • Quick Checks: 12-1 • Topic Test, p. 241 • Performance Assessment, p. 242 • Topic 12 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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	**MP6** Attend to precision. **MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 225A-226B, Lesson 12-2 • 227A-228B, Lesson 12-3 • 229A-230B, Lesson 12-4 • 231A-232B, Lesson 12-5 • 233A-234B, Lesson 12-6 • 235A-236B, Lesson 12-7 • 237A-238B, Lesson 12-8 ***enVisionMATH Common Core Standards Workbook*** • pp. CC31-CC32 ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Comparing Lengths, p. 164 • Comparing Containers, p. 170 ***About Teaching Mathematics 2nd Ed.*** (Burns, 2000) • Foot Cutout, p. 53 http://www.illustrativemathematics.org/illustrations/455 • Size Shuffle	***enVisionMATH Common Core*** • Center 12-2, 12-3, 12-4, 12-5, 12-6, 12-7, 12-8 • Topic 12 Centers, p. 221E-221F • Mindpoint Quizshow ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Comparing Lengths, p. 164 • Comparing Containers, p. 170 • Comparing Shape Puzzles, p. 165 • Comparing Line Puzzles, p. 167 http://www.illustrativemathematics.org/illustrations/456 • Which Weighs More? Which Weighs Less?	***enVisionMATH Common Core*** • Quick Checks: 12-2, 12-3, 12-4, 12-5, 12-6, 12-7, 12-8 • Topic Test, p. 241 • Performance Assessment, p. 242 • Topic 12 Alternate Test Master

CLUSTER: Classify objects and count the number of objects in each category.s/a

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.MD.3 Classify objects into given categories; count the number of objects in each category and sort the categories by count (Limit category counts to be less than or equal to 10).	**MP2** Reason abstractly and quantitatively.	***enVisionMATH Common Core*** • 185A-186B, Lesson 9-8 • 245A-246B, Lesson 13-1 • 247A-248B, Lesson 13-2 • 249A-250B, Lesson 13-3 • 251A-252B, Lesson 13-4 • 253A-254B, Lesson 13-5 • 255A-256B, Lesson 13-6 • 257A-258B, Lesson 13-7 ***enVisionMATH Common Core Standards Workbook*** • pp. CC33-CC34 http://www.illustrativemathematics.org/illustrations/799 • Sort and Count 1 http://www.illustrativemathematics.org/illustrations/990 • Sort and Count 2	***enVisionMATH Common Core*** • Center 9-8 13-1, 13-2, 13-3, 13-4, 13-5, 13-6, 13-7 • Topic 13 Centers, p. 243E-244F • Mindpoint Quizshow ***Developing Number Concepts, Book 1*** (Richardson, 1999) • Sorting Colors, p. 65 • Sorting Collections, p. 67 • Graph and See, pp. 152-3	***enVisionMATH Common Core*** • Quick Checks: 9-8, 13-1, 13-2, 13-3, 13-4, 13-5, 13-6, 13-7 • Topic Test, p. 261 • Performance Assessment, p. 262 • Topic 13 Alternate Test Master

Domain Legend

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

***** Students do not need to learn formal names such as "right rectangular prism."

💻 Online resource located at **PearsonSuccessNet.com**, click ***Other Resources***

💻² Online game located at **envisionmathca.com,** click **Teacher Resources**

💻³ Online game located at **PearsonSuccessNet.com**, click ***Premium***, click ***Search***, type keyword "***game***"

ADDITIONAL SUPPORT

LANGUAGE OBJECTIVES	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	KEY VOCABULARY
• Student will use adjectives to describe attributes of objects (length/weight). Ex.: A leaf is light. The lunch line is long. • Student will use comparative adjectives to compare the attributes of objects. Ex: The teacher is taller than the student.	• Objects have measurable attributes such as length, capacity, and weight that can be compared and described. • Objects can be compared by length. • Objects can be compared by height. Comparing by height is similar to comparing by length. • Objects can be compared by capacity. • Objects can be compared by weight. • Attributes can be used to compare objects. • Attributes can be used to sort a group of objects. • Attributes such as color, shape or size can be used to sort the same set of objects in different ways. • A set of objects can be sorted according to a combination of attributes. • Some problems can be solved by reasoning about conditions in the problem. • Data can be collected and represented using different types of graphs. Graphs can be used to answer questions.	• How can you describe the object by its length, weight or height? • How do you know if an item is taller/shorter than another? • How have you sorted the objects? • Explain another way to sort the objects. • How can you figure out if there is an object that doesn't belong?	about the same alike as long as as tall as balance scale different does not belong empty full heavier than height holds less holds more least length lighter than longer than longest most picture graph real graph same shorter than shortest sort sorting rule taller than tallest weighs less weighs more weight

DAILY ROUTINES	
• Compare which student is taller, shorter and in between. • Compare which common classroom objects are shorter and longer. • Compare which common classroom objects are heavier and lighter.	• Mathematician's Chair • Problem Solving Notebook

LITERATURE CONNECTIONS	
• *Measuring Penny* by Loreen Leedy • *Greetings Sun* by Phillis and David Gershiter • *Lemonade for Sale* by Stuart J. Murphy	• *The Long and Short of It* by Cheryl Nathan and Lisa McCourt • *Same Old Horse* by Stuart J. Murphy • *A House for a Hermit Crab* by Eric Carle

DIFFERENTIATION 🕮

FRONT LOADING	ENRICHMENT	INTERVENTION
enVisionMATH Common Core • The Language of Math – Topic 12, p. 221D – Topic 13, p. 243D • Interactive Math Story – Topic 12, pp. 221G-221H – Topic 13, pp. 243G-243H • Review What You Know, Home-School Connection, My New Math Words – Topic 12, p. 221 – Topic 13, p. 243 • How Long Is the Train?, Topic 12, p. 222 • Quilly's Kitchen, Topic 13, p. 244	***enVisionMATH Common Core*** • Sorting and Classifying 💻3 • Differentiated Instruction – Topic 12, p. 221C – Topic 13, p. 243C • Step 4 Enrichment – Topic 9, p. 186B – Topic 12, pp. 224B, 226B, 228B, 230B, 232B, 234B, 236B, 238B – Topic 13, pp. 246B, 248B, 250B, 252B, 254B, 256B, 258B	***enVisionMATH Common Core*** • Universal Access – Topic 12, p. 221C – Topic 13, p. 243C • Step 4 Intervention – Topic 9, p. 186B – Topic 12, pp. 224B, 226B, 228B, 230B, 232B, 234B, 236B, 238B – Topic 13, pp. 246B, 248B, 250B, 252B, 254B, 256B, 258B • Math Diagnosis and Intervention System: Booklet D Grades K-3 • Reteaching Sets A-D, pp. 239-240 • Reteaching Sets A-D, pp. 259-260

TRANSITIONAL KINDERGARTEN
• *California Preschool Curriculum* Framework Vol. 1. Measurement, pp. 272-280
• *California Preschool Learning Foundations* Vol. 1. Measurement, p.155-156
• Richardson, Kathy, *Developing Number Concepts: Counting, Comparing, and Pattern* Book 1. Chapter 1 Activities: 1-15, 1-16, 1-17, 1-18, 1-19, 1-20, 1-27, 1-36, 1-38, 1-40, and 1-41
• Richardson, Kathy, *Developing Math Concepts in Pre-Kindergarten*. The Measuring Activities, pp. 61, 93, 95, 97, 169, 59, 133, 134, 135, and the Data Collection Activities, pp. 73 and 88
• Baratta-Lorton, Mary, Mathematics Their Way; An Activity Centered Mathematics Program for Early Childhood Education; 20th Anniversary Edition; Comparing, pp. 115-121
• Garland, Cynthia, editor, Mathematics Their Way Summary Newsletter. The Opening, pp.4.1-4.14

DOMAIN: Geometry

CLUSTER: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).s/a

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
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.*	**MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 287A-288B, Lesson 15-1 • 289A-290B, Lesson 15-2 • 291A-292B, Lesson 15-3 • 293A-294B, Lesson 15-4 • 295A-296B, Lesson 15-5 ***enVisionMATH Common Core Standards Workbook*** • pp. CC35-CC36	***enVisionMATH Common Core*** • Center 15-1, 15-2, 15-3, 15-4, 15-5 • Topic 15 Centers, p. 285E-285F • Mindpoint Quizshow	***enVisionMATH Common Core*** • Quick Checks: 15-1, 15-2, 15-3, 15-4, 15-5 • Topic Test, p. 299 • Performance Assessment, p. 300 • Topic 15 Alternate Test Master
K.G.2 Correctly name shapes regardless of their orientations or overall size.	**MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 265A-266B, Lesson 14-1 • 267A-268B, Lesson 14-2 • 269A-270B, Lesson 14-3 • 271A-272B, Lesson 14-4 • 273A-274B, Lesson 14-5 • 279A-280B, Lesson 14-8 ***enVisionMATH Common Core Standards Workbook*** • pp. CC37-CC38 ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • Exploration Using the Geoboard, p. 94 • Introductory Exploration with Pattern Blocks, p. 90 • Sorting Shapes on a Geoboard, p. 96	***enVisionMATH Common Core*** • Center 14-1, 14-2, 14-3, 14-4, 14-5, 14-8 • Topic 14 Centers, p. 263E-263F • Mindpoint Quizshow ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • Geoboard Square Search, p. 97 • Square Up, p. 96	***enVisionMATH Common Core*** • Quick Checks: 14-1, 14-2, 14-3, 14-4, 14-5, 14-8 • Topic Test, p. 283 • Performance Assessment, p. 284 • Topic 14 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.G.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").	**MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 275A-276B, Lesson 14-6 • 277A-278B, Lesson 14-7 ***enVisionMATH Common Core Standards Workbook*** • pp. CC39-CC40	***enVisionMATH Common Core*** • Center 14-6, 14-7 • Topic 14 Centers, p. 263E-263F • Mindpoint Quizshow	***enVisionMATH Common*** • Quick Checks: 14-6, 14-7 • Topic Test, p. 283 • Performance Assessment, p. 284 • Topic 14 Alternate Test Master

CLUSTER: Analyze, compare, create, and compose shapes.s/a

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.G. 4 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).	**MP6** Attend to precision. **MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 303A-304B, Lesson 16-1 • 307A-308B, Lesson 16-3 • 311A-312B, Lesson 16-5 ***enVisionMATH Common Core Standards Workbook*** • pp. CC41-CC42 http://www.illustrativemathematics.org/illustrations/515 • Alike or Different Game?	***enVisionMATH Common Core*** • Center 16-1, 16-3, 16-5 • Topic 16 Centers p. 301E-301F • Mindpoint Quizshow	***enVisionMATH Common Core*** • Quick Checks: 16-1, 16-3, 16-5 • Topic Test, p. 315 • Performance Assessment, p. 316 • Topic 16 Alternate Test Master
K.G. 5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	**MP1** Make sense of problems and persevere in solving them. **MP4** Model with mathematics. **MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 309A-310B, Lesson 16-4 ***enVisionMATH Common Core Standards Workbook*** • pp. CC43-CC44	***enVisionMATH Common Core*** • Center 16-4 • Topic 16 Centers p. 301E-301F • Mindpoint Quizshow	***enVisionMATH Common Core*** • Quick Checks: 16-4 • Topic Test, p. 315 • Performance Assessment, p. 316 • Topic 16 Alternate Test Master

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
K.G.6 Compose simple shapes to form larger shapes. For example, "*Can you join these two triangles with full sides touching to make a rectangle?*"	**MP1** Make sense of problems and persevere in solving them. **MP3** Construct viable arguments and critique the reasoning of others. **MP4** Model with mathematics. **MP7** Look for and make use of structure.	***enVisionMATH Common Core*** • 305A-306B, Lesson 16-2 ***enVisionMATH Common Core Standards Workbook*** • pp. CC45-CC46 ***About Teaching Mathematics, 2nd Ed.*** (Burns, 2000) • Introductory Explorations with Pattern Blocks, p. 90 • The Four Triangle Problem, p. 93 ***A Collection of Math Lessons, Grades 1-3*** *(Burns & Tank, 1988)* • The Four-Triangle Problem, p. 99	***enVisionMATH Common Core*** • Center 16-2 • Topic 16 Centers p. 301E-301F • Mindpoint Quizshow	***enVisionMATH Common Core*** • Quick Checks: 16-2 • Topic Test, p. 315 • Performance Assessment, p. 316 • Topic 16 Alternate Test Master

Domain Legend

▲ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

s/a **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

Additional Cluster: Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

***** Students do not need to learn formal names such as "right rectangular prism."

💻 Online resource located at **PearsonSuccessNet.com**, click ***Other Resources***

💻² Online game located at **envisionmathca.com,** click **Teacher Resources**

💻³ Online game located at **PearsonSuccessNet.com**, click ***Premium***, click ***Search***, type keyword "***game***"

ADDITIONAL SUPPORT

LANGUAGE OBJECTIVES	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	KEY VOCABULARY
• Students will use prepositional phrases to describe relative positions of objects. Example: The circle is on top of the rectangle. • Student will use "If … then" statements to describe a defining attribute of a geometric shape. Example: If a shape has three sides, then it is a triangle.	• The position of objects can be determined in relation to surrounding objects and described using words. • A rectangle has four sides and four square corners. • A square has four sides and four square corners. All of the sides of a square are the same length. • A circle is round and does not have any corners. • All triangles have three sides but can have different configurations of sides and angles. • A hexagon is a shape with six sides and six corners. • Three-dimensional or solid figures have length, width and height. • Two-dimensional figures or plane figures have length and width. • Many everyday objects closely approximate standard geometric solids. • Flat surfaces of many solid figures have specific shapes. • Solid figures can be compared in different ways. Some solid figures can be compared by their flat surfaces (faces) and vertices (corners). • Solid figures in the real world can be shown with three-dimensional models. • Shapes can be combined to make other shapes.	• How can you describe this shape? • How can you describe this shape in relation to objects around it? • How are some objects in our environment the same shape as a circle, square, sphere or cube, etc.? • How can you put these shapes together to form a new shape?	above behind below beside circle cone corner cube cylinder flat surface hexagon in front of inside left next to on top of outside over rectangle right roll same size same shape side slide sphere square stack three-dimensional triangle two-dimensional under

DAILY ROUTINES
• Create calendar activities with different shapes and patterns. • Mathematician's Chair • Problem Solving Notebook
LITERATURE CONNECTIONS
• *Jack the Builder* by Stuart J. Murphy • *Shapes, Shapes, Shapes* by Tana Hoban • *The Shape of Things* by Dayle Ann Dodds

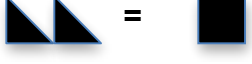
DIFFERENTIATION 🕮

FRONT LOADING	ENRICHMENT	INTERVENTION
enVisionMATH Common Core • The Language of Math – Topic 14, p. 263D – Topic 15, p. 285D – Topic 16, p. 301D • Interactive Math Story – Topic 14, p. 263G-263H – Topic 15, p. 285G-285H – Topic 16, p. 301G-301H • Review What You Know, Home-School Connection, My New Math Words – Topic 14, p. 263 – Topic 15, p. 285 – Topic 16, p. 301 • Shapeland Dog Park, Topic 14, p. 264 • Match Up!, Topic 15, p. 286 • Lin's Shape Hunt, Topic 16, p. 302	***enVisionMATH Common Core*** • Position and Location 💻[3] • Geometry (Grade 1) 💻[3] • Properties of Plane Shapes (Grade 1) 💻[3] • Shape (Grade 2) 💻[3] • Differentiated Instruction – Topic 14, p. 263C – Topic 15, p. 285C – Topic 16, p. 301C • Step 4 Enrichment – Topic 14, pp. 266B, 268B, 270B, 272B, 274B, 276B, 278B, 280B – Topic 15, pp. 288B, 290B, 292B, 294B, 296B – Topic 16, pp. 304B, 306B, 308B, 310B, 312B	***enVisionMATH Common Core*** • Universal Access – Topic 14, p. 263C – Topic 15, p. 285C – Topic 16, p. 301C • Step 4 Intervention – Topic 14, pp. 266B, 268B, 270B, 272B, 274B, 276B, 278B, 280B – Topic 15, pp. 288B, 290B, 292B, 294B, 296B – Topic 16, pp. 304B, 306B, 308B, 310B, 312B • Math Diagnosis and Intervention System: Booklet D Grades K-3 • Reteaching Sets A-C, pp. 281-282 • Reteaching Sets A-D, pp. 297-298 • Reteaching Sets A–D, pp. 313-314

TRANSITIONAL KINDERGARTEN
California Preschool Curriculum Framework Vol. 1. Shapes, pp.282-285 and Positions in Space, pp. 286-289
California Preschool Learning Foundations Vol. 1. Geometry, pp.157-158
Burns, Marilyn and Leyani von Rozt. *Lessons for Algebraic Thinking Grades K-2. 2002*. Math Solutions Publications. Sausalito, CA. Pattern Block Fish, pp.79-88, Comparing Handfuls, pp.12-23, and Dot Cards, Version 1, pp.34-46
Richardson, Kathy. *Developing Number Concepts* Book 1. Pattern, pp. 107, 110, 113, 115, and 116
Richardson, Kathy. *Developing Math Concepts in Pre-Kindergarten*. Learning Geometry Concepts, pp. 14-15 and The Geometry Activities, pp. 48, 51, 52, 53, 54, 58, 91, 130, 131, 155, 157, 158, 159, and 161
Baratta-Lorton, Mary, *Mathematics Their Way; An Activity Centered Mathematics Program for Early Childhood Education* 20th Anniversary Edition. Sorting by Senses activity, p. 76 and Geoboard Sorting Game, p. 80
Garland, Cynthia, editor, *Mathematics Their Way Summary Newsletter*. Pattern Extensions, 9.7-9.12

Los Angeles Unified School District
Kindergarten Developmental Milestones
Common Core State Standards

MATHEMATICS YOUR CHILD SHOULD KNOW IN KINDERGARTEN

Standard/Skill	When your child should master these standard(s) by:
Count orally to 100 by ones 0, 1, 2, 3…	
Count orally to 100 by tens 10, 20, 30…	
Start counting forward from any number …87, 88, 89…	
Write numbers 0-20	
Understand the number and its quantity ☆☆☆ = 3 ●●●●●●●●●●●●●●●●● = 16	
Count how many from 0 - 20 How many is ◆◆◆◆◆?	
Which number is greater than, less than, or equal to. Which is greater 5 or 8? 7 = 7	
Add and subtract with objects, drawings, fingers, etc. 4 + 3 = 7 10 – 4 = 6	
Make 10 in different ways (5 and 5; 1 and 9; 4 and 6)	
Add and subtract "5" in different ways (0 + 5 = 5, 1 + 4 = 5, 5 – 2 = 3, 5 – 1 = 4)	
Make 11-19 with tens and ones 18 = 10 + 8; 18 is 1 ten and 8 ones 11 = 10 + 1; 11 is 1 ten and 1 one	
Describe and compare objects (shorter, heavier, longer, etc.)	
Put similar objects together by shape, color, size, etc. ◆◆◆◆◆◆ → ◆◆◆ and ◆◆◆	
Know and describe shapes (squares, circles, rectangles, hexagons, cubes, cones, cylinders, & spheres; "square has 4 corners & 4 equal sides")	
Understand simple shapes can form larger shapes  =	

Los Angeles Unified School District

KINDERGARTEN ASSESSMENT

Administration Guide

Kindergarten Formative Assessment
Common Core State Standards

Assessment	Common Core State Standards
Writing Numbers	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).
Oral Counting	K.CC.1 Count to 100 by ones and by tens.
Number Identification	
Counting Objects – Scattered Configuration	K.CC.4a 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. K.CC.4b 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. 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 an number from 1-20, count out that many objects.
Counting Objects – Arranged Configuration	K.CC.4a 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. K.CC.4b 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. 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 an number from 1-20, count out that many objects.
Comparing Quantities	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.
Comparing Numerals	K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.

Kindergarten Formative Assessment
Materials Needed

Item	Quantity Needed	Details
Administration Guide	1 Set	Directions for: • Writing Numbers • Oral Counting • Number Identification • Counting Objects – Scattered Configuration • Counting Objects – Arranged Configuration • Comparing Quantities • Comparing Numerals
Student Pages	1 Set	Place each of the student pages together in order: 1. Number Identification Sample 2. Number Identification – Level 1 3. Number Identification – Level 2 4. Number Identification – Level 3 5. Counting Objects – Arranged Configuration 6. Comparing Numerals Sample 7. Comparing Numerals Levels 1-2
Recording Forms	1 per Student	The two pages can be copied onto single sheets, double-sided.
Writing Numbers Assessment (Blank Hundred Chart)	1 per Student	Single-sided
Manipulatives	9 cubes of one color	The cubes will be used for Counting Objects – Scattered Configuration.
	13 cubes (6 of one color and 7 of another color)	The cubes will be used for Comparing Quantities (6 in one group, 7 in another group).
Pencil or Pen	1	To complete Recording Form

Materials Needed for Writing Number Assessment:
- ✓ Recording Forms
- ✓ Writing Numbers Assessment (blank hundred chart) – One per Student
- ✓ Pencil or Pen

WRITING NUMBERS

Small Group (at beginning of year)
Whole Group (later in year)

1. Distribute the Writing Numbers Assessment (blank hundreds charts).

2. Say these specific directions to student(s):

   "Complete the chart by writing the numbers beginning with 1, as far as you can go. When you get to the end of the row, go to the next row (demonstrate by pointing)**."**

Writing Numbers: Scoring Guidelines

Correct responses include:
- Numbers written correctly

Incorrect responses include:
- Numbers written incorrectly
- Numbers skipped by the student

Note: Numbers written backwards are acceptable (i.e., the number 2 is facing the wrong direction). However, if the digits in a two-digit number are reversed (i.e., 12 is written 21), that is incorrect.

To calculate a Writing Numbers score, the examiner:
- Counts up all numbers that the student attempted to write and
- Subtracts the number of errors from the total of numbers attempted.
- The resulting figure is the number of correct numbers written.

THE FOLLOWING ASSESSMENTS ARE DONE ONE-ON-ONE BY TEACHER

Materials Needed for Oral Counting Assessment:
- ✓ Recording Form
- ✓ Pencil or Pen

ORAL COUNTING

1. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

2. Say these specific directions to the student:

   "When I say start, I want you to start counting aloud from 1 like this: 1, 2, 3, until I tell you to stop. If you come to a number you don't know, I'll tell it to you. Be sure to do your best counting. Are there any questions? Ready, start."

3. If the student fails to say **"1"** after 5 seconds, say **"1"** and continue.

4. If the student hesitates for 5 seconds after any number, say the next number.

5. Let the student keep counting until they cannot go on.

6. If the student starts to repeat numbers, goes backwards, or says random numbers, record the behavior and score up to the last correct number stated in order.

7. Follow along on the examiner copy. Put a slash (/) through any incorrect.

Oral Counting: Scoring Guidelines

Correct responses include:
- Numbers said correctly
- Numbers said incorrectly but corrected by the student within 3 seconds

Incorrect responses include:
- Numbers said incorrectly
- Numbers said correctly after hesitations of 5 seconds or longer
- Numbers skipped by the student

To calculate a Writing Numbers score, the examiner:
- Counts up all numbers that the student said correctly in order and
- Subtracts the number of errors from the highest number stated correctly.
- The resulting figure is the number of correct numbers said.

Materials Needed for Oral Counting Assessment:

- ✓ Recording Form
- ✓ Student Page 1: Number Identification Sample
- ✓ Student Pages 2-4: Number Identification Levels 1-3
- ✓ Pencil or Pen

NUMBER IDENTIFICATION

1. Place the Student Page 1: Number Identification Sample in front of the student

2. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

3. Say these specific directions to the student:

   "Look at the paper in front of you. It has a number on it (demonstrate by pointing)**. What number is this?**

   Example 1

CORRECT RESPONSE	*INCORRECT RESPONSE*
"Good. The number is 7. Look at the number next to 7 (demonstrate by pointing)**. What number is this?**	**"This number is 7** (point to 7)**. What number is this? Good. Let's try another one. Look at the number next to 7** (demonstrate by pointing)**. What number is this?"**

   Example 2

CORRECT RESPONSE	*INCORRECT RESPONSE*
"Good. The number is 3." (Turn the page)	**"This number is 3** (point to 3)**. What number is this? Good."** (Turn the page)

   Place Student Page 2: Number Identification – Level 1 in front of the student.

   "The paper in front of you has rows of numbers. When I say start, I want you to tell me what the numbers are. Start here and go across the page. When you come to the end of the row, go to the next row (demonstrate by pointing)**. If you come to a number you don't know, I'll tell you what to do. Are there any questions? Put your finger on the first one. Ready, start."**

4. If the student fails to answer the first problem after 5 seconds, tell the student to **"Try the next one."**

5. Follow along on the examiner copy. Put a slash (/) through any incorrect.

6. The maximum time for each is 5 seconds. If a student does not provide an answer within 5 seconds, tell the student to **"Try the next one."** (If necessary, the examiner points to the next number as a student prompt.)

7. If the student scores 8 or greater, go to the next level. Otherwise, stop this portion of the assessment.

Number Identification: Scoring Guidelines

Correct responses include:
- Numbers read correctly
- Numbers read incorrectly but corrected by the student within 5 seconds

Incorrect responses include:
- Numbers read incorrectly
- Numbers read correctly after hesitations of 5 seconds or longer
- Numbers skipped by the student

Materials Needed for Counting Objects – Scattered Configuration

- ✓ Recording Form
- ✓ 9 Cubes of One Color
- ✓ Pencil or Pen

COUNTING OBJECTS – SCATTERED CONFIGURATION

1. Place 9 cubes of one color in front of the student in a scattered arrangement.

2. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

3. Ask the student:

   "How many cubes are there?"

4. You may tell the student that he/she may touch the cubes.

5. Check the cardinality. After the student counts, ask the student:

   "How many cubes are there?"

   Cardinality is the number of elements in a given set.

   If a student restates total, circle yes. If student recounts, circle no.

6. Check for One-to-One Correspondence

   One-to-One correspondence is the ability to match numbers to objects or object to object; for example, the numbers one to five matching five blocks, or matching one sock to one shoe.

   If the student says one number as they touch each cube, circle yes. If the student touches multiple cubes for each number or says multiple numbers for each cube, circle no.

7. Mark strategies used by student.

Materials Needed for Counting Objects – Arranged Configuration

- ✓ Recording Form
- ✓ Student Page 5: Counting Objects – Arranged Configuration (3-by-6 array of printed starts)
- ✓ Pencil or Pen

COUNTING OBJECTS – ARRANGED CONFIGURATION

1. Place Student Page 5: Counting Objects – Arranged Configuration (3-by-6 array of printed stars) in front of the student.

2. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

3. Ask the student:

   "How many stars are there?"

4. Check for cardinality. After the student counts, as the student:

   "How many stars are there?"

   If the student restates total, circle yes. If student recounts, circle no.

5. Check for One-to-One Correspondence.

   One-to-One correspondence is the ability to match numbers to objects or object to object; for example, the numbers one to five matching five blocks, or matching one sock to one shoe.

   If the student says one number as they touch each cube, circle yes. If the student touches multiple cubes for each number or says multiple numbers for each cube, circle no.

6. Mark strategies used by student.

Materials Needed for Counting Objects – Arranged Configuration

- ✓ Recording Form
- ✓ Set of 6 Cubes of One Color and Set of 7 Cubes of Another Color
- ✓ Pencil or Pen

COMPARING QUANTITIES

1. Place two sets of cubes in front of the student – one with 6 cubes of one color, the other with 7 cubes of another color.

2. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

3. Ask the student:

   "Which group has more cubes?"

4. You may tell the student that he/she may touch the cubes.

5. If you cannot determine the strategy used, say:

   "Show me how you figured it out."

6. Mark strategies used by the student.

Materials Needed for Comparing Numerals Assessment:

- ✓ Recording Form
- ✓ Student Page 6: Comparing Numerals Sample
- ✓ Student Page 7: Comparing Numerals Levels 1-2
- ✓ Pencil or Pen

COMPARING NUMERALS

1. Place the Student Page 6: Comparing Numerals Sample in front of the student.

2. Place the recording form copy on a clipboard and position so the student cannot see what the examiner records.

3. Say these specific directions to the student:

   "Look at the paper in front of you. The box in front of you has two numbers in it (demonstrate by pointing)**. Which number is greater or more?"**

   Example 1

CORRECT RESPONSE	*INCORRECT RESPONSE*
"Good. The greater number is 8. Now look at this box (demonstrate by pointing)**. It has two numbers in it. Tel me the number that is greater or more."**	**"The greater number is 8. You should have said 8 because 8 is greater than 2. Now look at this box** (demonstrate by pointing)**. It has two numbers in it. Tell me the number that is greater or more."**

   Example 2

CORRECT RESPONSE	*INCORRECT RESPONSE*
"Good. The greater number is 5." (Turn the page)	**"The greater number is 5. You should have said 5 because 5 is more than 4."** (Turn the page)

   Place the student copy in front of the student.

   "The paper in front of you has boxes on it. In the boxes are two numbers. When I say start, I want you to tell me the number in the box that is greater or more. Start here and go down the page. When you come to the end of the column, stop (demonstrate by pointing)**. If you come to a box and you don't know which number is greater, I'll tell you what to do. Are there any questions? Put your finger on the first one. Ready, start."**

   NOTE: If the student has difficulties with speech production, the examiner can use this alternate wording for directions: **"When I say, 'start,' point to the number that is greater or more in each pair."**

4. If the student fails to answer the first problem after 5 seconds, tell the student to **"Try the next one."**

5. Follow along on the examiner copy. Put a slash (/) through any incorrect.

6. If a student does not provide an answer within 5 seconds, tell the student to **"Try the next one."** (If necessary, the examiner points to the next box as a student prompt.)

7. If the student scores 4 or greater, go to the next level. Otherwise, stop this portion of the assessment.

Comparing Numerals: Scoring Guidelines

Correct responses include:
- Comparing Numerals read correctly
- Comparing Numerals read incorrectly but corrected by the student within 5 seconds

Incorrect responses include:
- The student reading the lesser number in the number pair
- Correct responses given after hesitations of 5 seconds or longer
- The student's calling out a number other than appears in the number pair
- Response items skipped by the student

7	3

Number Identification – Level 1

5	3	0	8	2
4	1	7	6	9

Number Identification – Level 2

13	10	16	12	18
17	14	19	15	11

Number Identification – Level 3

72	20	64	100	31
49	90	80	26	50

COUNTING OBJECTS – Arranged Configuration

8 2	4 5

Comparing Numerals Sample

Comparing Numerals
Level 1

7	3
4	8
8	9
4	3
0	5

Comparing Numerals
Level 2

14	18
13	17
17	16
11	12
14	10

Kindergarten Assessment
Recording Form

Name _____ Date _____

WRITING NUMBERS # Attempted _____ – # of Errors _____ = Score _____

ORAL COUNTING # Attempted _____ – # of Errors _____ = Score _____

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

NUMBER IDENTIFICATION

Level 1	5	3	0	8	2	4	1	7	6	9
Level 2	13	10	16	12	18	17	14	19	15	11
Level 3	72	20	64	100	31	49	90	80	26	50

Score: ____/10
Score: ____/10
Score: ____/10

COUNTING OBJECTS – Scattered Configuration:

# of cubes stated: _____ (Correct answer: 9) Score: _____/ 1

Strategies used (please mark):

Cardinality (please circle): Yes No
One-to-one Correspondence (please circle): Yes No

Keeps track while counting:

_____ Points to each cube
_____ Lines them up
_____ Moves objects to another pile
_____ Other: _____

Errors:

_____ Skips cubes
_____ Recounts cubes
_____ Skips numbers when counting
_____ Other: _____

Kindergarten Assessment
Recording Form

Name _____ Date _____

COUNTING OBJECTS – Arranged Configuration:

# of stars stated: _____ (Correct answer: 18)

Score: _____/ 1

Strategies used (please mark):

Cardinality (please circle): Yes No
One-to-one Correspondence (please circle): Yes No

Keeps track while counting:

_____ Counts left to right
_____ Counts top to bottom
_____ Counts in zigzag pattern
_____ Other: _____

Errors:

_____ Skips stars
_____ Recounts stars
_____ Skips numbers when counting
_____ Other: _____

COMPARING QUANTITIES

6 cubes	7 cubes

Score: _____/ 1

Strategies used (please mark):

_____ Counts _____ Matches _____ Guesses _____ Other: _____

COMPARING NUMERALS

Level 1

7	3
4	8
8	9
4	3
0	5

Score: _____/5

Level 2

14	18
13	17
17	16
11	12
14	10

Score: _____/5

Name _____ Date _____

Kindergarten Formative Assessment Class Record Sheet

Dates: Fall _____ Winter _____ Spring _____

Student's Name	Writing Numbers			Oral Counting			Number Identifica-tion Level 1			Number Identifica-tion Level 2			Number Identifica-tion Level 3			Counting Objects Scattered			Counting Objects Arranged			Comparing Quantities			Comparing Numerals Level 1			Comparing Numerals Level 2		
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S

Los Angeles Unified School District

KINDERGARTEN ASSESSMENT

Administration Guide

SPANISH VERSION

Kindergarten Formative Assessment
Common Core State Standards

Assessment	Common Core State Standards
Writing Numbers	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).
Oral Counting	K.CC.1 Count to 100 by ones and by tens.
Number Identification	
Counting Objects – Scattered Configuration	K.CC.4a 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. K.CC.4b 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. 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 an number from 1-20, count out that many objects.
Counting Objects – Arranged Configuration	K.CC.4a 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. K.CC.4b 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. 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 an number from 1-20, count out that many objects.
Comparing Quantities	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.
Comparing Numerals	K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.

Kindergarten Formative Assessment
Materials Needed

Item	Quantity Needed	Details
Administration Guide	1 Set	Directions for: • Writing Numbers • Oral Counting • Number Identification • Counting Objects – Scattered Configuration • Counting Objects – Arranged Configuration • Comparing Quantities • Comparing Numerals
Student Pages	1 Set	Place each of the student pages together in order: 1. Number Identification Sample 2. Number Identification – Level 1 3. Number Identification – Level 2 4. Number Identification – Level 3 5. Counting Objects – Arranged Configuration 6. Comparing Numerals Sample 7. Comparing Numerals Levels 1-2
Recording Forms	1 per Student	The two pages can be copied onto single sheets, double-sided.
Writing Numbers Assessment (Blank Hundred Chart)	1 per Student	Single-sided
Manipulatives	9 cubes of one color	The cubes will be used for Counting Objects – Scattered Configuration.
	13 cubes (6 of one color and 7 of another color)	The cubes will be used for Comparing Quantities (6 in one group, 7 in another group).
Pencil or Pen	1	To complete Recording Form

Materials Needed for Writing Number Assessment:
- ✓ Recording Forms
- ✓ Writing Numbers Assessment (blank hundred chart) – One per Student
- ✓ Pencil or Pen

WRITING NUMBERS

Small Group (at beginning of year)
Whole Group (later in year)

1. Distribute the Writing Numbers Assessment (blank hundreds charts).

2. Say these specific directions to student(s):

   "Termina la gráfica. Escribe los números, empezando con uno, lo mas que puedes. Cuando llegas al final de la fila, sigue en la próxima fila (demonstrate by pointing**)."**

Writing Numbers: Scoring Guidelines

Correct responses include:
- Numbers written correctly

Incorrect responses include:
- Numbers written incorrectly
- Numbers skipped by the student

Note: Numbers written backwards are acceptable (i.e., the number 2 is facing the wrong direction). However, if the digits in a two-digit number are reversed (i.e., 12 is written 21), that is incorrect.

To calculate a Writing Numbers score, the examiner:
- Counts up all numbers that the student attempted to write and
- Subtracts the number of errors from the total of numbers attempted.
- The resulting figure is the number of correct numbers written.

THE FOLLOWING ASSESSMENTS ARE DONE ONE-ON-ONE BY TEACHER

Materials Needed for Oral Counting Assessment:
- ✓ Recording Form
- ✓ Pencil or Pen

ORAL COUNTING

1. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

2. Say these specific directions to the student:

   "Cuando digo empieza, quiero que empieces contando en voz alta hasta que digo que paras. Si encuentras un número que no sabes, lo voy a decir. Haz lo mejor que puedas en contar. ¿Tienes alguna pregunta? Listo, empieza."

3. If the student fails to say **"1"** after 5 seconds, say **"1"** and continue.

4. If the student hesitates for 5 seconds after any number, say the next number.

5. Let the student keep counting until they cannot go on.

6. If the student starts to repeat numbers, goes backwards, or says random numbers, record the behavior and score up to the last correct number stated in order.

7. Follow along on the examiner copy. Put a slash (/) through any incorrect.

Oral Counting: Scoring Guidelines

Correct responses include:
- Numbers said correctly
- Numbers said incorrectly but corrected by the student within 3 seconds

Incorrect responses include:
- Numbers said incorrectly
- Numbers said correctly after hesitations of 5 seconds or longer
- Numbers skipped by the student

To calculate a Writing Numbers score, the examiner:
- Counts up all numbers that the student said correctly in order and
- Subtracts the number of errors from the highest number stated correctly.
- The resulting figure is the number of correct numbers said.

Materials Needed for Oral Counting Assessment:

- ✓ Recording Form
- ✓ Student Page 1: Number Identification Sample
- ✓ Student Pages 2-4: Number Identification Levels 1-3
- ✓ Pencil or Pen

NUMBER IDENTIFICATION

1. Place the Student Page 1: Number Identification Sample in front of the student

2. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

3. Say these specific directions to the student:

   "Mira el papel en frente de ti. Hay un número en el papel (demonstrate by pointing)**. ¿Cuál número es éste?"**

   Example 1

CORRECT RESPONSE	*INCORRECT RESPONSE*
"Muy bien. El número es siete. Mira el número al lado del 7 (demonstrate by pointing)**. ¿Cuál número es éste?"**	**"Este número es siete** (point to 7)**. ¿Cuál número es este? Muy bien. Intentemos otro. Mira el número al lado de 7** (demonstrate by pointing)**. ¿Cuál número es este?"**

   Example 2

CORRECT RESPONSE:	*INCORRECT RESPONSE:*
"Muy bien. El número es tres." (Turn the page.)	**"Este número es tres** (point to 3)**. ¿Cuál número es este? Muy bien."** (Turn the page.)

   Place Student Page 2: Number Identification – Level 1 in front of the student.

   "El papel en frente de ti tiene filas de números. Cuando digo empieza, quiero que me digas que números son. Empieza aquí y vé al otro lado de la página. Cuando llegues al fin de la fila, vé a la próxima fila (demonstrate by pointing)**. Si encuentras un número que no sabes, lo voy a decir. ¿Tienes alguna pregunta? Pon el dedo en el primero. Listo, empieza."**

4. If the student fails to answer the first problem after 5 seconds, tell the student to **"Intenta la próxima."**

5. Follow along on the examiner copy. Put a slash (/) through any incorrect.

6. The maximum time for each is 5 seconds. If a student does not provide an answer within 5 seconds, tell the student to **"Intenta la próxima."** (If necessary, the examiner points to the next number as a student prompt.)

7. If the student scores 8 or greater, go to the next level. Otherwise, stop this portion of the assessment.

Number Identification: Scoring Guidelines

Correct responses include:
- Numbers read correctly
- Numbers read incorrectly but corrected by the student within 5 seconds

Incorrect responses include:
- Numbers read incorrectly
- Numbers read correctly after hesitations of 5 seconds or longer
- Numbers skipped by the student

Materials Needed for Counting Objects – Scattered Configuration

- ✓ Recording Form
- ✓ 9 Cubes of One Color
- ✓ Pencil or Pen

COUNTING OBJECTS – SCATTERED CONFIGURATION

1. Place 9 cubes of one color in front of the student in a scattered arrangement.

2. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

3. Ask the student:

   "¿Cuántos cubos hay?"

4. You may tell the student that he/she may touch the cubes.

5. Check the cardinality. After the student counts, ask the student:

   "¿Cuántos cubos hay?"

   Cardinality is the number of elements in a given set.

   If a student restates total, circle yes. If student recounts, circle no.

6. Check for One-to-One Correspondence

   One-to-One correspondence is the ability to match numbers to objects or object to object; for example, the numbers one to five matching five blocks, or matching one sock to one shoe.

   If the student says one number as they touch each cube, circle yes. If the student touches multiple cubes for each number or says multiple numbers for each cube, circle no.

7. Mark strategies used by student.

]

Materials Needed for Counting Objects – Arranged Configuration

- ✓ Recording Form
- ✓ Student Page 5: Counting Objects – Arranged Configuration (3-by-6 array of printed starts)
- ✓ Pencil or Pen

COUNTING OBJECTS – ARRANGED CONFIGURATION

1. Place Student Page 5: Counting Objects – Arranged Configuration (3-by-6 array of printed stars) in front of the student.

2. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

3. Ask the student:

   "¿Cuántas estrellas hay?"

4. Check for cardinality. After the student counts, as the student:

   "¿Cuántas estrellas hay?"

   If the student restates total, circle yes. If student recounts, circle no.

5. Check for One-to-One Correspondence.

   One-to-One correspondence is the ability to match numbers to objects or object to object; for example, the numbers one to five matching five blocks, or matching one sock to one shoe.

   If the student says one number as they touch each cube, circle yes. If the student touches multiple cubes for each number or says multiple numbers for each cube, circle no.

6. Mark strategies used by student.

Materials Needed for Counting Objects – Arranged Configuration

- ✓ Recording Form
- ✓ Set of 6 Cubes of One Color and Set of 7 Cubes of Another Color
- ✓ Pencil or Pen

COMPARING QUANTITIES

1. Place two sets of cubes in front of the student – one with 6 cubes of one color, the other with 7 cubes of another color.

2. Place the recording form on a clipboard and position so the student cannot see what the examiner records.

3. Ask the student:

   "¿Cuál grupo tiene mas cubos?"

4. You may tell the student that he/she may touch the cubes.

5. If you cannot determine the strategy used, say:

   "Enseňame como lo entendiste."

6. Mark strategies used by the student.

Materials Needed for Comparing Numerals Assessment:
- ✓ Recording Form
- ✓ Student Page 6: Comparing Numerals Sample
- ✓ Student Page 7: Comparing Numerals Levels 1-2
- ✓ Pencil or Pen

COMPARING NUMERALS

1. Place the Student Page 6: Comparing Numerals Sample in front of the student.

2. Place the recording form copy on a clipboard and position so the student cannot see what the examiner records.

3. Say these specific directions to the student:

   "Mira el papel en frente de ti. La caja en frente de ti tiene dos números adentro (demonstrate by pointing)**. ¿Cuál número es mas grande o mas?"**

   Example 1

CORRECT RESPONSE:	*INCORRECT RESPONSE:*
"Muy bien. El número mas grande es 8. Ahora mira esta caja (demonstrate by pointing)**. Tiene dos números adentro. Dime el número que es mas grande o mas."**	**"El número mas grande es 8. Deberías haber dicho ocho porque ocho es mas grande que dos. Ahora mira esta caja** (demonstrate by pointing)**. Tiene dos números adentro. Dime el número que es mas grande o mas."**

   Example 2

CORRECT RESPONSE:	*INCORRECT RESPONSE:*
"Muy bien. El número mas grande es cinco." (Turn the page.)	**"El número mas grande es cinco. Deberías haber dicho cinco porque cinco es mas grande que cuatro."** (Turn the page.)

   Place the student copy in front of the student.

   "El papel en frente de ti tiene cajas. En las cajas hay dos números. Cuando digo empieza, quiero que me digas el número en la caja que es mas grande o mas. Empieza aquí y sigue hasta el fondo de la página. Cuando llegues al fin de la columna, para (demonstrate by pointing)**. Si encuentras una caja y no sabes cual número es mas grande, te diré que hacer. ¿Tienes alguna pregunta? Pon el dedo en el primero. Listo, empieza."**

   NOTE: If the student has difficulties with speech production, the examiner can use this alternate wording for directions: **"Cuando digo empieza, seňala el número que es mas grande o mas en cada pareja."**

4. If the student fails to answer the first problem after 5 seconds, tell the student to **"Intenta la próxima."**

5. Follow along on the examiner copy. Put a slash (/) through any incorrect.

6. If a student does not provide an answer within 5 seconds, tell the student to **"Intenta la próxima."** (If necessary, the examiner points to the next box as a student prompt.)

7. If the student scores 4 or greater, go to the next level. Otherwise, stop this portion of the assessment.

Comparing Numerals: Scoring Guidelines

Correct responses include:
- Comparing Numerals read correctly
- Comparing Numerals read incorrectly but corrected by the student within 5 seconds

Incorrect responses include:
- The student reading the lesser number in the number pair
- Correct responses given after hesitations of 5 seconds or longer
- The student's calling out a number other than appears in the number pair
- Response items skipped by the student