

**Long Beach Island School District
2026 Mathematics Curriculum
Kindergarten**

Original Adoption:	August 2024
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Revised on:	August 2026
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Long Beach Island School District Mathematics Curriculum	
Content Area: Math	
Course Title:	Grade Level: Kindergarten
Unit 1: Counting and Cardinality	35 days
Unit 2: Operations and Algebraic Thinking	35 days
Unit 3: Numbers and Operations in Base Ten	30 days
Unit 4: Measurement	25 days
Unit 5: Data Literacy	25 Days
Unit 6: Geometry	30 days

Introduction

Effective mathematics education provides students with a balanced instructional program. In such a program, students become proficient in basic computational skills and procedures, develop conceptual understandings, and become skilled at problem solving. Standards-based mathematics instruction starts with basic material and increases in scope and content as the years progress. It is like an inverted pyramid, with the entire weight of the developing subject, including readiness for algebra, resting on the foundation built in the early grades.

The curriculum is aligned to the NJSL for Mathematics. Activities outlined in this curriculum infuse the Standards for Mathematical Practice, and guidance is provided for supporting all students including multilingual learners (through WIDA language expectations) in developing mathematical thinking and problem-solving skills. In alignment to the content and practice standards, kindergarten students will extend their knowledge of mathematics as they learn to represent and compare whole numbers and describe shapes and space. More learning time in Kindergarten should be devoted to numbers than to other topics.

Students use numbers 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 $7 - 2 = 5$. 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.

Students describe their physical world using geometric ideas 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.

Alignment with State Mandates

The following colors are used throughout this document to indicate areas in which the curriculum is aligned with the following NJSA requirements:

- Holocaust and genocides ([N.J.S.A. 18A:35-28](#))
- History and contributions of African-Americans (Amistad Law) ([N.J.S.A. 18A:35-4.43](#))
- Highlight and promote diversity and inclusion (Diversity & Inclusion Law) ([N.J.S.A. 18A:35-4.36a](#))
- History of disabled and LGBT persons included in middle and high school curriculum ([Section 18A:35-4.35](#))
- Climate Change - to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways. Please [click here](#) for specific examples (by subject).

*WIDA English Language Development Standards (N.J.S.A. 18A:35-15 to 26)

***WIDA English Language Development Standard 3** [WIDA English Language Development Standards Framework, 2020 Edition](#)

“New Jersey remains committed to supporting multilingual learners through policies and practices that promote access, equity, and academic success. The English Language Development Standards provide a framework for ensuring that multilingual learners receive the instruction and support necessary to develop English language proficiency while meeting the expectations of the New Jersey Student Learning Standards. Implementation of these standards across all content areas supports inclusive learning environments and advances New Jersey’s commitment to preparing all students for success beyond graduation. The English Language Development Standards are a shared responsibility across all content areas and support inclusive and equitable learning environments. The English Language Development standards are a foundational component of standards-aligned instruction, guiding educators in designing learning experiences that make the NJSLS accessible to all students. The English Language Development Standards are designed to be implemented by all educators who work with multilingual learners. Classroom teachers, ESL and bilingual educators, specialists, and administrators share responsibility for ensuring that multilingual learners receive appropriate linguistic and academic support. Educators are encouraged to use these resources alongside the full framework when planning instruction, identifying language expectations, and designing opportunities for multilingual learners to engage meaningfully with grade-level content.”

Mathematical Practices Guidance and WIDA Language Expectations

“The Standards for Mathematical Practice in the New Jersey Student Learning Standards-Mathematics (NJSLS - Mathematics: [2023 Standards for Mathematical Practice](#)) describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.” [Mathematics](#) The table below provides suggestions and strategies along with WIDA Language Expectations for supporting students in developing mathematical thinking and problem-solving skills.

Math Practice	Guidance for Developing Mathematical Thinking	WIDA Language Expectation Focus
Make sense of problems and persevere in solving them	Understanding the problem: • Explain the main problem and the given facts in your own words. • State what you need to find and notice about the details. • Describe how the numbers or items connect to each other. Planning and Strategy • List what you already tried and steps used so far. • Think of different ways to organize or show the information. • Find other similar problems to help you get started. Checking and Changing • Name the steps you are most confident with. • Decide what to change or try next.	Explain/Inform: Describe solution pathways and unpack meaning from a problem statement.
Reason abstractly and quantitatively	Quantities and Meanings • Understand what the numbers represent and their relationships to each other (ex. How is ____ related to ____?) • Understand visual or written signs that stand for math ideas. Methods and Properties • Explain the math rules used to work out an answer. • Explain why a specific tool or step was used. • Explain whether a different rule or operation could work instead.	Explain: Relate abstract symbols, quantities, and numerical expressions to real-world contexts

Construct viable arguments and critique the reasoning of others	Evidence ● Explain the evidence that supports your answer. ● Explain how you can prove... ● Explain how you know what the problem was asking. ● Explain what didn't work and why ● Show a counter example.	Argue: Justify mathematical solutions, compare reasoning methods, and respectfully challenge peers' claims.
Model with mathematics	Modeling ● Construct a model to represent the problem. ● Explain how you can represent the quantities. ● Create an equation or expression that matches the diagram, chart, or table. ● Explain what formula might apply to the problem.	Inform/Explain: Represent mathematical relationships visually, contextually, or via equations and diagrams.
Use appropriate tools strategically	Tools ● Describe tools that can be used. ● Describe what information you have. ● Estimate. ● Determine which tool would be most helpful. ● Describe what a _____ can show that _____ may not.	Inform: Describe the choice of tools (such as graphs, calculators, or manipulatives) and how they support calculations.
Attend to precision	Precision ● Communicate math terms being used. ● Explain how your solution answers the problem ● Explain how you show the meaning of the quantities. ● Explain what symbols are important. ● Explain how you could test your solution to see if it answers the problem.	Inform: Communicate precise mathematical vocabulary, units of measure, and clear labels.
Look for and make use of structure	Structure ● Describe observations/noticings. ● Describe patterns you find. ● Describe what can be eliminated. ● Describe how this relates to ... ● Explain how this connects to other math concepts.	Explain: Describe patterns, operational properties, or structural compositions within expressions or shapes.

Look for and express regularity in repeated reasoning	• Describe what you notice. • Describe trends or rules for • Explain how you can prove... • Predict or explain to support patterns.	Explain: Generalize repeating processes and describe trends or rules using consistent language structures.
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Unit 1: Counting and Cardinality	Duration: 35 days
Standards/Learning Targets	
Focus Standards (Major Standards)	
● K.CC.A.1: Count to 100 by ones and by tens ● K.CC.A.2: Count forward beginning from a given number within the known sequence (instead of having to begin at 1). ● K.CC.A.3: Write numbers from 0 to 20. Represent a number of objects with a written numeral 0 to 20 (with 0 representing a count of no objects). ● K.CC.B.4: Understand the relationship between numbers and quantities; connect counting to cardinality. ● ELD-MA.K.Inform.Interpretive Interpret mathematical informational texts (with prompting and support) by ● Identifying concept or object ● Describing quantities and attributes ● K.CC.B.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.B.4b: Understand that the last number name says 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.B.4c: Understand that each successive number name refers to a quantity that is one larger. ● K.CC.B.5: Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. ● K.CC.C.6: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e .g ., by using matching and counting strategies. ● ELD-SI.K-3.Inform ● Define and classify objects or concepts ● Describe characteristics, patterns, or behavior ● Describe parts and wholes ● Sort, clarify, and summarize ideas ● Summarize information from interaction with others and from learning experiences ● ELD-SI.K-3.Explain ● Share initial thinking with others ● Follow and describe cycles in diagrams, steps in procedures, or causes and effects ● Compare and contrast objects or concepts ● Offer ideas and suggestions ● Act on feedback to revise understandings of how or why something works ● K.CC.C.7: Compare two numbers between 1 and 10 presented as written numerals.	
Supporting and Additional Standards	

- **L.VL.K.2.** With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
- **L.RF.K.4.** Read emergent-reader texts (decodable texts, including words with one-to-one letter-sound correspondences) orally with sufficient decoding accuracy to support comprehension.
- **W.WP.K.4.** With prompts and support, recognize that writing carries a message and should make sense to others.
- **SLK.1** Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.
- **ELD-SI.K-3.Narrate** ● Share ideas about one's own and others' lived experiences and previous learning ● Connect stories with images and representations to add meaning ● Ask questions about what others have shared ● Recount and restate ideas ● Discuss how stories might end or next steps

Computer Science and Design Thinking

- **8.1.2.DA.1:** Collect and present data including climate change data, in various visual formats
- **8.1.2.DA.3:** Identify and describe the patterns in data visualizations.
- **8.1.2.AP.1:** Model daily processes by creating and following algorithms to complete tasks.
- **8.1.2.AP.4:** Break down a task into a sequence of steps.
- **8.2.2.ED.2:** Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
- **8.2.2.ED.3:** Select and use appropriate tools and materials to build a product using the design process

Career Readiness, Life Literacies, and Key Skills

- **9.4.2.CI.1** Demonstrate openness to new ideas and perspectives
- **9.4.2.CI.2** Demonstrate originality and inventiveness in work
- **9.4.2.CT.2:** Identify possible approaches and resources to execute a plan
- **9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Climate Change

Climate Change Example: With prompting and support, students may ask and answer questions about objects that may be reused, objects that may be recycled, and objects that must be placed in the trash. Students may classify used objects into those categories with no more than 10 objects in each category. Students may count the number of objects in each category and sort the categories by

count.

Climate Change Example: Students may use sticks and clay to model trees and umbrellas and may then draw shapes (e.g., triangle, rectangle) to model those objects. With prompting and support, they may ask and answer questions about how trees and umbrellas may be used to reduce the warming effect of sunlight.

Evidence of Student Learning

Performance Tasks/Use of Technology:

Use online programs to enhance student understanding and accuracy:

- [Splash Learn](#)
- [ABCya!](#)
- [IXL](#)
- [ABC Mouse](#)
- Kahoot
- Generation Genius
- Snorkl

Other Assessments

Formative:

- Exit slips
- Teacher observations/anecdotal/checklists
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative:

- Unit Review Assessments
- Associated tests & quizzes
- Performance Tasks
- Extension Projects

Benchmark:

- District Approved Assessment
- District Curriculum Assessments

Alternative:

- Performance Tasks
- Written/verbal explanations
- Peer assessment
- Self-assessment
- Untimed Fact Practice Assessment

	● Reteach Activities and Worksheets ● Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	Skills
Unit Essential Questions ● How do you count to 5 by ones? ● How can you represent a number of objects by the correct numeral up to 5 using zero to represent no objects? ● What is the ascending number name for each object in a group? ● What are the objects named in the standard order; identify the last number called as the number of counted objects in the set; regardless of the order they are counted? ● Why is the next number name in counting always one greater than the previous number? ● How do you know how many are in a group of objects when up to 5 are arranged in a line or in a scattered configuration? ● What can we do to create addition and subtraction events with objects (or make drawings) to represent a sum (putting together) or a difference (taking from) up to 5? Enduring Understandings <i>Students will know: "I can..."</i> ● Know number names and the count sequence. ● Count to tell the number of objects. ● Understand addition as putting together and adding to,	Students will be able: ● To count to 5 by ones ● To represent a number of objects by the correct numeral up to 5 using zero to represent no objects ● Identify the ascending number name for each object in a group ● Identify the objects named in the standard orders; identify the last number called as the number of counted objects in the set; regardless of the order they are counted. ● To explain why the next number name in counting is always one greater than the previous ● Create an addition and subtraction event with objects (or make drawings) to represent a sum (putting together) or a difference (taking from) up to 5

and understand subtraction as taking apart and taking from.	
Instructional Plan	
Suggested Activities	Resources
Number Sense routine: Display slides on board that show a given number of objects. Students are to count and write the number on a white board. Students can also use manipulatives to count out how many they see. Try it: Provide each student with a 8 X 10 piece of construction paper each with one number 1-5 written on it. Students use bingo or dot markers and place markers for the number that was on the construction paper. Discuss it: Introduce numbers 1-5 using a math poster or cards. Work with a partner and model how to count. Connect it: Using white boards and dry erase markers and practice making each number and counting. Collect everyday objects like blocks, toy cars, pencils, and plastic cups. Describe attributes: Ask the child to pick an object and name its features, such as <i>long, short, heavy, light, tall, or round.</i>	Resources for on-grade students: • Differentiated according to informal assessments • 100 chart to assist with addition and subtraction • Connecting cubes for addition and subtraction • Counters to fill in ten frames • Anchor Charts on counting up, writing numbers to 5, and comparing numbers to 5 • Video Guidance Resources for approaching grade level students: Differentiated according informal assessments • 100 chart to assist with addition and subtraction • Connecting cubes for addition and subtraction • Counters to fill in ten frames • Manipulatives with small group guidance • Highlighters for close read strategies • Word Banks Resources for students exceeding grade level expectations: • Differentiated according to informal assessments • 100 chart to assist with addition and subtraction • Connecting cubes for addition and subtraction • Counters to fill in ten frames

Compare two items: Put two objects side by side (like a crayon and a marker) and ask which one is *longer* or *heavier*.

Count quantities: Make two small piles of blocks (for example, 4 blocks in one pile and 7 in another) and ask the child, "How many are in each group? Which group has more?"

WIDA Scaffolding by Proficiency Level

- **Entering / Emerging (Levels 1–2):** Point to groups, use manipulatives (blocks, counters), and repeat simple words like *more* or *total*.
- **Developing / Expanding (Levels 3–4):** Complete sentence frames such as "I have X cubes. I add Y cubes. Now I have Z cubes."
- **Bridging / Reaching (Levels 5–6):** Explain an addition strategy out loud to a partner using ordinal words or sequence terms (first, next, altogether).

Suggested Options for Differentiation

Multilingual Learners

- Differentiate instruction and classroom assessment as guided by the [WIDA English Language Development Standards Framework, 2020 Edition](https://wida.wisc.edu/sites/default/files/resource/CanDo-KeyUses-Kindergarten.pdf).
- <https://wida.wisc.edu/sites/default/files/resource/CanDo-KeyUses-Kindergarten.pdf>
- Follow the Individualized Educational Plans (IEP) for ML Special Education (SE) students.
- Encourage the ML student to use oral language. Discussions, especially pair-work, allow students to expand language usage in listening and speaking.
- Allow MLs to clarify ideas, make sense of their previous statements and elaborate on their views with specific explanations.
- Use wait time for MLs to express their ideas in class.
- Graphic organizers, color-coded anchor charts, word walls with visual imagery, and breakdown techniques for decoding dense mathematical word problems

- Structured talk protocols (Think-Pair-Share, Numbered Talks) and word banks
- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ML students to interact and communicate with peers
- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provide students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs
- Preferential seating.
- Provide special lighting or acoustics.
- Provide a space with minimal distractions.
- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments

- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
- Self centered curriculum allowing for student choice

Students at Risk of School Failure

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control
- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Core Instructional and Supplemental Materials

- *enVisions Mathematics* textbook
- [Kindergarten Learning Games, Ages 5 - 6 • ABCya!](#)
- Math workstations with open-ended tasks and collections of manipulatives
- Number Bingo

- Subitize match game
- Blast Off Counting Game
- Seesaw

As appropriate:

- Boom Cards
- VB-Mapp
- ABLLS-R
- Connecting Math Concepts
- Prodigy
- SplashLearn
- IXL
- Kahoot
- Generation Genius

Varied Levels of Text: Literature-

- *Fish Eyes* by Lois Ehlert
- *Anno's Counting Book* by Anno Mitsumasa
- *Chicka, Chicka, 1, 2, 3* by Bill Martin
- *Miss Bindergarten Celebrates the 100th Day of Kindergarten* by Joseph Slate
- *Five Little Monkeys* by Eileen Christelow

Teacher Notes:

Unit 2: Operations and Algebraic Thinking	Duration: 35 days
Standards/Learning Targets	
Focus Standards (Major Standards)	
● K.OA.A.1 Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations ● K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. (Climate Change Example: Students may use counters when adding to find the total number of trees that they and a partner observed (eg, front their front door, in a backyard, from a classroom window). With prompting and support, they may ask and answer questions about how trees may reduce the warming effect of sunlight) ● K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$). ● K.OA.A.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. ● ELD-MA.K.Inform.Interpretive Interpret mathematical informational texts (with prompting and support) by ● Identifying concept or object ● Describing quantities and attributes ● K.OA.A.5 Fluently add and subtract within 5.	
Supporting and Additional Standards	
Primary Interdisciplinary Connections: ● L.VL.K.2. With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. ● L.RF.K.4. Read emergent-reader texts (decodable texts, including words with one-to-one letter-sound correspondences) orally with sufficient decoding accuracy to support comprehension. ● W.WP.K.4. With prompts and support, recognize that writing carries a message and should make sense to others. ● SLK.1 Participate in collaborative conversations with diverse partners about <i>kindergarten topics and texts</i> with peers and adults in small and larger groups.	

Computer Science and Design Thinking

- **8.1.2.DA.1:** Collect and present data including climate change data, in various visual formats
- **8.1.2.DA.3:** Identify and describe the patterns in data visualizations.
- **8.1.2.AP.1:** Model daily processes by creating and following algorithms to complete tasks.
- **8.1.2.AP.4:** Break down a task into a sequence of steps.
- **8.2.2.ED.2:** Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
- **8.2.2.ED.3:** Select and use appropriate tools and materials to build a product using the design process

Career Readiness, Life Literacies, and Key Skills

- **9.4.2.CI.1** Demonstrate openness to new ideas and perspectives
- **9.4.2.CI.2** Demonstrate originality and inventiveness in work
- **9.4.2.CT.2:** Identify possible approaches and resources to execute a plan
- **9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

Evidence of Student Learning

Performance Tasks/Use of Technology:

Use online programs to enhance student understanding and accuracy:

- [Splash Learn](#)
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- [IXL](#)
- [ABC Mouse](#)
- Kahoot
- Generation Genius

Other Assessments

Formative:

- Exit slips
- Teacher observations/anecdotal/checklists
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative:

- Unit Review Assessments
- Associated tests & quizzes
- Performance Tasks
- Extension Projects

Benchmark:

- District Curriculum Benchmark Assessments

Alternative:

	● Performance Tasks ● Written/verbal explanations ● Peer assessment ● Self-assessment ● Untimed Fact Practice Assessment ● Reteach Activities and Worksheets ● Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	Skills
Unit Essential Questions ● How do you count and represent with a written numeral a number of objects to 10? ● What strokes do we make to write numerals from zero to 10? ● What number do you begin counting from when we count to 30 by ones and tens? ● What numbers come next when we begin counting from any given number up to 10 -- instead of having to begin at one? ● What objects or drawings can we use to represent and solve addition and subtraction word problems (within 10)? ● What tools can we use to master adding fluently within 10? ● What do we need to look for to classify and sort objects into given categories and count the objects in each category (up to 10 objects)? ● How many ways can you make the number 10? Enduring Understandings	Students will be able: ● Count and represent with a written number a number of objects to 10 ● Identify the strokes need to write numerals from zero to 10 ● Identify the number to begin counting from when counting to 30 by ones and tens ● Identify what number comes next when we begin counting from any given number up to 10 - instead of having to begin at 1 ● Identify objects or drawings can we use to represent and solve addition and subtraction word problems (within 10) ● Identify tools to use to master adding fluently within 10 ● Identify what to look for to classify and sort objects into given categories and count the objects in each category (up to 10 objects)? ● Identify different ways to make the number 10

<i>Students will know: “I can...”</i> • Know number names and the count sequence. • Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. • Classify objects and count the number of objects in each category.	
Instructional Plan	
Suggested Activities	Resources
Number sense warm up activity: Counting to 50 Students will play “Sparkle”. To play this game, have students stand forming a circle. Choose one student to start counting. Every student after has to say the next number. Once you get to 50, the next student says “Sparkle”, and the student sits down and is out of the game. Start again with number one, and continue playing until only one student is left. Read aloud: “Counting on Community”- Listen to the story and count and discuss the different items found in the read aloud. Lesson: Addition Try it: Students will complete an addition worksheet. Discuss it: Introduce the word addition. Write it on the board. Ask students what addition means. Connect it: Sitting on carpet with class use the addition flash cards to model and practice adding.	Resources for on-grade students: • Differentiated according to informal assessments • 100 chart to assist with addition and subtraction • Connecting cubes for addition and subtraction • Counters to fill in ten frames • Anchor Charts on counting up, writing numbers 6-10, and comparing numbers 6-10 • Video Guidance Resources for students approaching grade level expectations: • Differentiated according informal assessments • 100 chart to assist with addition and subtraction • Connecting cubes for addition and subtraction • Counters to fill in ten frames • Touch point chart • Manipulatives with small group guidance • Highlighters for close read strategies • Word Banks Resources for students exceeding grade level expectations: • Differentiated according to informal assessments

- Achieve the Core word problems
- 100 chart to assist with addition and subtraction
- Connecting cubes for addition and subtraction
- Counters to fill in ten frames

Suggested Options for Differentiation

Multilingual Learners

- Differentiate instruction and classroom assessment as guided by the [WIDA English Language Development Standards Framework, 2020 Edition](#).
- <https://wida.wisc.edu/sites/default/files/resource/CanDo-KeyUses-Kindergarten.pdf>
- Follow the Individualized Educational Plans (IEP) for ML Special Education (SE) students.
- Encourage the ML student to use oral language. Discussions, especially pair-work, allow students to expand language usage in listening and speaking.
- Allow MLs to clarify ideas, make sense of their previous statements and elaborate on their views with specific explanations.
- Use wait time for MLs to express their ideas in class.
- Graphic organizers, color-coded anchor charts, word walls with visual imagery, and breakdown techniques for decoding dense mathematical word problems
- Structured talk protocols (Think-Pair-Share, Numbered Talks) and word banks
- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ML students to interact and communicate with peers
- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary

- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs
- Preferential seating.
- Provide special lighting or acoustics.
- Provide a space with minimal distractions.
- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments
- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
- Self centered curriculum allowing for student choice

Students at Risk of School Failure

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials

- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control
- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Core Instructional and Supplemental Materials

- *enVisions Mathematics* textbook
- <https://jr.brainpop.com/math/>
- Math workstations with open-ended tasks
- Collections and manipulatives
- Domino Addition and Subtraction
- Addition War
- Seesaw

As appropriate:

- Boom Cards
- VB-Mapp
- ABLIS-R
- Connecting Math Concepts
- Prodigy
- SplashLearn
- IXL
- Snorkl
- Generation Genius
- XtraMath

Varied Levels of Text: Literature-

- *Ten Black Dots* by Donald Crews
- *This Old Man* by Pam Adams
- *Remainder of One* by Elinor J. Pinczes
- *Domino Addition* by Lynette Long
- *Ten in the Bed* by Penny Dale
- *Ten Apples Up on Top!*
- *Ten Little Rubber Ducks* by Eric Carle

Teacher Notes:

Unit 3: Numbers and Operations in Base Ten	Duration: 30 days
Standards/Learning Targets	
Focus Standards (Major Standards)	
• K.NBT.A Work with numbers 11–19 to gain foundations for place value. • K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones • ELD-SI.K-3.Explain • Share initial thinking with others • Follow and describe cycles in diagrams, steps in procedures, or causes and effects • Compare and contrast objects or concepts • Offer ideas and suggestions • Act on feedback to revise understandings of how or why something works	
Supporting and Additional Standards	
Primary Interdisciplinary Connections: • L.VL.K.2. With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. • L.RF.K.4. Read emergent-reader texts (decodable texts, including words with one-to-one letter-sound correspondences) orally with sufficient decoding accuracy to support comprehension. • W.WP.K.4. With prompts and support, recognize that writing carries a message and should make sense to others. • SLK.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. • ELD-SI.K-3.Narrate • Share ideas about one’s own and others’ lived experiences and previous learning • Connect stories with images and representations to add meaning • Ask questions about what others have shared • Recount and restate ideas • Discuss how stories might end or next steps	

Computer Science and Design Thinking

- **8.1.2.DA.1:** Collect and present data including climate change data, in various visual formats
- **8.1.2.DA.3:** Identify and describe the patterns in data visualizations.
- **8.1.2.AP.1:** Model daily processes by creating and following algorithms to complete tasks. **8.1.2.AP.4:** Break down a task into a sequence of steps.
- **8.2.2.ED.2:** Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
- **8.2.2.ED.3:** Select and use appropriate tools and materials to build a product using the design process

Career Readiness, Life Literacies, and Key Skills

- **9.4.2.CI.1** Demonstrate openness to new ideas and perspectives
- **9.4.2.CI.2** Demonstrate originality and inventiveness in work
- **9.4.2.CT.2:** Identify possible approaches and resources to execute a plan
- **9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Evidence of Student Learning

Performance Tasks/Use of Technology:

Use online programs to enhance student understanding and accuracy:

- [Splash Learn](#)
- [ABCya!](#)
- [IXL](#)
- [ABC Mouse](#)
- Generation Genius
- Snorkl

Other Assessments

Formative:

- Exit slips
- Teacher observations/anecdotal/checklists
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative:

- Unit Review Assessments
- Associated tests & quizzes
- Performance Tasks
- Extension Projects

Benchmark:

- District Approved Assessment
- District Curriculum Benchmark Assessments

	Alternative: ● Performance Tasks ● Written/verbal explanations ● Peer assessment ● Self-assessment ● Untimed Fact Practice Assessment ● Reteach Activities and Worksheets ● Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	Skills
Unit Essential Questions ● How can you represent the number 11? 12? 13? 14? 15? 16? 17? 18? 19? ● Why do we group numbers into tens and ones? ● How are numbers organized in groups of 10? ● How can you show numbers 11 to 19 with objects? ● How are teens composed of 10s and 1s? Enduring Understandings <i>Students will know: "I can..."</i> ● Numbers can be represented in a variety of ways ● Numbers greater than 9 (11-19) are grouped into a ten and one(s) ● Digits are used to make numbers in base 10 form ● Teens are composed of 10s and ones (11-19) ● Compose and decompose teen numbers into a ten and some ones using base 10 blocks and pictures ● Compose numbers to make 10/decompose numbers to take apart 10	Students will be able: ● Represent numbers 11 - 19 ● Explain why we group numbers into tens and ones ● Identify how numbers are organized in groups of 10 ● To show numbers 11 - 19 with objects ● Explain how teens are composed of 10s and 1s

Instructional Plan	
Suggested Activities	Resources
Number sense warm up: Play “Number I Spy” Teacher will think of a number between 0-100 and students will try to guess his/her number. Try it: Students complete a subtraction sheet. Discuss it: Introduce the word Subtraction. Write it on the board. Ask students what Subtraction means. Use subtraction cards to model counting back and using them to Subtract. Connect it: Sitting on carpet with class use the subtraction flash cards to model and practice subtracting. WIDA Scaffolding by Proficiency Level ● Entering / Emerging (Levels 1–2): Point to a bundle of 10 sticks and extra loose counters. Use single words or short phrases like "Ten" and "Four" or point and gesture to show 14. ● Developing / Expanding (Levels 3–4): Complete sentence frames with a partner, such as: <i>"I see a group of ten and ____ more. Together it is ____."</i> or write equations like $(10 + 3 = 13)$. ● Bridging / Reaching (Levels 5–6): Independently explain their reasoning to the class using causal or sequential connectors: <i>"I broke 16 into 10 and 6 because</i>	Resources for on-grade students: ● Differentiated according to informal assessments ● 100 chart to assist with addition and subtraction ● Connecting cubes for addition and subtraction ● Counters to fill in ten frames ● Anchor Charts on adding and subtracting within 10 ● Video Guidance Resources for students approaching grade level expectations: ● Differentiated according informal assessments ● 100 chart to assist with addition and subtraction ● Connecting cubes for addition and subtraction ● Counters to fill in ten frames ● Manipulatives with small group guidance ● Highlighters for close read strategies ● Word Banks Resources for students exceeding grade level expectations: ● Differentiated according to informal assessments ● Achieve the Core word problems ● 100 chart to assist with addition and subtraction ● Connecting cubes for addition and subtraction ● Counters to fill in ten frames Suggested Options for Differentiation ● 100 chart to assist with addition and subtraction ● Connecting cubes for addition and subtraction ● Counters to fill in ten frames

sixteen is made of ten ones and six extra ones."

Suggested Options for Differentiation

Multilingual Learners

- Differentiate instruction and classroom assessment as guided by the [WIDA English Language Development Standards Framework, 2020 Edition](#).
- <https://wida.wisc.edu/sites/default/files/resource/CanDo-KeyUses-Kindergarten.pdf>
- Follow the Individualized Educational Plans (IEP) for ML Special Education (SE) students.
- Encourage the ML student to use oral language. Discussions, especially pair-work, allow students to expand language usage in listening and speaking.
- Allow MLs to clarify ideas, make sense of their previous statements and elaborate on their views with specific explanations.
- Use wait time for MLs to express their ideas in class.
- Graphic organizers, color-coded anchor charts, word walls with visual imagery, and breakdown techniques for decoding dense mathematical word problems
- Structured talk protocols (Think-Pair-Share, Numbered Talks) and word banks
- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ML students to interact and communicate with peers
- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials

- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs
- Preferential seating.
- Provide special lighting or acoustics.
- Provide a space with minimal distractions.
- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments
- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
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Students at Risk of School Failure

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- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding

- Allow students to have personal possessions and property in school
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- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
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- Use real-world examples and create mental models for abstract idea
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Core Instructional and Supplemental Materials

- *enVisions Mathematics* Program
- [Number Guessing Game](#)
- [Shapes! A Geometry Activity for Children • ABCya!](#)
- Measure student jumps and compare data
- Measure students using a variety of math manipulatives - traditional and non-traditional units of measure (links, cubes, paper clips, etc.)
- Manipulatives
- Measuring shadows
- Seesaw

As appropriate:

- Boom Cards
- VB-Mapp
- ABLLS-R
- Connecting Math Concepts
- Prodigy
- IXL
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Varied Levels of Text: Literature-

- *How Big Is a Foot?* by Myller Rolf
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- *Inch by Inch* by Leo Lionni
- *The Grouchy Ladybug* by Eric Carle
- *Measuring Penny* by Loreen Leedy
- *The Button Box* by Margarete Reid

Teacher Notes:

Unit 4: Measurement	Duration: 25 days
Standards/Learning Targets	
Focus Standards (Major Standards)	

- **K.M.A.1** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- **ELD-SI.K-3.Inform** • Define and classify objects or concepts • Describe characteristics, patterns, or behavior • Describe parts and wholes • Sort, clarify, and summarize ideas • Summarize information from interaction with others and from learning experiences
- **K.M.A.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.
- **ELD-SI.K-3.Explain** • Share initial thinking with others • Follow and describe cycles in diagrams, steps in procedures, or causes and effects • Compare and contrast objects or concepts • Offer ideas and suggestions • Act on feedback to revise understandings of how or why something works
- **K.M.B.1** Understand that certain objects are coins and dollar bills, and that coins and dollar bills represent money. Identify the values of all U.S. coins and the one-dollar bill
- **ELD-MA.K.Inform**. Expressive Construct mathematical informational texts (with prompting and support) that • Define or classify concept or entity • Describe a concept or entity • Compare/contrast concepts or entities

Supporting and Additional Standards

Primary Interdisciplinary Connections:

- **L.VL.K.2.** With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
- **L.RF.K.4.** Read emergent-reader texts (decodable texts, including words with one-to-one letter-sound correspondences) orally with sufficient decoding accuracy to support comprehension.
- **W.WP.K.4.** With prompts and support, recognize that writing carries a message and should make sense to others.
- **SLK.1** Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- **ELD-SI.K-3.Narrate** • Share ideas about one’s own and others’ lived experiences and previous learning • Connect stories with images and representations to add meaning • Ask questions about what others have shared • Recount and restate ideas • Discuss how stories might end or next steps

Computer Science and Design Thinking

- **8.1.2.DA.1:** Collect and present data including climate change data, in various visual formats
- **8.1.2.DA.3:** Identify and describe the patterns in data visualizations.
- **8.1.2.AP.1:** Model daily processes by creating and following algorithms to complete tasks. 8.1.2.AP.4: Break down a task into a sequence of steps.
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Career Readiness, Life Literacies, and Key Skills

- **9.4.2.CI.1** Demonstrate openness to new ideas and perspectives
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Evidence of Student Learning

Performance Tasks/Use of Technology:

Use online programs to enhance student understanding and accuracy:

- [Splash Learn](#)
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- [IXL](#)
- [ABC Mouse](#)
- Snorkl
- Generation Genius
- Prodigy

Other Assessments

Formative:

- Exit slips
- Teacher observations/anecdotal/checklists
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative:

- Unit Review Assessments
- Associated tests & quizzes
- Performance Tasks
- Extension Projects

Benchmark:

- District Approved Assessment (Fall, Winter, Spring)
- District Curriculum Benchmark Assessments

Alternative:

	● Performance Tasks ● Written/verbal explanations ● Peer assessment ● Self-assessment ● Untimed Fact Practice Assessment ● Reteach Activities and Worksheets ● Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	Skills
Unit Essential Questions ● What do you think about when you describe measurable attributes of objects?(e.g., length and weight.) ● What do you do when you directly compare and describe two objects with a measurable attribute in common using “more of”/”less of” the attribute? For example, directly compare the heights of two children and describe one child as taller/shorter. ● What do you look at when you analyze and compare two- and three-dimensional shapes in different sizes and orientations by counting sides or vertices (“corners”)? Enduring Understandings <i>Students will know: “I can...”</i> ● Describe and compare measurable attributes. ● Measure, analyze, compare, create, and compose shapes.	Students will be able: ● Explain their thinking when describing measurable attributes of objects (e.g., length and weight) ● Identify the steps to directly compare and describe two objects with a measurable attribute in common using “more of/less of” the attribute. ● Analyze and compare two- and three- dimensional shapes in different sizes and orientations by counting sides or vertices (“corners”)
Instructional Plan	
Suggested Activities	Resources
Measurement	Resources for on-grade students:

Try it: Give each student a marker, pencil, eraser, and a crayon. Tell them to put them in size order from shortest to longest and relate to weather.

Discuss it: Children turn and talk with each other and discuss how they came to their decisions. They may have different answers depending on the size of their material and relate to history events

Connect it: Have students then line up their materials on a piece of paper with a line so they are lining them up exactly.

WIDA Key Language Uses in Measurement

- **Informing:** Students name and point out measurable attributes of objects.
- **Comparing:** Students contrast objects using direct comparison statements.
- **Explaining:** Students describe *how* they checked or measured an attribute.

Language Functions for Kindergarten Measurement

- **Describing attributes:** Using adjectives like *longer, shorter, heavier, lighter, taller, wider*.
- **Asking and answering clarifying questions:** "Which pencil is longer?" or "Is this block heavier?"
- **Using relative/comparative phrases:** "This one is bigger than that one."

Sample Language Features & Vocabulary

- **Nouns:** *length, weight, size, height, object, cube, balance*

- Differentiated according to informal assessments
- 100 chart to assist with addition and subtraction
- Connecting cubes for addition and subtraction
- Counters to fill in ten frames
- Anchor Charts on comparing length, weight, and height
- Video Guidance

Resources for approaching grade level students:

- Differentiated according informal assessments
- 100 chart to assist with addition and subtraction
- Connecting cubes for addition and subtraction
- Counters to fill in ten frames
- Manipulatives with small group guidance
- Highlighters for close read strategies
- Word Banks

Resources for students exceeding grade level expectations:

- Differentiated according to informal assessments
- Word problems
- 100 chart to assist with addition and subtraction
- Connecting cubes for addition and subtraction
- Counters to fill in ten frames

scale.

- **Adjectives:** *heavy, light, long, short, tall, small, big.*
- **Verbs/Prepositions:** *measure, compare, match, heavier than, longer than.*

Suggested Options for Differentiation

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- Provide written directions with models and diagrams when possible
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- Provide vocabulary ahead of time
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- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support

- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

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- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

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- *The Button Box* by Margarett Reid

Teacher Notes:

Unit 5: Data Literacy

Duration: 25 days

Standards/Learning Targets

Focus Standards (Major Standards)

- **K.DL.A.1** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count (Clarification: Limit category counts to be less than or equal to 10) (Climate Change Example: With prompting and support, student may ask and answer questions about objects that may be reused, objects that may be recycled, and objects that must be placed in the trash. Students may classify used objects into those categories with no more than ten objects in each category. Students may count the number of objects in each category and sort the categories by count.
- **ELD-MA.K.Inform.** Expressive Construct mathematical informational texts (with prompting and support) that
 - Define or classify concept or entity
 - Describe a concept or entity
 - Compare/contrast concepts or entities
- **ELD-SI.K-3.Inform**
 - Define and classify objects or concepts
 - Describe characteristics, patterns, or behavior
 - Describe parts and wholes
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- **ELD-SI.K-3.Explain**
 - Share initial thinking with others
 - Follow and describe cycles in diagrams, steps in procedures, or causes and effects
 - Compare and contrast objects or concepts
 - Offer ideas and suggestions
 - Act on feedback to revise understandings of how or why something works

Supporting and Additional Standards

Primary Interdisciplinary Connections:

- **L.VL.K.2.** With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
- **L.RF.K.4.** Read emergent-reader texts (decodable texts, including words with one-to-one letter-sound correspondences) orally with sufficient decoding accuracy to support comprehension.
- **W.WP.K.4.** With prompts and support, recognize that writing carries a message and should make sense to others.
- **SLK.1** Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.

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- **8.1.2.DA.1:** Collect and present data including climate change data, in various visual formats
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- **8.2.2.ED.2:** Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
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- Teacher observations/anecdotal/checklists
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Benchmark:

- District Approved Assessment (Fall, Winter, Spring)
- District Curriculum Benchmark Assessments

Alternative:

- Performance Tasks
- Written/verbal explanations
- Peer assessment
- Self-assessment

	• Untimed Fact Practice Assessment • Reteach Activities and Worksheets • Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	Skills
Unit Essential Questions • Where do you begin when counting objects to 20 and how can you write a numeral to show how many? • Where do you place your pencil on the paper when you write the numerals zero to 20? • What number do you start with when counting to 30 by ones and tens? • What do you need to do to identify if the number of objects in one group is greater than, less than, or equal to the number of objects in another group. (groups of up to 10 objects)? • What can you use to help you compare numbers up to 10, written as numerals? Enduring Understandings <i>Students will know: "I can..."</i> • Know number names and the count sequence. • Compare numbers.	Students will be able: • To identify where to begin when counting objects to 20 and how to write a numeral to show how many • Identify where to place their pencil on the paper when writing numerals zero to 20 • Identify what numbers to start with when counting to 30 by ones and tens • Identify the number of objects in one group that is greater than, less than or equal to the number of objects into another (groups of up to 10 objects) • Identify strategies to help compare numbers up to 10, written as numerals
Instructional Plan	
Suggested Activities	Resources
Play "Number I Spy" Teacher will think of a number between 0-100 and students will try to guess	Resources for on-grade students: • Differentiated according to informal assessments

his/her number. Use Link below for activity:
Click here: I spy number

Teen Numbers

Try it: Students work on their own with cubes to make teen numbers. Teacher will formatively assess with a checklist to see who understands or is having difficulty.

Discuss it: Students work with each other and show how they came up with their own teen numbers. Come back as a group and continue discussing how they came to their answers.

Connect it: As a whole group give the students teen numbers to show on their cubes. When they have done it make sure to show them the correct answer with the teachers' cubes.

WIDA Scaffolding Examples

- **Listening/Interpretive:** Listen to a peer describe a sorted group of colored blocks ("I put the red bears here").
- **Speaking/Expressive:** Use sentence frames like *"I see more [blue] than [yellow]"* or point and state *"This has a big stack."*
- **Reading/Writing:** Match picture cards to data columns and dictate category labels to an adult.

- 100 chart to assist with addition and subtraction
- Connecting cubes for addition and subtraction
- Counters to fill in ten frames
- Anchor Charts on teen numbers and counting to 100 by tens
- Video Guidance

Resources for students approaching grade level expectations:

- Differentiated according to informal assessments
- 100 chart to assist with addition and subtraction
- Connecting cubes for addition and subtraction
- Counters to fill in ten frames
- Manipulatives with small group guidance
- Highlighters for close read strategies
- Word Banks

Resources for students exceeding grade level expectations:

- Differentiated according to informal assessments
- Word problems
- 100 chart to assist with addition and subtraction
- Connecting cubes for addition and subtraction
- Counters to fill in ten frames

Suggested Options for Differentiation

Multilingual Learners

- Differentiate instruction and classroom assessment as guided by the [WIDA English Language Development Standards Framework, 2020 Edition](#).

- <https://wida.wisc.edu/sites/default/files/resource/CanDo-KeyUses-Kindergarten.pdf>
- Follow the Individualized Educational Plans (IEP) for ML Special Education (SE) students.
- Encourage the ML student to use oral language. Discussions, especially pair-work, allow students to expand language usage in listening and speaking.
- Allow MLs to clarify ideas, make sense of their previous statements and elaborate on their views with specific explanations.
- Use wait time for MLs to express their ideas in class.
- Graphic organizers, color-coded anchor charts, word walls with visual imagery, and breakdown techniques for decoding dense mathematical word problems
- Structured talk protocols (Think-Pair-Share, Numbered Talks) and word banks
- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ML students to interact and communicate with peers
- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ML students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding
- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Special Education/504 Plans

- Follow specific students accommodations and modifications as listed in individual student IEPs
- Preferential seating.
- Provide special lighting or acoustics.

- Provide a space with minimal distractions.
- Administer a test in a small group setting.
- Behavior management support.
- Adjusted class schedules or grading.
- Extended time on tests and assignments.
- Verbal, visual, or technology aids

Gifted and Talented

- Differentiated assignments/projects/assessments
- Differentiate learning pace using curriculum acceleration
- Curriculum compacting
- Open ended/abstract questions to activate higher level thinking
- Alternative modes of communication
- Student developed extension activities
- Plan self directed inquiry
- Opportunities to push assessment/activity boundaries
- Self centered curriculum allowing for student choice

Students at Risk of School Failure

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control
- Provide clear, achievable expectations, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea

- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Core Instructional and Supplemental Materials

- *enVisions Mathematics* textbook
- [Number Guessing Game](#)
- [Shapes! A Geometry Activity for Children • ABCya!](#)
- Measure student jumps and compare data
- Measure students using a variety of math manipulatives - traditional and non-traditional units of measure (links, cubes, paper clips, etc.)
- Manipulatives
- Measuring shadows
- Prodigy
- SplashLearn
- Generation Genius
- IXL

As appropriate:

- VB-Mapp
- ABLLS-R

Varied Levels of Text: Literature-

- *How Big Is a Foot?* by Myller Rolf
- *Is it larger? Is it Smaller?* by Tana Hoban
- *Inch by Inch* by Leo Lionni
- *The Grouchy Ladybug* by Eric Carle
- *Measuring Penny* by Loreen Leedy
- *The Button Box* by Margarete Reid

Teacher Notes:

Unit 6: Geometry

Duration: 30 days

Standards/Learning Targets
Focus Standards (Major Standards)
• K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. • ELD-SI.K-3.Explain • Share initial thinking with others • Follow and describe cycles in diagrams, steps in procedures, or causes and effects • Compare and contrast objects or concepts • Offer ideas and suggestions • Act on feedback to revise understandings of how or why something works • K.G.A.2 Correctly name shapes regardless of their orientations or overall size. • ELD-MA.K.Inform.Expressive Construct mathematical informational texts (with prompting and support) that • Define or classify concept or entity • Describe a concept or entity • Compare/contrast concepts or entities • K.G.A.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”). • ELD-MA.K.Inform.Interpretive Interpret mathematical informational texts (with prompting and support) by • Identifying concept or object • Describing quantities and attributes • ELD-SI.K-3.Inform • Define and classify objects or concepts • Describe characteristics, patterns, or behavior • Describe parts and wholes • Sort, clarify, and summarize ideas • Summarize information from interaction with others and from learning experiences • K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length). • K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. (Climate Change Example: Students may use sticks and clay to model trees and umbrellas and then may draw shapes (eg, triangle, rectangle) to model those objects. With prompting and support, they may ask and answer questions about how trees and umbrellas may be used to reduce the warming effect of sunlight. • K.G.B.6 Compose simple shapes to form larger shapes <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i>
Supporting and Additional Standards
Primary Interdisciplinary Connections: • L.VL.K.2. With prompting and support, ask and answer questions to help determine or clarify the meaning of unknown and

multiple-meaning words and phrases based on kindergarten reading and content.

- **L.RF.K.4.** Read emergent-reader texts (decodable texts, including words with one-to-one letter-sound correspondences) orally with sufficient decoding accuracy to support comprehension.
- **W.WP.K.4.** With prompts and support, recognize that writing carries a message and should make sense to others.
- **SLK.1** Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.

Computer Science and Design Thinking

- **8.1.2.DA.1:** Collect and present data including climate change data, in various visual formats
- **8.1.2.DA.3:** Identify and describe the patterns in data visualizations.
- **8.1.2.AP.1:** Model daily processes by creating and following algorithms to complete tasks. **8.1.2.AP.4:** Break down a task into a sequence of steps.
- **8.2.2.ED.2:** Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
- **8.2.2.ED.3:** Select and use appropriate tools and materials to build a product using the design process

Career Readiness, Life Literacies, and Key Skills

- **9.4.2.CI.1** Demonstrate openness to new ideas and perspectives
- **9.4.2.CI.2** Demonstrate originality and inventiveness in work
- **9.4.2.CT.2:** Identify possible approaches and resources to execute a plan
- **9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Evidence of Student Learning

Performance Tasks/Use of Technology:

Use online programs to enhance student understanding and accuracy:

- [Splash Learn](#)
- [ABCya!](#)
- [IXL](#)
- [ABC Mouse](#)
- Prodigy
- XtraMath
- Generation Genius

Other Assessments

Formative:

- Exit slips
- Teacher observations/anecdotal/checklists
- Performance Assessments
- Oral Assessments/Conferencing
- Portfolio/Math Journals
- Daily Classwork
- Pre-assessments

Summative:

	• Unit Review Assessments • Associated tests & quizzes • Performance Tasks • Extension Projects Benchmark: • District Approved Assessment (Fall, Winter, Spring) • District Curriculum Benchmark Assessments Alternative: • Performance Tasks • Written/verbal explanations • Peer assessment • Self-assessment • Untimed Fact Practice Assessment • Reteach Activities and Worksheets • Project Based Assessments with Scoring Rubric
Knowledge and Skills	
Content	Skills
Unit Essential Questions • What do we do to 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? • What characteristics help us name shapes regardless of their orientations or overall size? • What will help you to identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”)? • Can we create shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes?	Students will be able: • To describe objects in the environment using names of shapes, and describe the relative position of these objects using terms such as above, below, besides, in front of, behind, and next to? • Identify the characteristics help name shapes regardless of orientation or overall size • Identify attributes to help determine between two-dimensional and three- dimensional shapes • Create shapes in the world by building shapes from components and drawing shapes • Use simple shapes to create larger shapes

• What simple shapes can we use to form larger shapes? For example, “Can you join these two triangles with full sides touching to make a rectangle?” Enduring Understandings Students will know: “I can...” • Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). • Analyze, compare, create, and compose shapes.	
Instructional Plan	
Suggested Activities	Resources
Geometry: Describing Objects in the Environment Number Sense Warm Up: “Play Beat the Computer”- Students will count and shout the number of objects on the smartboard and try to beat the computer before the number is shown. Use the link below to access the activity: Click link to utilize activity: Beat the computer Read “The Shape of Things” The Shape of Things Read Aloud: Families Come In Many Different Shapes, Sizes, and Colors after reading, have the students draw their family using shapes Lesson: Try it: Introduce the pattern blocks. Students work in pairs or small groups to create different patterns: animals, buildings, designs etc. using the pattern blocks. Discuss it: Discuss different types of shapes and where you can	Resources for on-grade students: • Differentiated according to informal assessments • 100 chart to assist with addition and subtraction • Connecting cubes for addition and subtraction • Counters to fill in ten frames • Anchor Charts on flat and solid shapes • Video Guidance Resources for students approaching grade level expectations: • Differentiated according to informal assessments • 100 chart to assist with addition and subtraction • Connecting cubes for addition and subtraction • Counters to fill in ten frames • Manipulatives with small group guidance • Highlighters for close read strategies • Word Banks

see them in the world, at home, and in school.

Students will be given time to use manipulative shapes, and create a picture of something. They will then take a gallery walk to see what others created and get an idea of others' perspectives.

Connect it: Read *The Shape of Things* and ask questions about the different types of shapes they see in the story. Ask questions like: How many sides does each shape have, does the shape have straight sides or curvy, how many corners does the shape have, etc. Have students draw to recreate these shapes.

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- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Core Instructional and Supplemental Materials

- *enVisions Mathematics* textbook
- [Kindergarten Learning Games, Ages 5 - 6 • ABCya!](#)
- Manipulatives
- Hands-on workstations
- [Brainpopjr.com](#)
- Shape Games
- Geoboard shape activities
- Seesaw

As appropriate:

- Boom Cards

- VB-Mapp
- ABLIS-R
- Connecting Math Concepts
- Prodigy
- SplashLearn
- IXL

Varied Levels of Text: Literature-

- *The Greedy Triangle* by Marilyn Burns
- *Cubes, Cones, Cylinders and Spheres* by Tana Hoban
- *The Shape of Things* by Dayle Ann Dodds
- *Go Away Big Green Monster* by Ed Emberley
- *A Pig Is Big*
- *Pancakes Crackers and Pizza*
- *The Shape of Things*

Teacher Notes:

Introduce a concept or entity through... ■ Generalized nouns to identify concept (fractions, equations, plot graphs) ■ Relating verbs (be, have) to define or describe concepts (Fractions are pieces of a whole thing.) ■ Mathematical terms to describe concept, process, purpose, or action (mean, quotient, divide, subtract, reduce) Describe solutions and steps used to solve problems with others through... ■ Abstract nouns to establish context (process, answer, approach, solution) ■ Past tense doing (added, grouped) and thinking (thought, remembered) verbs to recount steps ■ Visuals (charts, diagrams, manipulatives, drawings) to support approach and/or solution ■ Connectors to order steps (first, next, then) and show causal relationships (because, so, then) ■ Compare/contrast signal words to differentiate results, approaches, objects (Our solution is... but your group has a different solution.) State reasoning used to generate solutions through... ■ If/then clause structures to show reasoning (if a shape only has 3 sides, then it is a triangle) ■ Declarative statements to state conclusion with a neutral stance of authority (This shows five 3rd-grade students jumped higher than the average of seven inches.) ■ Thinking verbs to reflect on the process (I wonder if we tried, if it would be different, I think we should have done...)

Create conjecture using definitions through... ■ Relating verbs (have, belong to, be) to make a claim (A is bigger than B because it is taller.) ■ Adverbial phrases (qualities, quantities, frequency) to add precision related to conjecture (All squares have 4 equal sides. Triangles always have 3 sides.) Generalize by finding commonalities across cases through... ■ A variety of structures such as comparatives (er, est; more, most); demonstratives (these, both, that) to point out similarities (Both squares and rhombuses have 4 equal sides, $\frac{1}{2}$ is bigger than $\frac{1}{4}$) ■ Conditional structures (if/then, when) to draw conclusions (If $34+68=102$ then $102-68=34$, When a number is even you can divide it into two equal parts.) Justify conclusion steps and strategies in simple patterns through... ■ Technical nouns to add precision and details (place value, communicative property, angles, measurement, fractions, even/odd) ■ Causal connectors (because, so, that means) to present case to others (The taller rectangle isn't always bigger because you have to look at the area inside.) ■ Drawings, manipulatives, models, diagrams to support thinking Identify and respond to others' arguments through... ■ Questions (how, what, why) to ask for clarification or information (How did you get your answer?) ■ Declarative statements to disagree/debate (I disagree, I'm not sure, I got a different answer...) ■ Declarative statements to counter claim or reasoning (5-3 is not the same as 3-5, Just because it has 4 sides that doesn't make it a square, the sides have to be equal)