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| Grade: K | Content Area: Mathematics |
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Introduction:

Students in Kindergarten will complete three Critical Areas. All math units follow the NJ Student Learning Objectives. Student progress will be measured in a variety of methods.

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| Adopted on: | October 23, 2018 |
| Revised on: | July 13, 2021 |
| Revised by: | Dana Giordano, Margaret Fay |
| Proposed Revision Date: | Summer 2024 |

| Beach Haven School District Mathematics Curriculum | |
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| Content Area: Math | |
| Course Title: Math | Grade Level: K |
| Instructional Materials: "Go Math" | |
| <p>Critical Area 1: Number and Operations (Chapters 1–8)</p> <p style="text-align: center;">Focus:</p> <ul style="list-style-type: none"> ● Know number names and the count sequence ● Count to tell the number of objects ● Compare numbers ● Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from ● Work with numbers 11–19 to gain foundations for place value | 110 Days- ongoing |
| <p>Critical Area 2: Geometry and Positions (Chapters 9–10)</p> <p style="text-align: center;">Focus:</p> <ul style="list-style-type: none"> ● Identify and describe shapes (squares, circles, triangles, rectangles, ● hexagons, cubes, cones, cylinders, and spheres). | 40 Days- ongoing |
| <p>Critical Area 3: Measurement and Data (Chapters 11–12)</p> <p style="text-align: center;">Focus:</p> <ul style="list-style-type: none"> ● Describe and compare measurable attributes ● Classify objects and count the number of objects in each category | 30 Days- ongoing |

Critical Area 1: Number and Operations
(Chapters 1–8)

Duration: 110 Days- ongoing

Standards/Learning Targets

New Jersey Student Learning Standards:

- K.CC.A.1 Count to 100 by ones and 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 0-20 (with 0 representing a count of no objects).
- K.CC.B.4 Count to tell the number of objects
 - 4. Understand the relationship between numbers and quantities; connect counting to cardinality.
 - a) When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
 - b) Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
 - c) Understand that each successive number name refers to a quantity that is one larger.
- K.CC.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.
- K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals
- K.OA.A.1 Represent addition and subtraction with objects, fingers, mental images,
 - drawings, sounds (e.g., claps), acting out situations, verbal explanations,
 - expressions, or equations.
- K.OA.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.
- 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.
- K.OA.A.5 Fluently add and subtract within 5
- 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.

Standards for Mathematical Practice:

- MP.2 Reason Abstractly and quantitatively.
- MP.4 Model with mathematics.
- MP.5 Use appropriate tools strategically.
- MP.6 Attend to precision.

Interdisciplinary Connections:

ELA:

- SL.K.3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Career Ready Practices:

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP4. Communicate clearly and effectively and with reason.
- CRP12. Work productively in teams while using cultural global competence.

21st Century Life and Career Standards:

- 9.1.4.A.1- Explain the difference between a career and a job, and identify various jobs in the community and the related earnings.

Technology:

- 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.
- 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
- 8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product
- 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
- 8.2.2.E.1 List and demonstrate the steps to an everyday task

Modifications and Accommodations

English Language Learners:

- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ELL 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 ELL students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding

Special Education/Students with Disabilities:

- Follow specific students accommodations and modifications as listed in individual student IEP
- Allow extra time
- Test key concepts and main ideas
- Simplify instructions
- Give students objective tests: matching, multiple choice, etc.
- Provide manipulatives
- Use alternative assessments such as physical demonstration and pictorial products
- Provide shorter assessments
- Grade content vs. mechanics
- Read assessments aloud
- Allow open-book or open-note tests

504:

- Follow specific students accommodations and modifications as listed in individual student 504 plan
- Allow extra time
- Test key concepts and main ideas
- Simplify instructions
- Give students objective tests: matching, multiple choice, etc.
- Provide manipulatives
- Use alternative assessments such as physical demonstration and pictorial products
- Provide shorter assessments
- Grade content vs. mechanics
- Read assessments aloud
- Allow open-book or open-note tests

Students at Risk of 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

Culturally Diverse:

- 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

Knowledge & Skills

Essential Questions/Understandings:

- How can you show, count, and write numbers 0 to 5? (Chapter 1)
- How can building and comparing sets help you compare numbers? (Chapter 2)
- How can you show, count, and write numbers 6 to 9? (Chapter 3)
- How can you show and compare numbers to 10? (Chapter 4)
- How can you show addition? (Chapter 5)
- How can you show subtraction? (Chapter 6)
- How can you show, count, and write numbers 11 to 19? (Chapter 7)
- How can you show, count, and write numbers to 10 and beyond? (Chapter 8)

Core Instructional & Supplemental Materials

Suggested Activities/Resources:

- [Happy Numbers](#)
- [Reflex Math](#)
- [Xtramath.org](#)
- Seesaw
- SMARTboard applications
- Online games
- ThinkCentral Dashboard
- Grab&Go Centers
- Animated Math Models
- Interactive Student Edition
- Boom Cards
- [education.com](#)
- [ABCya.com](#)
- [mathgames.com](#)
- [Splashlearn.com](#)
- [Pink Cat Games](#)
- [Toy Theater](#)

Varied Levels of Text:

Shape Up! By David A. Adler
The Greedy Triangle, Marilyn Burns
Springtime Addition, Jill Fuller
Toy Box Subtraction, Jill Fuller
How Many Legs In All? Diorio, Anne D
Little Number Stories Williams, Rozanne L. G
Monster Musical Chairs Murphy, Stuart J.
Picnic Fun: Hot Dog Operations
 Loughran, Donna N
NEW Take Away Trumbauer, Lisa E
Blue Sea Kalan, Robert A

Evidence of Student Learning

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| <p>Formative Tasks:</p> <ul style="list-style-type: none"> ● Solve and Share ● Exit Slips ● Math Center Activities ● Math Games ● Daily Review ● Quick Check Quizzes ● Draw and Show ● Math Journals | <p>Alternative Assessments:</p> <ul style="list-style-type: none"> ● Performance Tasks ● Student created models ● Written/verbal explanations ● Math Portfolio ● Peer assessment ● Self-assessment ● Show What You Know |
| <p>Summative Assessments:</p> <ul style="list-style-type: none"> ● Show-What-You-Know ● Mid-Chapter Checkpoints ● Chapter Test | <p>Benchmark Assessments:</p> <ul style="list-style-type: none"> ● Beginning of the year, mid year, and end of the year tests |

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| <p>Critical Area 2: Geometry and Positions (Chapters 9–10)</p> | <p>Duration: 40 Days- ongoing</p> |
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Standards/Learning Targets

New Jersey Student Learning 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.
- K.G.A.2 Correctly name shapes regardless of their orientations or overall size.
- K.G.A.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three dimensional (“solid”).
- 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.
- K.G.B.6 Compose simple shapes to form larger shapes.

Standards for Mathematical Practice:

- MP.1 Make sense of problems and persevere in solving them.
- MP.2 Reason Abstractly and quantitatively.
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- MP.6 Attend to precision.

Interdisciplinary Connections:

ELA:

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Career Ready Practices:

- CRP1. Act as a responsible and contributing citizen and employee.
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21st Century Life and Career Standards:

- 9.1.4.A.1- Explain the difference between a career and a job, and identify various jobs in the community and the related earnings.

Technology:

- 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.
- 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
- 8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product
- 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
- 8.2.2.E.1 List and demonstrate the steps to an everyday task

Modifications and Accommodations

English Language Learners:

- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
- Build in more group work to allow ELL 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 ELL students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding

Special Education/Students with Disabilities:

- Follow specific students accommodations and modifications as listed in individual student IEP
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- Provide shorter assessments
- Grade content vs. mechanics
- Read assessments aloud
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504:

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Students at Risk of Failure:

- Ensure child has access to all appropriate academic resources both in school and at home
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Culturally Diverse:

- 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

Knowledge & Skills

Essential Questions/Understandings:

- How can you identify, name, and describe two-dimensional shapes? (Chapter 9)
- How can identifying and describing shapes help you sort them? (Chapter 10)

Core Instructional & Supplemental Materials

Suggested Activities/Resources:

- [Happy Numbers](#)
- [Reflex Math](#)
- [Xtramath.org](#)
- Seesaw
- SMARTboard applications
- Online games
- ThinkCentral Dashboard
- Grab&Go Centers
- Animated Math Models
- Interactive Student Edition
- Boom Cards
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- [ABCya.com](#)
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Varied Levels of Text:

Literature

- Shape Up!* By David A. Adler
- The Greedy Triangle*, Marilyn Burns
- Springtime Addition*, Jill Fuller
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- How Many Legs In All?* Diorio, Anne D
- Little Number Stories* Williams, Rozanne L. G
- Monster Musical Chairs* Murphy, Stuart J.
- Picnic Fun: Hot Dog Operations*
Loughran, Donna N
- NEW Take Away* Trumbauer, Lisa E
- Blue Sea* Kalan, Robert A

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Standards/Learning Targets

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| <p>New Jersey Student Learning Standards:</p> <ul style="list-style-type: none"> ● K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. ● K.MD.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. Classify objects and count the number of objects in each category. ● K.MD.B.3 Classify objects into given categories; count the number of objects in each category and sort the categories by count. <p>Standards for Mathematical Practice:</p> <ul style="list-style-type: none"> ● MP.1 Make sense of problems and persevere in solving them. ● MP.2 Reason Abstractly and quantitatively. ● MP.3 Construct viable arguments and critique the reasoning of others. ● MP.7 Look for and make use of structure. |
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Knowledge & Skills

Essential Questions/Understandings:

- How can comparing objects help you measure them? (Chapter 11)
- How does sorting help you display information? (Chapter 12)

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