



# BURCH CHARTER SCHOOL OF EXCELLENCE

2020-2021

Mathematics - Kindergarten

Approved by the Burch Charter School of Excellence Board of Trustees

August 2020

**MISSION STATEMENT OF BURCH CHARTER SCHOOL OF EXCELLENCE:**

Burch Charter School of Excellence (BCSE) was founded in September, 2008. Our primal mission is to enable students to reach their intellectual and personal potential. We strive to instill integrity and respect in our students' in partnership with families and the community. We maintain a blended learning environment that enhances positive character traits that ensures our students become productive 21st century world citizens. The Burch Charter School of Excellence, a public school, is committed to providing best practices for educating our students in an environment that enables them to develop into critical thinkers that evolve into digital, life-long learners. Our curriculum emphasizes literacy and mathematics infused with technology.

We believe:

- Our students will be effective communicators, quality producers, self-directed lifelong learners, community contributors, collaborative workers and complex thinkers;
- All students are entitled to opportunities to maximize their talents and abilities;
- Our ethnic and cultural diversity is our strength and prepares students for success in a global society;
- Setting high expectations for students, teachers and administrators ensures that our students successfully meet or exceed the New Jersey Student Learning Standards.
- Parents are essential partners in the education of their children;
- Maintaining a strong partnership with the Irvington community is integral to student success;
- Understanding, implementing and responding to current trends in technology is intrinsic to success in a 21<sup>st</sup> century world; In ensuring that the district has a well-trained, highly qualified and competent staff; In maintaining a safe and secure learning environment.

The underlying values and principles that drive our mission and vision are our personal responsibility, a strong work ethic, cooperation, respect for others, honesty, integrity and the firm belief that every child can learn.

BCSE Curricular Framework Mathematics– Kindergarten

<b>Grade:</b> Kindergarten		<b>Content:</b> Mathematics
<b>Unit 1</b>		<b>Time Frame</b> 43-45 days
<b>New Jersey Learning Standards</b>	<b>Mathematical Practices</b>	<b>Critical Skills</b>
<p>K.CC.A.1. Count to 100 by ones and by tens. *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>How do we count?</li> </ul>	<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>Number names and the count sequence up to 10</li> <li>Count orally by ones <u>up to 10.</u></li> </ul>
<p>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). *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>How can we know how many or how much of something there is?</li> <li>How to I write the numbers in sequence 1-20.</li> </ul>	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>Represent the number of objects with a numeral.</li> <li>Write numbers from <u>0 to 10.</u></li> </ul>
<p>K.CC.B.4. Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p>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.</p> <p>K.CC.B.4b.Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p>	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>Objects can be counted in any order. Each object is counted once (one-to-one correspondence).</li> <li>The next number name in counting is always one greater than the previous number.</li> <li>The last number name said tells the number of objects counted.</li> <li>ay number names in the standard order.</li> <li>pair each object with one number name (one-to-one correspondence).</li> <li>count to tell the number of objects.</li> <li>count objects arranged in any order.</li> <li>identify the last number named as the</li> </ul>

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<p>K.CC.B.4c.Understand that each successive number name refers to a quantity that is one larger.</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• What makes one number more or less than another number?</li> <li>• How do we count to tell the number of objects?</li> <li>• How can we use numerals from 0-20 to show how many objects we have?</li> </ul>		<p>number of objects counted.</p>
<p>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. *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How can we know how many or how much of something there is?</li> <li>• How can we use numerals from 0-20 to show how many objects we have?</li> </ul>	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Count to tell the number of objects arranged in a line, rectangular array, circle, or scattered configuration.</li> <li>• Count to tell the number of objects when asked <i>how many?</i> questions .</li> <li>• Given a number from 1-10, count out that many object.</li> </ul>
<p>I Can Statements:</p> <ul style="list-style-type: none"> <li>• I can count to 100 by ones and tens.</li> <li>• I can count forward starting at a given number.</li> <li>• I can write numbers from zero to twenty.</li> <li>• I can write a number for a group 0 to 20 objects.</li> <li>• I can put numbers in order. I can name a group of objects by using a number.</li> <li>• I can understand that the last object counted tells the number of objects in a group.</li> <li>• I can understand that the number of objects in a group can be rearranged and the total number can be the same.</li> <li>• I can understand that adding an object to a group will make the total one bigger.</li> <li>• I can count to tell how many. I can count out a number of objects between 0-20.</li> </ul>		
<p>K.OA.A.1. Represent addition and subtraction <b>up to 10</b> with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. *(benchmarked)</p>	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p>	<ul style="list-style-type: none"> <li>• Understand addition as putting together and adding to.</li> <li>• Understand subtraction as taking apart and taking from.</li> </ul>

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<p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• What is addition?</li> <li>• What is subtraction?</li> <li>• What happens when we combine groups and what happens when we take groups apart?</li> </ul>	<p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Create addition events with objects (up to 10).</li> <li>• Create addition events with drawings and sounds (up to 10).</li> <li>• Create addition events by acting out situations and with verbal explanations.</li> </ul>
<p>I Can Statements</p> <ul style="list-style-type: none"> <li>• I can use objects, fingers, and pictures to help me show addition.</li> <li>• I can use objects, fingers, and pictures to help to help to show subtraction.</li> </ul>		
<p>K.MD.B.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• What do all objects have in common?</li> <li>• How do we sort objects?</li> <li>• How do we sort objects to find out how many there are of each?</li> </ul>	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>• Objects can be sorted based on their properties.</li> <li>• Sort objects into categories</li> </ul>
<p>I Can Statements</p> <ul style="list-style-type: none"> <li>• I can place objects into categories.</li> <li>• I can count the number of objects in categories</li> <li>• I can sort the categories by the number of objects.</li> </ul>		
<p>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, and next to.</p>	<p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>• Shapes have names.</li> <li>• Positional words (above, below, besides, in front of, behind, next to)</li> </ul>

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<p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do you know the difference between shapes?</li> <li>• How do you identify 2D shapes?</li> <li>• How do identify 3D shapes?</li> </ul>		<ul style="list-style-type: none"> <li>• Name shapes in order to describe objects in the environment.</li> <li>• Use terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i> in order to describe relative positions of objects.</li> </ul>
<p>I Can Statements</p> <ul style="list-style-type: none"> <li>• I can find shapes around me.</li> <li>• I can tell where shapes are.</li> <li>• I can tell about shapes.</li> </ul>		
<p><b>Resources</b></p>		
<p><a href="https://sso.rumba.pk12ls.com/">https://sso.rumba.pk12ls.com/</a></p> <p>EnvisionMath</p> <ul style="list-style-type: none"> <li>• Benchmarks Assessments</li> <li>• Fluency Practice</li> <li>• Vocabulary Review</li> <li>• Topic Assessments</li> </ul>	<p><a href="http://www.mobymax.com">www.mobymax.com</a></p> <p><a href="http://www.iready.com">www.iready.com</a></p> <p><a href="http://www.abcya.com">www.abcya.com</a></p> <p><a href="http://www.khanacademy.com">www.khanacademy.com</a></p> <p><a href="http://www.funbrain.com">www.funbrain.com</a></p> <p><a href="http://www.splashlearn.com">www.splashlearn.com</a></p>	
<p><b>Differentiated Instruction</b> (<i>content, process, product and learning environment</i>)</p>		
<p><b>At Risk Students</b></p>	<p><b>English Language Learners</b></p>	
<p><b><u>Modifications for Classroom</u></b></p> <p>Pair visual prompts with verbal presentations</p>	<p><b><u>Modifications for Classroom</u></b></p> <p>Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)</p>	

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<p>Use of lab or experiments to give visual representation of concept</p> <p>Ask students to restate information, directions, and assignments.</p> <p>Work within group or partners</p> <p>Repetition and practice</p> <p>Model skills / techniques to be mastered.</p> <p>Use metacognitive work</p> <p>Extended time to complete class work</p> <p>Provide copy of class notes</p> <p>Student may request to use a computer to complete assignments.</p> <p>Use manipulatives to examine concepts</p> <p>Assign a peer helper in the class setting</p> <p>Provide oral reminders and check student work during independent work time</p>	<p>Preteach vocabulary</p> <p>Use graphic organizers or other visual models</p> <p>Use of manipulatives to visualize concept</p> <p>Highlight key vocabulary-chart or vocabulary bank</p> <p>Use of nonverbal responses (thumbs up/down)</p> <p>Use sentence frames</p> <p>Design questions for different proficiency levels</p> <p>Utilize partners and partner talk</p>
<p><b>Special Education</b></p>	<p><b>Gifted and Talented</b></p>

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<b><u>Modifications for Classroom</u></b>	<b>Extension Activities</b>
Pair visual prompts with verbal presentations	Conduct research and provide presentation of cultural topics.
Use of lab or experiments to give visual representation of concept	Design surveys to generate and analyze data to be used in discussion.
Ask students to restate information, directions, and assignments.	Use of Higher Level Questioning Techniques
Preteach vocabulary	Provide assessments at a higher level of thinking
Repetition and practice	Create alternative assessment which requires writing, research and presentation
Model skills / techniques to be mastered.	
Use manipulatives and visual representation to examine Breakdown large assignments into smaller tasks	
Extended time to complete class work	
Provide copy of class notes	
Preferential seating to be mutually determined by the student and teacher	
Use of online component of book	
Extra textbooks for home. Student may request books on tape / CD / digital media, as available and appropriate.	
Assign a peer helper in the class setting	
Provide oral reminders and check student work during independent work time	



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Assist student with long and short term planning of assignments	
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<b>Grade:</b> Kindergarten		<b>Content:</b> Mathematics
<b>Unit 2</b>		<b>Time Frame:</b> 43-45 days
<b>New Jersey Learning Standards</b>	<b>Mathematical Practices</b>	<b>Critical Skills</b>
<p>K.CC.A.1. Count to 100 by ones and by tens.*(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do we count?</li> </ul>	<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Number names and the count sequence up to 50</li> <li>• Count orally by ones <u>up to 50</u>.</li> <li>• Count orally by tens <u>up to 50</u>.</li> </ul>
<p>K.CC.A.2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do we count?</li> <li>• How do I count on (moving forward)?</li> </ul>		<ul style="list-style-type: none"> <li>• Count orally by ones <u>up to 50</u>, beginning at any number.</li> </ul>
<p>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).*(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How can we know how many or how much of something there is?</li> <li>• How to I write the numbers in sequence 1-20.</li> </ul>	<p>MP. 2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>• The number of objects can be represented by a numeral.</li> <li>• Write numbers from <u>0 to 20</u>.</li> </ul>
<p>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. *(benchmarked)</p> <p><b>Essential Question(s):</b></p>	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Count to tell the number of objects arranged in a line, rectangular array, circle, or scattered configuration.</li> <li>• Count to tell the number of objects when asked “how many?” questions.</li> <li>• Given a number from 1-20, count out that</li> </ul>

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<ul style="list-style-type: none"> <li>• How can we know how many or how much of something there is?</li> <li>• How can we use numerals from 0-20 to show how many objects we have?</li> </ul>		<p>many object.</p>
<p>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 <i>e.g. by using matching and counting strategies.</i></p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How can we compare two numbers? (to determine which is more and which is less?)</li> <li>• What strategies can we use to find out if one group of objects is greater than, less than or equal to another group of objects?</li> </ul>	<p>MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Different groups can have different numbers of objects.</li> <li>• Numbers of objects can be compared using phrases such as <i>greater than, less than</i> and <i>equal to</i>.</li> <li>• Compare the number of objects (up to 10) in two groups.</li> <li>• Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.</li> </ul>
<p>K.CC.C.7. Compare two numbers between 1 and 10 presented as written numerals.</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How can we compare two numbers? (to determine which is more and which is less?)</li> <li>• What strategies can we use to find out if one group of objects is greater than, less than or equal to another group of objects?</li> </ul>	<p>MP.2 Reason abstractly and quantitatively.</p>	<ul style="list-style-type: none"> <li>• Number names and the count sequence</li> <li>• The next number name in counting is always one greater than the previous number.</li> <li>• Count to tell the number of objects.</li> <li>• compare numbers (up to 10) written as numerals.</li> <li>•</li> </ul>
<p>I Can Statements:</p> <ul style="list-style-type: none"> <li>• I can put numbers in order.</li> <li>• I can name a group of objects by using a number.</li> <li>• I can understand that the last object counted tells the number of objects in a group.</li> <li>• I can understand that the number of objects in a group can be rearranged and the total number can be the same.</li> <li>• I can understand that adding an object to a group will make the total one bigger.</li> <li>• I can count to tell how many.</li> <li>• I can count out a number of objects between 0-20.</li> <li>• I can count to 100 by ones and tens. I can count forward starting at a given number.</li> </ul>		

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<ul style="list-style-type: none"> <li>• I can write numbers from zero to twenty. I can write a number for a group 0 to 20 objects.</li> <li>• I can tell if a group of objects in one group is greater than, less than, or equal to a group of objects in another group.</li> <li>• I can compare two written numbers between 1 and 10.</li> </ul>		
<p>K.OA.A.2. Solve addition and subtraction word problems, and add and subtract within 10, <i>e.g., by using objects or drawings to represent the problem.</i></p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• What happens when we combine groups and what happens when we take groups apart?</li> <li>• How do I solve word problems?</li> <li>• What strategies can I use to solve word problems?</li> </ul>	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP. 2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p>	<ul style="list-style-type: none"> <li>• Use objects and drawings to represent addition and subtraction.</li> <li>• Add and subtract within 10.</li> </ul>
<p>K.OA.A.5. <b>Demonstrate fluency for addition and subtraction within 5</b>– (by the end of Kindergarten). *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do we write addition and subtraction sentences?</li> <li>• How is counting up or down from a number useful?</li> <li>• When would you use this strategy?</li> </ul>	<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Add within 5 with accuracy and efficiency .</li> </ul>
<p>I Can Statements</p> <ul style="list-style-type: none"> <li>• I can solve addition and subtraction word problems within 10.</li> <li>• I can take apart numbers less than or equal to 10.</li> <li>• I can add and subtract within 5.</li> </ul>		
<p><b>Resources</b></p>		

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<p><a href="https://sso.rumba.pk12ls.com/">https://sso.rumba.pk12ls.com/</a></p> <p>EnvisionMath</p> <ul style="list-style-type: none"> <li>• Benchmarks Assessments</li> <li>• Fluency Practice</li> <li>• Vocabulary Review</li> <li>• Topic Assessments</li> </ul>	<p><a href="http://www.mobymax.com">www.mobymax.com</a></p> <p><a href="http://www.iready.com">www.iready.com</a></p> <p><a href="http://www.abcya.com">www.abcya.com</a></p> <p><a href="http://www.khanacademy.com">www.khanacademy.com</a></p> <p><a href="http://www.funbrain.com">www.funbrain.com</a></p> <p><a href="http://www.splashlearn.com">www.splashlearn.com</a></p>
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**Differentiated Instruction**  
*(content, process, product and learning environment)*

<b>At Risk Students</b>	<b>English Language Learners</b>
<p><b><u>Modifications for Classroom</u></b></p> <p>Pair visual prompts with verbal presentations</p> <p>Use of lab or experiments to give visual representation of concept</p> <p>Ask students to restate information, directions, and assignments.</p> <p>Work within group or partners</p> <p>Repetition and practice</p> <p>Model skills / techniques to be mastered.</p> <p>Use metacognitive work</p> <p>Extended time to complete class work</p>	<p><b><u>Modifications for Classroom</u></b></p> <p>Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)</p> <p>Preteach vocabulary</p> <p>Use graphic organizers or other visual models</p> <p>Use of manipulatives to visualize concept</p> <p>Highlight key vocabulary-chart or vocabulary bank</p> <p>Use of nonverbal responses (thumbs up/down)</p> <p>Use sentence frames</p>

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<p>Provide copy of class notes</p> <p>Student may request to use a computer to complete assignments.</p> <p>Use manipulatives to examine concepts</p> <p>Assign a peer helper in the class setting</p> <p>Provide oral reminders and check student work during independent work time</p>	<p>Design questions for different proficiency levels</p> <p>Utilize partners and partner talk</p>
<p style="text-align: center;"><b>Special Education</b></p>	<p style="text-align: center;"><b>Gifted and Talented</b></p>
<p><b><u>Modifications for Classroom</u></b></p> <p>Pair visual prompts with verbal presentations</p> <p>Use of lab or experiments to give visual representation of concept</p> <p>Ask students to restate information, directions, and assignments.</p> <p>Preteach vocabulary</p> <p>Repetition and practice</p> <p>Model skills / techniques to be mastered.</p> <p>Use manipulatives and visual representation to examine</p> <p>Breakdown large assignments into smaller tasks</p> <p>Extended time to complete class work</p> <p>Provide copy of class notes</p>	<p><b><u>Extension Activities</u></b></p> <p>Conduct research and provide presentation of cultural topics.</p> <p>Design surveys to generate and analyze data to be used in discussion.</p> <p>Use of Higher Level Questioning Techniques</p> <p>Provide assessments at a higher level of thinking</p> <p>Create alternative assessment which requires writing, research and presentation</p>

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<p>Preferential seating to be mutually determined by the student and teacher</p> <p>Use of online component of book</p> <p>Extra textbooks for home. Student may request books on tape / CD / digital media, as available and appropriate.</p> <p>Assign a peer helper in the class setting</p> <p>Provide oral reminders and check student work during independent work time</p> <p>Assist student with long and short term planning of assignments</p>	
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BCSE Curricular Framework Mathematics– Kindergarten

<b>Grade:</b> Kindergarten		<b>Content:</b> Mathematics
<b>Unit 3</b>		<b>Time Frame</b> 43-45 days
<b>New Jersey Learning Standards</b>	<b>Mathematical Practices</b>	<b>Critical Skills</b>
<p>K.CC.A.1. Count to 100 by ones and by tens. *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>How do we count?</li> </ul>	<p>MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>Number names and the count sequence up to 70</li> <li>Count orally by ones <u>up to 70</u>.</li> </ul>
<p>I Can Statements</p> <ul style="list-style-type: none"> <li>I can count to 100 by ones and tens.</li> </ul>		
<p>K.MD.A.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>How does estimation help you find a reasonable measurement?</li> <li>How do you determine the tool and unit to help you accurately measure?</li> </ul>	<p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>Measurable attributes: length, weight, size (volume)</li> <li>A single object can have more than one measurable attribute.</li> <li>identify measureable attributes.</li> <li>describe the measurable attributes of multiple objects.</li> <li>describe multiple measurable attributes of a single object.</li> </ul>
<p>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 differences. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>How do we describe and compare objects by</li> </ul>	<p>MP.6 Attend to precision. MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>When comparing objects by measuring, each object must have the same starting point.</li> <li>Moving an object does not change its measure.</li> <li>directly compare and describe two objects with measurable attribute in common using <i>more of</i> or <i>less of</i>.</li> </ul>



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measuring?		
<p>K.MD.B.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do we sort objects?</li> <li>• How do we sort objects to find out how many there are of each?</li> </ul>	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>• Groups can be sorted by the number of objects in each group.</li> <li>• sort objects into groups.</li> <li>• sort the group by count.</li> </ul>
<p>I Can Statements</p> <ul style="list-style-type: none"> <li>• I can tell how an object can be measured.</li> <li>• I can compare how 2 objects are similar or different.</li> <li>• I can put 3 objects in-order from longest to shortest.</li> <li>• I can tell the length of an object in whole numbers.</li> <li>• I can place objects into categories.</li> <li>• I can count the number of objects in categories</li> <li>• I can sort the categories by the number of objects.</li> </ul>		
<p>K.G.A.2. Correctly name shapes regardless of their orientation or overall size.</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do you know the difference between shapes?</li> <li>• What words can be used to describe a shape/object?</li> </ul>	<p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>• Shapes have names.</li> <li>• Shapes can have the same names but appear different.</li> <li>• Correctly names shapes regardless of their orientation or overall size.</li> </ul>
<p>K.G.A.3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do you identify 2D shapes?</li> <li>• How do identify 3D shapes?</li> <li>• How are 2D and 3D shapes different?</li> <li>• How do you describe a 3- dimensional shape?</li> </ul>	<p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>• Shapes may be <i>flat</i> or <i>solid</i>.</li> <li>• identify shapes as two-dimensional (lying in a plane, <i>flat</i>) or three-dimensional ( <i>not flat, solid</i>).</li> <li>• Compare two- and three- dimensional shapes, in different sizes, and orientations.</li> </ul>
<p>I Can Statements:</p>		

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<ul style="list-style-type: none"> <li>• I can tell about shapes.</li> <li>• I can compare shapes.</li> <li>• I can name shapes</li> </ul>	<p>K.OA.A.3. Decompose numbers less than or equal to 10 into pairs in more than one way, <i>e.g. using objects or drawings</i>, and record each decomposition by a drawing or equation (<i>e.g. <math>5 = 3 + 2</math> and <math>5 = 4 + 1</math></i>)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• What is addition?</li> <li>• What is subtraction?</li> <li>• What happens when we combine groups and what happens when we take groups apart?</li> </ul>	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Part-to-whole relationships</li> <li>• Some groups of objects can be broken into two smaller groups while the total number remains the same.</li> <li>• Some groups of objects can be broken into two smaller groups in more than one way.</li> <li>• decompose numbers less than or equal to ten into two numbers.</li> <li>• record the decomposition with a drawing.</li> <li>• record the decomposition with an equation.</li> <li>• decompose the same number in more than one way.</li> </ul>
<p>K.OA.A.4. For any number from 1 to 9, find the number that makes 10 when added to the given number <i>e.g. by using objects or drawings</i>, and record the answer with a drawing or equation.</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How can I represent the number 10?</li> <li>• How do algebraic representations relate and compare to one another?</li> </ul>	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• find a missing part of 10 using objects.</li> <li>• given a number from 1 to 9, use drawings, or equations to find the number that makes 10.</li> </ul>	
<p>K.OA.A.5. Demonstrate fluency for addition and subtraction within 5 (by the end of Kindergarten). *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do we write addition and subtraction sentences?</li> <li>• How is counting up or down from a number useful?</li> <li>• When would you use this strategy?</li> </ul>	<p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>		<ul style="list-style-type: none"> <li>• add and subtract within 5 with accuracy and efficiency.</li> </ul>

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<p><b>I Can Statements:</b></p> <ul style="list-style-type: none"> <li>• I can take apart numbers less than or equal to 10.</li> <li>• I can find the number that is added to 1 through 9 to make 10.</li> <li>• I can use objects or drawings to show my answer. I can add and subtract within 5.</li> </ul>		
<p>K.NBT.A.1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, <i>e.g. by using objects or drawings</i>, and record each composition or decomposition by a drawing or equation (<i>e.g. <math>18 = 10 + 8</math></i>); Understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• Why do we break numbers apart into 10’s and 1’s?</li> <li>• How do we compose and decompose numbers into 10’s and 1’s.</li> </ul>	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Numbers from 11 to 19 can be represented as one group of ten <i>ones</i> and another group containing fewer than ten <i>ones</i>.</li> <li>• Compose and decompose numbers from 11 to 19 into a group of ten <i>ones</i> and another group of one(s).</li> <li>• Use the term <i>ones</i> to describe the number of objects in each group.</li> <li>• record each composition or decomposition using objects and drawings.</li> <li>• record each composition or decomposition by a drawing or equation.</li> </ul>
<p><b>I Can Statements</b></p> <ul style="list-style-type: none"> <li>• I can put together and take apart numbers 11-19 by naming the 10’s and the 1’s.</li> <li>• I can use objects, drawings, or equations to show 10’s and 1’s.</li> </ul>		
<p><b>Resources</b></p>		

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<p><a href="https://sso.rumba.pk12ls.com/">https://sso.rumba.pk12ls.com/</a></p> <p>EnvisionMath</p> <ul style="list-style-type: none"> <li>• Benchmarks Assessments</li> <li>• Fluency Practice</li> <li>• Vocabulary Review</li> <li>• Topic Assessments</li> </ul>	<p><a href="http://www.mobymax.com">www.mobymax.com</a></p> <p><a href="http://www.iready.com">www.iready.com</a></p> <p><a href="http://www.abcya.com">www.abcya.com</a></p> <p><a href="http://www.khanacademy.com">www.khanacademy.com</a></p> <p><a href="http://www.funbrain.com">www.funbrain.com</a></p> <p><a href="http://www.splashlearn.com">www.splashlearn.com</a></p>
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**Differentiated Instruction**  
*(content, process, product and learning environment)*

<b>At Risk Students</b>	<b>English Language Learners</b>
<p><b><u>Modifications for Classroom</u></b></p> <p>Pair visual prompts with verbal presentations</p> <p>Use of lab or experiments to give visual representation of concept</p> <p>Ask students to restate information, directions, and assignments.</p> <p>Work within group or partners</p> <p>Repetition and practice</p> <p>Model skills / techniques to be mastered.</p> <p>Use metacognitive work</p> <p>Extended time to complete class work</p>	<p><b><u>Modifications for Classroom</u></b></p> <p>Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)</p> <p>Preteach vocabulary</p> <p>Use graphic organizers or other visual models</p> <p>Use of manipulatives to visualize concept</p> <p>Highlight key vocabulary-chart or vocabulary bank</p> <p>Use of nonverbal responses (thumbs up/down)</p> <p>Use sentence frames</p>

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<p>Provide copy of class notes</p> <p>Student may request to use a computer to complete assignments.</p> <p>Use manipulatives to examine concepts</p> <p>Assign a peer helper in the class setting</p> <p>Provide oral reminders and check student work during independent work time</p>	<p>Design questions for different proficiency levels</p> <p>Utilize partners and partner talk</p>
<p><b>Special Education</b></p>	<p><b>Gifted and Talented</b></p>
<p><b><u>Modifications for Classroom</u></b></p> <p>Pair visual prompts with verbal presentations</p> <p>Use of lab or experiments to give visual representation of concept</p> <p>Ask students to restate information, directions, and assignments.</p> <p>Preteach vocabulary</p> <p>Repetition and practice</p> <p>Model skills / techniques to be mastered.</p> <p>Use manipulatives and visual representation to examine Breakdown large assignments into smaller tasks</p> <p>Extended time to complete class work</p> <p>Provide copy of class notes</p>	<p><b><u>Extension Activities</u></b></p> <p>Conduct research and provide presentation of cultural topics.</p> <p>Design surveys to generate and analyze data to be used in discussion.</p> <p>Use of Higher Level Questioning Techniques</p> <p>Provide assessments at a higher level of thinking</p> <p>Create alternative assessment which requires writing, research and presentation</p>

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<p>Preferential seating to be mutually determined by the student and teacher</p> <p>Use of online component of book</p> <p>Extra textbooks for home. Student may request books on tape / CD / digital media, as available and appropriate.</p> <p>Assign a peer helper in the class setting</p> <p>Provide oral reminders and check student work during independent work time</p> <p>Assist student with long and short term planning of assignments</p>	
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BCSE Curricular Framework Mathematics– Kindergarten

<b>Grade:</b> Kindergarten		<b>Content:</b> Mathematics
<b>Unit 4</b>		<b>Time Frame</b> 43-45 days
<b>New Jersey Learning Standards</b>	<b>Mathematical Practices</b>	<b>Critical Skills</b>
<p>K.CC.A.1. Count to 100 by ones and by tens. *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <p>How do we count?</p>	<p>MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• Number names and the count sequence up to 100</li> <li>• Count orally by ones <u>up to 100</u>.</li> <li>• Count orally by tens <u>up to 100</u>.</li> </ul>
<p>I Can Statements</p> <ul style="list-style-type: none"> <li>• I can count to 100 by ones and tens.</li> </ul>		
<p>K.OA.A.5. <b>Demonstrate fluency for addition and subtraction within 5</b> (by the end of Kindergarten). *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How do we write addition and subtraction sentences?</li> <li>• How is counting up or down from a number useful?</li> <li>• When would you use this strategy?</li> </ul>	<p>MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> <li>• add and subtract within 5 with accuracy and efficiency.</li> </ul>
<p>I Can Statements</p> <ul style="list-style-type: none"> <li>• I can add and subtract within 5.</li> </ul>		
<p>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 (<i>e.g. number of sides and vertices “corners”</i>) and other attributes (<i>e.g. having sides of equal length</i>).</p> <p><b>Essential Question(s):</b></p>	<p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> <li>• Orientation does not alter attributes or size.</li> <li>• Shapes may have sides of unequal or equal length.</li> <li>• Shapes may or may not have the same number of sides or ‘corners’.</li> <li>• compare two- and three- dimensional</li> </ul>

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<ul style="list-style-type: none"> <li>• How do you know the difference between shapes?</li> <li>• How can you use the words alike and different to compare two-dimensional shapes?</li> </ul>		<p>shapes in different sizes and in different orientations and identify similarities and differences.</p> <ul style="list-style-type: none"> <li>• compare parts of two- and three-dimensional shapes [e.g. number of sides, number of vertices (<i>corners</i>)].</li> <li>• compare attributes of two- and three-dimensional shapes [e.g. sides have equal length.]</li> <li>• use informal language to describe similarities, differences, parts, and other attributes when comparing two- and three-dimensional shapes, in different sizes and orientations.</li> </ul>
<p>K.G.B.5. Model shapes in the world by building shapes from components (<i>e.g., sticks and clay balls</i>) and drawing shapes.</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How can you model shapes in the real world?</li> <li>• How can you use positional words to describe shapes in the environment?</li> </ul>	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>• Basic shapes exist in real world objects.</li> <li>• recognize basic shapes in the real world.</li> <li>• use objects (clay, sticks, etc) to model shapes.</li> <li>• model shapes in the world by drawing shapes.</li> </ul>
<p>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></p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• How can I create new and larger shapes with smaller ones?</li> </ul>	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> <li>• Shapes can be combined to make larger shapes.</li> <li>• Compose simple shapes to form larger shapes.</li> </ul>
<p>I Can Statements:</p> <ul style="list-style-type: none"> <li>• I can think about and compare two-dimensional and three-dimensional shapes.</li> <li>• I can make shapes by drawing them or by using things like sticks and clay.</li> <li>• I can use simple shapes to make larger shapes.</li> </ul>		
<p>K.NBT.A.1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, <i>e.g. by using</i></p>	<p>MP.1 Make sense of problems and persevere in solving them.</p>	<ul style="list-style-type: none"> <li>• Numbers from 11 to 19 can be represented as one group of ten <i>ones</i> and another group</li> </ul>



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<p><i>objects or drawings</i>, and record each composition or decomposition by a drawing or equation (<i>e.g.</i> <math>18 = 10 + 8</math>); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. *(benchmarked)</p> <p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"> <li>• Why do we break numbers apart into 10’s and 1’s?</li> <li>• How do we compose and decompose numbers into 10’s and 1’s.</li> </ul>	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>containing fewer than ten <i>ones</i>.</p> <ul style="list-style-type: none"> <li>• Compose and decompose numbers from 11 to 19 into a group of ten <i>ones</i> and another group of one(s).</li> <li>• Use the term <i>ones</i> to describe the number of objects in each group.</li> <li>• Record each composition or decomposition using objects and drawings.</li> <li>• Record each composition or decomposition by a drawing or equation.</li> </ul>
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<p>I Can Statements</p> <ul style="list-style-type: none"> <li>• I can put together and take apart numbers 11-19 by naming the 10’s and the 1’s.</li> <li>• I can use objects, drawings, or equations to show 10’s and 1’s.</li> </ul>
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Resources	
<p><a href="https://sso.rumba.pk12ls.com/">https://sso.rumba.pk12ls.com/</a></p> <p>EnvisionMath</p> <ul style="list-style-type: none"> <li>• Benchmarks Assessments</li> <li>• Fluency Practice</li> <li>• Vocabulary Review</li> <li>• Topic Assessments</li> </ul>	<p><a href="http://www.mobymax.com">www.mobymax.com</a></p> <p><a href="http://www.iready.com">www.iready.com</a></p> <p><a href="http://www.abcya.com">www.abcya.com</a></p> <p><a href="http://www.khanacademy.com">www.khanacademy.com</a></p> <p><a href="http://www.funbrain.com">www.funbrain.com</a></p> <p><a href="http://www.splashlearn.com">www.splashlearn.com</a></p>

Differentiated Instruction ( <i>content, process, product and learning environment</i> )	
At Risk Students	English Language Learners
<p><u>Modifications for Classroom</u></p>	<p><u>Modifications for Classroom</u></p>

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<p>Pair visual prompts with verbal presentations</p> <p>Use of lab or experiments to give visual representation of concept</p> <p>Ask students to restate information, directions, and assignments.</p> <p>Work within group or partners</p> <p>Repetition and practice</p> <p>Model skills / techniques to be mastered.</p> <p>Use metacognitive work</p> <p>Extended time to complete class work</p> <p>Provide copy of class notes</p> <p>Student may request to use a computer to complete assignments.</p> <p>Use manipulatives to examine concepts</p> <p>Assign a peer helper in the class setting</p> <p>Provide oral reminders and check student work during independent work time</p>	<p>Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)</p> <p>Preteach vocabulary</p> <p>Use graphic organizers or other visual models</p> <p>Use of manipulatives to visualize concept</p> <p>Highlight key vocabulary-chart or vocabulary bank</p> <p>Use of nonverbal responses (thumbs up/down)</p> <p>Use sentence frames</p> <p>Design questions for different proficiency levels</p> <p>Utilize partners and partner talk</p>
<p><b>Special Education</b></p>	<p><b>Gifted and Talented</b></p>

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<b><u>Modifications for Classroom</u></b>	<b>Extension Activities</b>
Pair visual prompts with verbal presentations	Conduct research and provide presentation of cultural topics.
Use of lab or experiments to give visual representation of concept	Design surveys to generate and analyze data to be used in discussion.
Ask students to restate information, directions, and assignments.	Use of Higher Level Questioning Techniques
Preteach vocabulary	Provide assessments at a higher level of thinking
Repetition and practice	Create alternative assessment which requires writing, research and presentation
Model skills / techniques to be mastered.	
Use manipulatives and visual representation to examine Breakdown large assignments into smaller tasks	
Extended time to complete class work	
Provide copy of class notes	
Preferential seating to be mutually determined by the student and teacher	
Use of online component of book	
Extra textbooks for home. Student may request books on tape / CD / digital media, as available and appropriate.	
Assign a peer helper in the class setting	
Provide oral reminders and check student work during independent work time	

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Assist student with long and short term planning of assignments	
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