



## Content Strands Grades PK - 2 – Benchmark Scope and Sequence

	PK	KG	1	2
<b>1. Numbers and Operations</b>				
Counting and Cardinality	▪	<ul style="list-style-type: none"> <li>▪ Know number names and the count sequence</li> <li>▪ Count to tell the number of objects</li> <li>▪ Compare numbers</li> </ul>		
Number and Operations (Base 10)	▪	<ul style="list-style-type: none"> <li>▪ Work with numbers 11-19 to gain foundations for place value</li> </ul>	<ul style="list-style-type: none"> <li>▪ Extend the counting sequence</li> <li>▪ Understand place value</li> <li>▪ Use place value understanding and properties of operations to add and subtract</li> </ul>	<ul style="list-style-type: none"> <li>▪ Understand place value</li> <li>▪ Use place value understanding and properties of operations to add and subtract</li> </ul>
<b>2. Algebra</b>				
Operations and Algebraic Thinking	▪	<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>	<ul style="list-style-type: none"> <li>▪ Represent and solve problems involving addition and subtraction</li> <li>▪ Understand and apply properties of operations and the relationship between addition and subtraction</li> <li>▪ Add and subtract within 20</li> <li>▪ Work with addition and subtraction equations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Represent and solve problems involving addition and subtraction (within 100)</li> <li>▪ Add and subtract within 20</li> <li>▪ Work with equal groups of objects to gain foundations for multiplication</li> </ul>
<b>3. Measurement and Data Analysis</b>				
Measurement and Data	▪	<ul style="list-style-type: none"> <li>▪ Describe and compare measurable attributes</li> <li>▪ Classify objects and count the number of objects in categories</li> </ul>	<ul style="list-style-type: none"> <li>▪ Measure lengths indirectly and by iterating length units</li> <li>▪ Tell and write time</li> <li>▪ Represent and interpret data</li> </ul>	<ul style="list-style-type: none"> <li>▪ Measure and estimate lengths in standard units</li> <li>▪ Relate addition and subtraction to length</li> <li>▪ Work with time and money</li> <li>▪ Represent and interpret data</li> </ul>
<b>4. Geometry</b>				
Geometry	▪	<ul style="list-style-type: none"> <li>▪ Identify and describe shapes</li> <li>▪ Analyze, compare, create, and compose shapes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reason with shapes and their attributes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reason with shapes and their attributes</li> </ul>



## Content Strands Grades 3 – 5 – Benchmark Scope and Sequence

	3	4	5
<b>1. Numbers and Operations</b>			
Number and Operations (Base 10)	<ul style="list-style-type: none"> <li>Use place value understanding and properties of operations to perform multi-digit arithmetic</li> </ul>	<ul style="list-style-type: none"> <li>Generalize place value understanding for multi-digit whole numbers.</li> <li>Use place value understanding and properties of operations to perform multi-digit arithmetic.</li> </ul>	<ul style="list-style-type: none"> <li>Understand the place value system.</li> <li>Perform operations with multi-digit whole numbers and with decimals to hundredths.</li> </ul>
Number and Operations Fractions	<ul style="list-style-type: none"> <li>Develop understanding of fractions as numbers</li> </ul>	<ul style="list-style-type: none"> <li>Extend understanding of fraction equivalence and ordering.</li> <li>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</li> <li>Understand decimal notation for fractions, and compare decimal fractions.</li> </ul>	<ul style="list-style-type: none"> <li>Use equivalent fractions as a strategy to add and subtract fractions.</li> <li>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</li> </ul>
<b>2. Algebra</b>			
Operations and Algebraic Thinking	<ul style="list-style-type: none"> <li>Represent and solve problems involving multiplication and division</li> <li>Understand properties of multiplication and the relationship between multiplication and division</li> <li>Multiply and divide within 100</li> <li>Solve problems involving the four operations, and identify and explain patterns in arithmetic</li> </ul>	<ul style="list-style-type: none"> <li>Use the four operations with whole numbers to solve problems.</li> <li>Gain familiarity with factors and multiples.</li> <li>Generate and analyze patterns.</li> </ul>	<ul style="list-style-type: none"> <li>Write and interpret numerical expressions.</li> <li>Analyze patterns and relationships.</li> </ul>
<b>3. Measurement and Data Analysis</b>			
Measurement and Data	<ul style="list-style-type: none"> <li>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</li> <li>Represent and interpret data.</li> <li>Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</li> <li>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</li> <li>Represent and interpret data.</li> <li>Geometric measurement: understand concepts of angle and measure angles.</li> </ul>	<ul style="list-style-type: none"> <li>Convert like measurement units within a given measurement system.</li> <li>Represent and interpret data.</li> <li>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</li> </ul>
<b>4. Geometry</b>			
Geometry	<ul style="list-style-type: none"> <li>Reason with shapes and their attributes</li> </ul>	<ul style="list-style-type: none"> <li>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</li> </ul>	<ul style="list-style-type: none"> <li>Graph points on the coordinate plane to solve real-world and mathematical problems.</li> <li>Classify two-dimensional figures into categories based on their properties.</li> </ul>



International School of Kenya  
Mathematics: ES Scope and Sequence