Kentucky Early Childhood Standard (KYECS) aligned to
Kentucky Core Academic Kindergarten Standards (KYCAS)

Mathematics

Kentucky Early Childhood Standards (KYECS) Alignment to Kentucky Core Academic Standards (KYCAS)

Kentucky's Early Childhood Standards (KYECS) are designed as a framework to assist in understanding what children should know and be able to do from birth through four years of age. The KYECS provide a common set of expectations for young children and represent the skills and knowledge that provide the foundation for school readiness and are critical for ensuring later academic success. In comparison, the Kentucky Core Academic Standards (KYCAS) provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. These standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers.

This document reflects an effort to ensure that the early childhood standards for three-and four-year-old children are aligned to the expectations that the Kentucky Department of Education has adopted for students in the primary grades. This document is designed to support teachers of preschool and primary children (ages 3-8) as it aligns the foundational skills of the KYECS and the expectations for primary students as outlined in the KYCAS. The alignment of these skills will help to ensure a smooth transition as children move into the primary program. This document provides support to teachers as they plan curriculum and instruction for transitioning students.

How to Read the Document

Kentucky's Early Childhood Standards for three and four year olds consist of one standard in the area of Mathematics. This standard is further defined by a set of four benchmarks and developmental continuum. In contrast, the Kentucky Core Academic Standards for Math consist of seven domains. The layout of this document shows the connection between these two sets of standards, aligning KYECS benchmarks and developmental continuum items with the KYCAS standards, domains and clusters.

The alignment document is designed as a three-column table. The contents of each column are described below:

Column One - Kentucky Early Childhood Standards
- Standard - A general statement that represents the information, skills, or both that a child should know or be able to do.

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- Benchmark - A subcomponent of a standard that translates the standard into what a child should understand or be able to do at a specific developmental level; much more specific than a standard. Benchmarks are not listed in any specific order, either in importance or in development.

- Developmental Continuum - A predictable but not rigid sequence of accomplishments which describes the progressive levels of performance in the order in which they emerge in most children, based on current research.

Column Two - Kentucky Core Academic Standards

- Standards - define what students should know and be able to do.

- Clusters - are groups of related standards. Note that standards from different clusters may sometimes be closely related, because mathematics is a connected subject.

- Domains - are larger groups of related standards. Standards from different domains may sometimes be closely related.

Column Three – Notes

This column is blank for teachers to write comments pertaining to ideas for activities or strategies for integrating the standards into the curriculum for individual children or group activities. The space provides room for teachers to jot down ideas and record any anecdotal information. This document is designed to be user friendly for the teacher in the classroom. The layout emphasizes the connection between the foundational skills for three and four year olds and how these relate to and support the expectations for children in entry-level primary classrooms.

Appendix A - Kentucky Core Academic Mathematic Standards

Appendix B – Kentucky Early Childhood Mathematic Standards

Kentucky Early Childhood Standard (KYECS) MATHEMATICS (3S AND 4S) **Standard 1: Demonstrates general skills and uses concepts of mathematics.**	**Kentucky Core Academic Standard (KCAS) Math for Kindergarten**	
Benchmark 1.1: Demonstrates an understanding of numbers and counting.	**Domain** Counting and Cardinality	
Developmental Continuum Items		
• Imitates rote counting using the names of the numbers.	**(Domain) Counting and Cardinality** **(Cluster) Know number names and the count sequence.** 1. Count to 100 by ones and by tens. 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	**NOTES**
• Counts in sequence to 5 and beyond.	**(Domain) Counting and Cardinality** **(Cluster) Know number names and the count sequence.** 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	**NOTES**

• Arranges sets of objects in one-to-one correspondence.	**(Domain) Counting and Cardinality**
	(Cluster) 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.
	(Cluster) Compare numbers.
	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.[1] [1] (Include groups with up to ten objects.)
		NOTES

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• Understands that a single object is always "one" regardless of size, shape, and other attributes.	**(Domain) Counting and Cardinality**
	(Cluster) 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.
		NOTES

• Counts concrete objects to 5 and beyond.	**(Domain) Counting and Cardinality** **(Cluster) Count to tell the number of objects.** 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. **(Cluster) Compare numbers.** 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.[1] [1] (Include groups with up to ten objects.)	**NOTES**
• Uses math language to express quantity in everyday experiences.	**(Domain) Counting and Cardinality** **(Cluster) Compare numbers.** 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.[1] [1] (Include groups with up to ten objects.) **(Domain) Measurement & Data** **(Cluster) Describe and compare measurable attributes.** 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 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.* **(Cluster) Classify objects and count the number of objects in each category.** 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.[1] [1] Limit category counts to be less than or equal to 10.	**NOTES**
• Compares concrete quantities to	**(Domain) Counting and Cardinality**	**NOTES**

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determine which has more.	**(Cluster) Count to tell the number of objects.** 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. **(Cluster) Compare numbers.** 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.[1] [1] (Include groups with up to ten objects.)	
• Recognizes that a set of objects remains the same amount if physically rearranged.	**(Domain) Counting and Cardinality** **(cluster) Count to tell the number of objects.** 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.	**NOTES**
• Realizes that the last number counted is the total amount of objects.	**(Domain) Counting and Cardinality** **(Cluster) Count to tell the number of objects.** 4. Understand the relationship between numbers and quantities; connect counting to cardinality. 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.	**NOTES**
• Recognizes some numerals and associates number concepts with print materials in a meaningful way.	**(Domain) Counting and Cardinality** **(Cluster) Count to tell the number of objects.** 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).	**NOTES**
• Names and writes some numerals.	**(Domain) Counting and Cardinality** **(Cluster) Count to tell the number of objects.** 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).	**NOTES**

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Kentucky Early Childhood Standard (KYECS) MATHEMATICS (3S AND 4S)	Kentucky Core Academic Standard (KCAS) Math for Kindergarten	
Benchmark 1.2: Recognizes and describes shapes and spatial relationships. Developmental Continuum Items	**Domains** Geometry Measurement and Data	
• Recognizes some basic shapes.	**(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 2. Correctly name shapes regardless of their orientations or overall size.	**NOTES**
• Creates and duplicates shapes.	**(Domain) Geometry** **(Cluster) Analyze, compare, create, and compose shapes.** 5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. 6. Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"*	**NOTES**
• Completes simple puzzles.	**(Domain) Geometry** **(Cluster) Analyze, compare, create, and compose shapes.** 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). 6. Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"*	**NOTES**
• Identifies shapes.	**(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 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*.	**NOTES**

	2. Correctly name shapes regardless of their orientations or overall size. 3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). **(Domain) Measurement and Data** **(Cluster) Describe and compare measurable attributes.** 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.* **(Cluster) Classify objects and count the number of objects in each category.** 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.[1] _{[1] Limit category counts to be less than or equal to 10.}	
• Recognizes parts of a whole.	**(Domain) Geometry** **(Cluster) Analyze, compare, create, and compose shapes.** 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). 6. Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"*	**NOTES**
• Recognizes the position of objects.	**(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 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*.	**NOTES**
• Uses words that indicate directionality, order and position of objects.	**(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 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*.	**NOTES**

Kentucky Early Childhood Standard (KYECS) MATHEMATICS (3S AND 4S) **Standard 1: Demonstrates general skills and uses concepts of mathematics.**	**Kentucky Core Academic Standard (KCAS) Math for Kindergarten**	
Benchmark 1.3: Uses the attributes of objects for comparison and patterning.	**Domains** Geometry Measurement and Data	
Developmental Continuum Items		
• Matches objects.	**(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 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*. 2. Correctly name shapes regardless of their orientations or overall size. 3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). **(Domain) Measurement and Data** **(Custer) Describe and compare measurable attributes.** 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 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.*	**NOTES**
• Sorts objects by one or more attributes.	**(Domain) Measurement and Data** **(Cluster) Describe and compare measurable attributes.** 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.* **(Cluster) Classify objects and count the number of objects in each category.** 3. Classify objects into given categories; count the numbers of objects in each category and	**NOTES**

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	sort the categories by count.[1] [1] Limit category counts to be less than or equal to 10. **(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 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*.	
• Describes objects by one or more attributes.	**(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 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*. 2. Correctly name shapes regardless of their orientations or overall size. 3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). **(Cluster) Analyze, compare, create, and compose shapes.** 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).	**NOTES**
• Recognizes, duplicates, and extends simple patterns.	**(Domain) Measurement and Data** **(Cluster) Describe and compare measurable attributes.** 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 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.* **(Cluster) Classify objects and count the number of objects in each category.** 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.[1]	**NOTES**
• Creates original patterns.	**(Domain) Measurement and Data** **(Cluster) Describe and compare measurable attributes.** 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 2. Directly compare two objects with a measurable attribute in common, to see which object	**NOTES**

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| | 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.*

 (Cluster) Classify objects and count the number of objects in each category.
 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.[1] | |

Kentucky Early Childhood Standard (KYECS) MATHEMATICS (3S AND 4S) **Standard 1: Demonstrates general skills and uses concepts of mathematics.**	Kentucky Core Academic Standard (KCAS) Math for Kindergarten	
Benchmark 1.4: Uses nonstandard and/or standard units to measure and describe	**Domains** Measurement and Data Counting and Cardinality Geometry	
Developmental Continuum Items		
• Compares and orders by size.	**(Domain) Measurement and Data** **(Cluster) Describe and compare measurable attributes.** 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 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.* **(Domain) Counting and Cardinality** **(Cluster) Know number names and the count sequence.** 1. Count to 100 by ones and by tens. 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). 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). **(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 2. Correctly name shapes regardless of their orientations or overall size. **(Domain) Counting and Cardinality** **(Cluster) Count to tell the number of objects** 4. Understand the relationship between numbers and quantities; connect counting to cardinality.	**NOTES**

	• 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. • 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. • Understand that each successive number name refers to a quantity that is one larger.	
• Uses tools to explore measuring.	**(Cluster) Compare Numbers** 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.[1] 7. Compare two numbers between 1 and 10 presented as written numerals. [1] Include groups with up to ten objects.	**NOTES**
COMBINED • *Explores, compares, and describes length, weight or volume using nonstandard units.* • *Explores, compares, and describes length, weight, or volume using standard units.*	**(Domain) Counting and Cardinality** **(Cluster) Know number names and the count sequence.** 1. Count to 100 by ones and by tens. 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). 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). **(Domain) Measurement and Data** **(Cluster) Describe and compare measurable attributes.** 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 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.* **(Domain) Geometry** **(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).** 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*. 2. Correctly name shapes regardless of their orientations or overall size.	**NOTES**
COMBINED	**(Domain) Counting and Cardinality**	**NOTES**

• *Shows awareness of simple time concepts.* • *Categorizes and sequences time intervals and uses language associated with time in everyday situations.*	**(Cluster) Know number names and the count sequence.** 1. Count to 100 by ones and by tens. 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). 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).	

Kentucky Core Academic Standards

Math Practices (KCAS)

1. Makes sense of problems and perseveres in solving them.
2. Reason abstractly and quantitatively.
3. Construct variable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

(Domain) Counting and Cardinality (KCAS)
(Cluster) Know number names and the count sequence.
1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
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).

(Domain) Counting and Cardinality (KCAS)
(Cluster) Count to tell the number of objects.
4. Understand the relationship between numbers and quantities; connect counting to cardinality.
- 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.
- 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.
- Understand that each successive number name refers to a quantity that is one larger.
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.

(Domain) Counting and Cardinality (KCAS)
(Cluster) Compare numbers.

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.[1]

7. Compare two numbers between 1 and 10 presented as written numerals.

[1] Include groups with up to ten objects.

(Domain) Operations & Algebraic Thinking (KCAS)
(Cluster) Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

1. Represent addition and subtraction with objects, fingers, mental images, drawings[1], sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

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 $5 = 4 + 1$).

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.

5. Fluently add and subtract within 5.

[1] Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)

(Domain) Number & Operations in Base Ten (KCAS)
(Cluster) Work with numbers 11-19 to gain foundations for place value.

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 (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

(Domain) Measurement and Data (KCAS)
(Cluster) Describe and compare measurable attributes.

1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

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.*

(Cluster) Classify objects and count the number of objects in each category.

3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.[1]

[1] Limit category counts to be less than or equal to 10.

(Domain) Geometry (KCAS)
(Cluster) Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

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*.

2. Correctly name shapes regardless of their orientations or overall size.

3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

(Cluster) Analyze, compare, create, and compose shapes.

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).

5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

6. Compose simple shapes to form larger shapes. *For example, "Can you join these two triangles with full sides touching to make a rectangle?"*

Kentucky Early Childhood Standards - MATHEMATICS (3S AND 4S)

Standard 1: Demonstrates general skills and uses concepts of mathematics.

Benchmark 1.1: Demonstrates an understanding of numbers and counting.
- Imitates rote counting using the names of the numbers.
- Counts in sequence to 5 and beyond.
- Arranges sets of objects in one-to-one correspondence.
- Understands that a single object is always "one" regardless of size, shape, other attributes.
- Uses math language to express quantity in everyday experiences.
- Compares concrete quantities to determine which has more.
- Recognizes that a set of objects remains the same amount if physically rearranged.
- Realizes that the last number counted is the total amount of objects.
- Recognizes some numerals and associates number concepts with print materials in a meaningful way.
- Names and writes some numerals.

Benchmark 1.2: Recognizes and describes shapes and spatial relationships.
- Recognizes some basic shapes.
- Creates and duplicates shapes.
- Completes simple puzzles.
- Identifies shapes.
- Recognizes parts of a whole.
- Recognizes the position of objects.
- Uses words that indicate directionality, order and position of objects.

Benchmark 1.3: Uses the attributes of objects for comparison and patterning.
- Matches objects.
- Sorts objects by one or more attributes.
- Describes objects by one or more attributes.
- Recognizes, duplicates, and extends simple patterns.
- Creates original patterns.

Benchmark 1.4: Uses nonstandard and/or standard units to measure and describe
- Compares and orders by size.
- Uses tools to explore measuring.
- Explores, compares, and describes length, weight or volume using nonstandard units.
- Explores, compares, and describes length, weight, or volume using standard units.
- Shows awareness of simple time concepts.
- Categorizes and sequences time intervals and uses language associated with time in everyday situations.