المدرسة الأمريكية الدولية
American International School

EARLY CHILDHOOD

International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

MATHEMATICS SCOPE AND SEQUENCE
AY 24-25

STRAND	STANDARDS/SKILLS	PRE- K	KG1	KG2
COUNTING AND CARDINALITY	**K.CC.A.1 Know number names and the count sequence.** (P) Count to 100 by ones and tens.	Count to 10 by ones.	Count to 20 by ones.	Count to 100 by ones and by tens.
	K.CC.A.2 Know number names and the count sequence. (P) Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	Count forward beginning from a given number within 10.	Count forward beginning from a given number within 20.	Count forward beginning from a given number within 100.
	K.CC.A.3 Know number names and the count sequence. (P) Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of objects).	Match 0-10 objects with a pre - written numeral.	Write numbers from 0 to 10. Represent 0-10 objects with a written numeral.	Write numbers from 0 to 20. Represent 0-20 objects with a written numeral.
	K.CC.B.4 Count to tell the number of objects. (P) Understand the relationship between numbers and quantities; connect counting during 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 refers to a quantity that is one larger.	In standard order, say and pair one object with one number name. Stops counting when the last object is reached.	In standard order, say and pair one object with one number name. Stops counting when the last object is reached regardless of how objects are arranged or counted. Understands that each successive number said in sequence is one larger.	In standard order, say and pair one object with one number name. Stops counting when the last object is reached regardless of how objects are arranged or counted. Understands that each successive number said in sequence is one larger.
	Count K.CC.B.5 to tell the number of objects. (P) 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.	Count 0-10 objects to answer "How many?" when arranged in a straight vertical line. Count 0-10 objects to answer "How many?	Count 0-10 objects to answer "How many?" when arranged in a straight line. Count 0-10 objects to answer "How many?"	Count 0-20 objects to answer "How many?" when arranged in a straight line.

		when arranged in a straight horizontal line. Given a number from 1-5, count out that many objects.	when arranged in an array. Count 0-10 objects to answer "How many?" when arranged in a circle. Given a number from 1-10, count out that many objects.	Count 0-20 objects to answer "How many?" when arranged in an array. Count 0-20 objects to answer "How many?" when arranged in a circle. Count 0-10 objects to answer "How many?" when scattered. Given a number from 1-20, count out that many objects.
	K.CC.C.6 Compare numbers. (P) Identify 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. Include groups with up to ten objects.	Given two groups, identify which is "bigger" or has "more" than the other.	Compare groups of objects (0-5) using math language (greater than, less than, or equal to).	Compare groups of objects (0-10) using math language (greater than, less than, or equal to).
	K.CC.A.7 Compare numbers. (P) Compare two numbers between 1 and 10 presented as written numerals.		Compare two numbers between 1 and 5 presented as written numerals. (using < or > or =)	Compare two numbers between 1 and 10 presented as written numerals. (using < or > or =)
OPERATIONS AND ALGEBRAIC THINKING	**K.OA.A.1 Understand addition as putting together and adding to and understand subtraction as taking apart and t(P)g from.** Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	Experiment with addition and subtraction through "put together" and "take apart" activities using tangible/visible objects. (1-5)	Represent addition and subtraction equations with objects, fingers, mental images, drawings, sounds.	Represent addition and subtraction equations with objects, fingers, mental images, drawings, sounds.
	K.OA.A.2 Understand addition as putting together and adding to and understand subtraction as taking apart and t(P)g from. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	Experiment with addition and subtraction through "put together" and "take apart" activities using tangible/visible objects. (1-5)	Add and subtract within 10 using any of a variety of methods.	Solve addition and subtraction word problems within 10. Add and subtract within 10 using any of a variety of methods.
	K.OA.A.3 Understand addition as putting together and adding to and understand subtraction as taking apart and t(P)g from.	Experiment with addition and subtraction through "put together" and	Decompose numbers 0 - 5 into pairs in more than one way.	Decompose numbers 0 - 10 into pairs in more than one way.

	Decompose numbers less than or equal to 10 in 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)	"take apart" activities using tangible/visible objects. (1-5)		
	K.OA.A.4 Understand addition as putting together and adding to and understand subtraction as taking apart and t(P)g from. For any number from 1-9, 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.	Experiment with addition and subtraction through "put together" and "take apart" activities using tangible/visible objects. (1-5)	For any number from 0 to 5, find the number that makes 5.	For any number from 0 to 10, find the number that makes 10.
	K.OA.A.5 Understand addition as putting together and adding to and understand subtraction as taking apart and taking from. Fluently add and subtract within 5.	Experiment with addition and subtraction through "put together" and "take apart" activities using tangible/visible objects. (1-5)	Fluently add and subtract within 5.	Fluently add and subtract within 5.
NUMBER AND OPERATIONS IN BASE TEN	**K.NBT.A.1 Work with numbers 11-19 to gain foundations for Place Value.** (P) Compose and decompose numbers 11-19 into tens and ones and some further ones eg. by using objects and drawings and record each composition or decomposition by a drawing or equation (such as 18 = 10 + 8); understand that these numbers are composed of tens and ones and one, two, three, four, five, six, seven, eight or nine ones.		Represent de/composition with drawings where the square/cube represents 1.	Compose and decompose numbers from 11 to 19 e.g. (15=10+5) Represent de/composition with drawing (cubes/rectangular prisms or squares/rectangles) or numerical equation. Understand tens and ones as a part of the concept of place value.
MEASUREMENT AND DATA	**K.MD.A.1 Describe and compare measurable attributes.** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	Describe the sensory attributes of everyday objects, such as big, tall, full, soft, wet.	Describe the height, and length of objects.	Describe the height, weight and length of objects.
	K.MD.A.2 Describe and compare measurable attributes. 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.	Compare the sensory attributes (opposites) of two everyday objects. Such as big/small, tall/short, full/empty, soft/hard, wet/dry	Compare the height, length of two objects. Tall/taller Short/shorter Long/longer short/shorter	Compare the height, weight, or length of two objects. Tall/taller Short/shorter Long/longer

				short/shorter Heavy/heavier Light/lighter
	K.MD.B.3 Classify objects and count the number of objects in each category. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Limit category counts to be less than or equal to 10.	With guidance and support, sort, categorize, match, or classify objects (e.g., size, shape, primary color).	Classify objects into given categories. Eg.. by color, shape, size or other attribute.	Classify objects into given categories. Eg.. by color, shape, size or other attribute. Count the number of objects (0-10) in each category and sort the categories by count. (data/graphs)
GEOMETRY	**K.G.A.1 Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders and spheres).** 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.	Recognize circles, squares, and triangles in the environment (e.g., clock is a circle, cracker is a square, and musical instrument triangle is a triangle)	Describe environmental objects using names of shapes. (2D) Use prepositions to describe positions of objects. (2D)	Describe environmental objects using names of shapes. (2D/3D) Use prepositions to describe positions of objects. (2D/3D)
	K.G.A.2 Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders and spheres). Correctly name shapes regardless of their orientations or overall size.	Correctly name circles, squares, and triangles regardless of their orientation or overall size.	Correctly name 2D shapes regardless of their orientation or overall size.	Correctly name 2D and 3D shapes regardless of their orientation or overall size.
	K.G.A.3 Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).	Correctly name circles, squares, and triangles regardless of their orientation or overall size.	Identify shapes as 2D because they are “flat”.	Identify shapes as 2D or 3D.
	K.G.A.4 Analyze, compare, create, and compose shapes. 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/ “corner”) and other attributes (e.g., having sides of equal length).	Describe attributes of: Circle (round) Square (four sides) Triangle (three sides)	Describe attributes of 2D shapes: Number of sides Number of vertices	Describe similarities or differences of 2D and 3D shapes using the attributes: Number of sides Number of vertices Number of faces*
	K.G.A.5 Analyze, compare, create, and compose shapes. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	Model shapes in the world by building or drawing the shapes.	Model shapes in the world by building or drawing the shapes.	Model shapes in the world by building or drawing the shapes.

	K.G.A.6 Analyze, compare, create, and compose shapes. Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”	Compose simple shapes to form pictures.	Compose simple geometric shapes to form larger pictures. Eg. Shape house	Compose simple geometric shapes to form larger geometric shapes. Eg. 2 triangles = 1 square 6 squares = 1 cube