Syllabus Self Contained Math

Subject:	Self Contained	
Grade:	Kinder	
Teacher:	**1.**	Maria Restrepo
	2.	Sara Fonseca
	3.	María Andrea Pinilla

GRADE GENERAL OBJECTIVE
To develop numerical relationships between children´s natural environment and different contexts as measurement, geometry, spatial location, patterns and data analysis.

INQUIRY TOPIC FIRST TERM:	**INQUIRY TOPIC SECOND TERM:**	**INQUIRY TOPIC THIRD TERM:**
MAKING NUMBERS	**EXPLORING ADDITION AND SUBTRACTION**	**MY GEOMETRICAL ENVIRONMENT**
TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**
Counting numbers to 10 forward and backwards. Writing numbers up to 25. Reading numbers up to 25. Ordering numbers in the number line and making movements in the number line. Comparing numbers using more than one strategy. Representing a number up to 10 in different ways (tally marks, number line, pictures, counters, dominoes, etc.). Recognizing clue words to answer how many more questions.	Counting numbers to 20 forward and backwards. Writing numbers up to 50. Reading numbers up to 50. Comparing numbers using more than one strategy. Identifying patterns in the number line and one hundred chart. Skip counting by 2´s and 5´s. Reading information from different representations (set, bar graphs) to analyze the characteristics shown in it. Composing and decomposing numbers up to 10.	Comparing objects according to their characteristics: size, weight, and capacity (heavier/lighter, more/less, longer/shorter). Reading information from different representations (set, bar graphs) to analyze the characteristics shown in it. Identifying patterns in the number line and one hundred chart. Skip counting by 2´s, 5´s and 10´s. Using of the + and - symbols to solve word problems. Solving numerical problems using addition and subtraction stories made up with numbers up to 20.

Comparing quantities (greater than, less than or equal to).	Representing a number up to 10 in different ways (tally marks, number line, pictures, counters, dominoes, etc.). Solving numerical problems using addition and subtraction stories made up with numbers up to 10. Solving problems using more than one resource. Comparing quantities (greater than, less than or equal to).	Solving problems using more than one resource. Recognizing and describing the characteristics of flat and solid shapes: square, rectangle, circle, triangle, cube, rectangular prism, sphere, pyramid, and cone. Modeling situations using solid and flat shapes.

Syllabus Self Contained Math

Subject:	Self Contained	
Grade:	Transition	
Teacher:	1.	Patricia Rivera
	2.	Olga Simbaqueva
	3.	Mahli Ricke

GRADE GENERAL OBJECTIVE
To develop numeric relationships between numbers, as addition and subtraction, using tens and ones, and applying to different contexts as measurement, geometry, patterns and data analysis.

INQUIRY TOPIC FIRST TERM:	**INQUIRY TOPIC SECOND TERM:**	**INQUIRY TOPIC THIRD TERM:**
What different strategies can help me add and subtract?	How can I add and subtract 2-digit numbers?	How can I use flat shapes and solid shapes?
TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**
Using flat shapes to create new shapes. Squares, triangles, trapezoids, circles Composing and decomposing shapes using the tangram. Different ways to represent a number up to 20. Adding and subtracting using the number line and the one hundred chart Modeling addition and subtraction using part part whole strategies and properties of the operations Ways to represent an addition or a subtraction. Meaning of the equal sign. Representation of numbers using addition and subtraction in word problems Comparing capacity.	Using flat shapes to understand solid shapes. Different ways to represent a number up to 50. Making tens Composing and decomposing numbers in standard and expanded forms Counting by tens using a hundred chart Number patterns using tens and ones Comparison between numbers and using symbols >, <, = Big numbers Adding tens and ones without regrouping	Comparison between objects about their geometrical characteristics: sides, corners, faces, edges. Creating a new shape using solid shapes. Different ways to represent a number up to 99. Solving word problem with 2-digit addition. Equal parts, halves and fourths. Identifying objects divided into equal parts. Making estimations of length.

Syllabus Self Contained Math

Subject:	Self Contained	
Grade:	First	
Teacher:	**1.**	
	2.	
	3.	

GRADE GENERAL OBJECTIVE
To develop addition and subtraction meanings using regrouping if necessary and applying to different contexts as measurement, geometry, patterns and data analysis.

INQUIRY TOPIC FIRST TERM:	**INQUIRY TOPIC SECOND TERM:**	**INQUIRY TOPIC THIRD TERM:**
Grouping and Regrouping	**Adding and subtracting big numbers**	**Applying addition and subtraction**
TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**
Strategies to add and subtract one digit numbers Adding three numbers Skip counting by 2´s, 5´s and 10´s Repeated additions, doubles and near doubles Adding tens and ones Adding two digit numbers: with and without regrouping Adding three or four two digit numbers Subtracting from a two-digit number Checking subtractions and additions	Comparing three-digit numbers Counting by 100´s Grouping three-digit numbers to add Regrouping three digit-numbers to subtract Subtracting across zeros	Metric lengths Relating inches, feet and yards Comparing metric lengths: centimeters and meters Two-dimensional shapes Angles Three-dimensional shapes: faces, edges, vertices Area

Syllabus Self Contained Math

Subject:	Self Contained
Grade:	Second
Teacher:	**1.**
	2.
	3.

GRADE GENERAL OBJECTIVE
To develop multiplication and division meanings, with whole numbers, using different representations and applying them to different contexts as measurement, geometry, patterns and data analysis.

INQUIRY TOPIC FIRST TERM:	**INQUIRY TOPIC SECOND TERM:**	**INQUIRY TOPIC THIRD TERM:**
Consolidating Addition and Subtraction	**Multiplication and Division Meanings**	**Multiplication and division representations**
TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**
Addition properties Addition patterns Estimating sums and differences Adding four-digit numbers Subtracting four-digit numbers	Repeated additions Arrays and multiplication Fact families Multiplication and division models Division as equal sharing Relating division and subtraction Inverse operations Patterns in the multiplication table. Multiplication tables to ten Distributive property, Associative property.	Fractions: Unit fractions, part of a whole, part of a set Equivalent fractions Comparing fractions Solving mass and capacity problems Time intervals Bar graphs, scale picture graphs, line plots Perimeter Measuring area Area of composite figures Angles, polygons, triangles and quadrilaterals

Syllabus Self Contained Math

Subject:	Self Contained
Grade:	Third
Teacher:	**1.**
	2.
	3.

GRADE GENERAL OBJECTIVE
To consolidate additive structure using whole numbers, fractions and decimals, and introduce multiplicative structure from whole numbers to different contexts as: geometry, fractions and decimals

INQUIRY TOPIC FIRST TERM:	**INQUIRY TOPIC SECOND TERM:**	**INQUIRY TOPIC THIRD TERM:**
Consolidating Multiplication and Division	**Relating Fractions and Decimals**	**Describing Geometry**
TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**
Reading and writing multi-digit number Ordering and comparing multi-digit numbers Using place value to round Addition properties Addition and subtraction patterns Factors and multiples Relating multiplication and division Multiplication properties and division rules Rounding and estimating products and divisions Distributive property	Factors and multiples: prime and composite numbers Equivalent fractions, Simplest fractions Comparing and ordering fractions Mixed numbers and improper fractions Adding and subtracting fractions and mixed numbers Tenths, hundredths Decimals as fractions Comparing and ordering decimals Adding and subtracting decimals	Customary units of length Converting customary units of length Customary units of capacity Converting customary units of capacity Customary units of weight Converting customary units of weight Converting units of time Metrics units of length, capacity and mass Measuring perimeters Models of area Relating perimeter and area

Multiplying multi-digit numbers Dividing with and without reminders Dividing greater numbers		Points, lines and rays Parallel and perpendicular lines Angles: measurement and classification Triangles and quadrilaterals. Lines of symmetry

Third

Syllabus Self Contained Math

Subject:	Self Contained
Grade:	Fourth
Teacher:	**1.**
	2.
	3.

GRADE GENERAL OBJECTIVE
To understand fractions, mixed numbers and decimals relationship and to build their additive and multiplicative structures, applying in contexts as: algebra, geometry and measurement

INQUIRY TOPIC FIRST TERM:	**INQUIRY TOPIC SECOND TERM:**	**INQUIRY TOPIC THIRD TERM:**
Decimals	**Fractions and mixed numbers**	**Measurement and geometry in fractions and decimals contexts**
TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**	**TERM CONTENTS (procedures, methods, techniques, themes and concepts of a specific area or discipline)**
Place value through millions Comparison by using place value Representing decimals Prime factorization Powers and exponents Multiplication model Relationship between multiplication and division Distributive property and partial quotients Models to interpret remainders Rounding decimals	Numerical expressions Order of operations Generating patterns Ordered pairs Graphing patterns Fraction and division relationship Greatest common factor Least common multiple Writing fraction as a decimal Rounding fractions Adding and subtracting like fractions	Converting customary Units of length Converting customary Units of weight Converting customary Units of capacity Converting metric Units of length Converting metric Units of weight Converting metric Units of capacity Polygons Sides and angles of a triangle Classifying triangles Sides and angles of a quadrilateral Three dimensional figures

Adding and subtracting decimals Multiplying and dividing decimals Multiplications properties Dividing decimals by power of ten	Adding and subtracting unlike fractions Adding and subtracting mixed numbers Multiplying and dividing fractions models Multiplying and dividing mixed numbers	Volume of prisms Volume of composite figures