



SPLIT UP OF SYLLABUS (2017-18)

GRADE:4

Subject: Mathematics

Teacher Name: Mrs. Sindu Sasikumar

M	Unit/Chapter	Concepts/Sub topic	Learning Outcomes	Essential Questions
APRIL	1. Large Numbers	<ul style="list-style-type: none"> ▪ Building numbers beyond 9,999 ▪ Indian place value chart (up to lakhs period). ▪ Face value and place value of a digit in a number. ▪ Comparison and ordering of numbers. ▪ Successor and predecessor of a number. ▪ International place value chart. ▪ Rounding off numbers to the nearest 10s, 100s and 1000s. ▪ Roman numerals. 	<ul style="list-style-type: none"> ▪ REPRESENT numerals up to 7 digits in Indian system 6 digits in International system. ▪ INDICATE the place, place value and period of a digit in a numeral ▪ COMPARE AND CONTRAST both systems. ▪ ESTIMATE numbers to the nearest 10/100/1000 ▪ Read and write Roman numerals. 	<ul style="list-style-type: none"> • Why do digits in a number have different values? • How can we use place value to round numbers? • How accurate does the solution need to be?
	MAY	2. Addition and Subtraction	<ul style="list-style-type: none"> ▪ Addition and subtraction facts. ▪ Addition and subtraction of large numbers. ▪ Application - Word problems. ▪ Problems involving addition and subtraction together. 	<ul style="list-style-type: none"> ▪ CARRYING OUT addition of 2 to 3 numbers by arranging the digits properly. ▪ CARRYING OUT subtraction by arranging the digits. ▪ VERIFY subtraction by addition. ▪ DESIGNING real life problems involving addition and subtraction.
3. Multiplication		<ul style="list-style-type: none"> ▪ Properties of multiplication – commutative, distributive and associative. ▪ Multiplication of large numbers 3-digit and 4-digit numbers. ▪ Multiplication by 10,100 & 1000. ▪ Multiplication by regrouping into 10, 100 and 1000. ▪ Application of multiplication. 	<ul style="list-style-type: none"> ▪ DEVISING the properties of multiplication. ▪ APPLY the understanding of multiplication in daily life. ▪ PUT INTO PRACTICE multiplication instead of repeated addition. 	<ul style="list-style-type: none"> • How to multiply numbers with different digits?



SPLIT UP OF SYLLABUS (2017-18)

GRADE:4

Subject: Mathematics

Teacher Name: Mrs. Sindu Sasikumar

	4. Division	<ul style="list-style-type: none"> ▪ Properties of division. ▪ Division of a large number by 2-digit and 3-digit number. ▪ Division by 10,100 & 1000. ▪ Application of division. 	<ul style="list-style-type: none"> ▪ INTERPRET the quotient and remainder when a number is divided. • DESIGNING real life problems involving division. 	<ul style="list-style-type: none"> • How to differentiate subtraction and division in a problem • What is divisor, dividend, quotient and remainder?
JUNE	5. Multiples and Factors	<ul style="list-style-type: none"> ▪ Facts about multiples and factors. ▪ Prime and composite numbers. ▪ Prime factorization of a number. ▪ Common multiples and common factors. ▪ Divisibility tests by 2, 3, 4, 5, 6, 9 & 10. 	<ul style="list-style-type: none"> ▪ PUT INTO PRACTICE the rules of divisibility ▪ BREAK DOWN the numeral into its prime factors. ▪ APPLY the understanding of factors to list prime & composite numbers to find common factors. ▪ Apply the understanding of multiples in finding common multiples. 	<ul style="list-style-type: none"> ▪ Identify composite numbers and prime numbers, and explain the relationship between them. • Can the method of prime factorisation help to determine common multiples and common factors?
	7. Understanding shapes and patterns	<ul style="list-style-type: none"> ▪ Types of lines – parallel, intersecting & perpendicular. ▪ Polygons ▪ Basic type of quadrilaterals. ▪ Circle and its parts. ▪ Symmetry 	<ul style="list-style-type: none"> ▪ UNDERSTAND the basic elements of Geometry. ▪ IDENTIFY the elements of a circle. ▪ CONSTRUCT the polygons of desired side. ▪ ANALYSE the different types of quadrilaterals. 	<ul style="list-style-type: none"> • Distinguish between the types of polygons.



SPLIT UP OF SYLLABUS (2017-18)

GRADE:4

Subject: Mathematics

Teacher Name: Mrs. Sindu Sasikumar

M	Unit/Chapter	Concepts/Sub topics	Learning Outcomes	Essential Questions
SEPTEMBER	6. Fractions	<ul style="list-style-type: none"> Types of fractions – proper, improper, mixed, like & unlike and equivalent fractions. Converting one type of fractions to another. Comparison of fractions. Addition and subtraction of like fractions. Word problems based on operations on fractions. 	<ul style="list-style-type: none"> DISTINGUISH the different types of fractions. COMPARE AND ORDER like and unlike fractions. OPERATE like fractions over +/- SOLVE problems related to situation arising in everyday life involving fractions 	<ul style="list-style-type: none"> Different types of fractions – relate examples from day to day life.
OCTOBER	13. Decimals	<ul style="list-style-type: none"> Representation of decimal numbers. Place value system of decimal numbers. Like and unlike decimals. Comparison and ordering of decimal numbers. Decimals in measurement. 	<ul style="list-style-type: none"> REPRESENT decimals on a number line appropriately. INDICATE the place values of decimal number. CONVERT unlike decimals to like decimals. COMPARE AND ORDER decimals. OPERATE decimals over + and - 	<ul style="list-style-type: none"> How does place value help us to add and subtract decimals?
NOVEMBER	8. Measurement	<ul style="list-style-type: none"> Standard units of measuring length, mass and capacity. Higher and lower units of measurements. Conversion from larger units to smaller units and vice versa. Addition and subtraction of units. Word problems based on operations on units. 	<ul style="list-style-type: none"> LIST and identify the relation of various standard units of Length/ weight/ capacity. CONVERT from one unit to another SOLVE problems on length, weight and capacity. 	<ul style="list-style-type: none"> Conversion of units - What do you observe? How can you explain it?



SPLIT UP OF SYLLABUS (2017-18)

GRADE:4

Subject: Mathematics

Teacher Name: Mrs. Sindu Sasikumar

DECEMBER	9. Perimeter and Area	<ul style="list-style-type: none"> Perimeter of straight line figures. Perimeter of curved figures. Area of regular figures. Area of irregular figures. 	<ul style="list-style-type: none"> EXPLORE perimeter/ area. EVALUATE the perimeter and area of a given geometric shape. 	<ul style="list-style-type: none"> When/ where/ how to find the perimeter and area of a figure.
	10. Time	<ul style="list-style-type: none"> Differentiate a.m. and p.m. Reading time to nearest units. Inter- conversion of 12-hour clock and 24-hour clock. Addition and subtraction of time. Timeline Reading calendar. Calculate time estimation. 	<ul style="list-style-type: none"> READ / RECORD time from clock face. CONVERT 12 hour clock to 24 hour clock and vice versa. COMPUTE elapsed time. 	<ul style="list-style-type: none"> Where and how to inter-convert time from 12-hour clock to 24-hour clock.
JANUARY	11. Money	<ul style="list-style-type: none"> Checking a bill and calculating bill amount. Addition and subtraction of money. Multiplication and division of money. 	<ul style="list-style-type: none"> APPLY basic operations on money. DESIGN real life problem. 	<ul style="list-style-type: none"> Bill making - What do you observe? How can you explain it?
	12. Data Handling	<ul style="list-style-type: none"> Organizing data using tally marks. Reading bar graphs. Drawing a bar graph. Circle graphs or pie charts. 	<ul style="list-style-type: none"> ORGANISE, DISPLAY AND INTERPRET data using Bar graph/ pictograph and tally mark 	<ul style="list-style-type: none"> Construct a Specific Graph type for the given data



AL AIN JUNIORS SCHOOL
INDIAN SYSTEM

SPLIT UP OF SYLLABUS (2017-18)

GRADE:4

Subject: Mathematics

Teacher Name: Mrs. Sindu Sasikumar

FEBRUARY	Revision			
MARCH	Revision			