The Orchid School
Baner
Syllabus Overview 2015- 2016
Std VIII
Subject : Maths

Month	Lesson / Content / Name of the Book	Expected Learning Objective	Activities/FAs Planned
MARCH -APRIL	Rational Numbers	Students will be able to identify the properties of rational numbers Associative,closure,distributive.	plot the rational number on the number line
	Practical Geometry	students will be able to identify the various quadrilaterals based on their properties.Students will be able to construct the quadrilaterals when three sides and one angle is given	
	Practical Geometry	students will be able to construct the quadrilaterals when three sides and one diagonal is given. When two sides and two diagonals is given . When the two sides and the angle between them is given. Construct the special quadrilaterals based on the properties (kite/rhombus,etc)	Construction of Kite

	Linear Equations with one variable	Students will be able to solve the equations having one variable	
	Linear Equations with one variable	Students will be able to form linear equations and solve the same from the given statements.	
JUNE	Linear Equations with one variable	Students will be able to form complex linear equations and solve the same from the given statements.Students will be able to verify the sides of the equation	
	Exponents and Powers	Students will use all the laws of exponents to solve various sums.Numbers with negative exponents obey the following laws: Very small numbers can be epressed in standard form using negative exponents.	PPT to be made by students in group
	Data handling	students will learn how to manage data systematically using tally matks and intervals	
	Data handling	students will learn the mean, mode ,median and use the same to interpret data and solve the given data	
FA 1			

JULY	Square and square roots	All square numbers end with 0,1,4,5,6 or 9.Students will be able to isentify the square of given numbers and also be able to find the square root of the given number.	
	Square and square roots	Solutions based with sentences on square and square roots	
	Cube and cube roots	Students will be able to identify the cubes and the cube roots of given numbers using the tests learnt.Numbers like 1729,4104,13832,..are called Hardy-Ramanujan no. They can be expressed as sum of two cubes in two different ways.	Videos and Quiz activities
	Comparing Quantities	Students will be able to undertsand the relation between Perctanges,profit and loss, compound interest	
	Comparing Quantities	students will be able to solve various sums based on percentage,profit and loss,simple intrest and compound intrest.	
AUG	Comparing quantities	Discount is a reduction given on marked price. Additional expenses made after buying an article are included in the cost price---- called as over-head expenses.	
	Comparing quantities	Students will learn VAT and computation of the same based on the given data.	

			Students will learn to compare and find out which intrest will b better to invest in SI or CI, based on the given data	worksheet
		Comparing quantities		
		Comparing Quantities	Students will learn how to use the various commercial mathematics for better utilisation of monetary benefits.	
FA 2				
SEPT		Algebric expressions and identities	students will learn the various identities (a-b)2 = a2-2ab +b2 (a+b) (a-b) = a2-b2	Lab activity
		Algebric expressions and identities	Student will learn how to derive the various identities with examples	
		Algebric expressions and identities	Students will use to expand the expression with the help of an identity	
		Algebric expressions and identities	students will learn and identify which identity is used in the given expression	
		Algebric expressions and identities	students will learn and use the various identities.use the identity to solve for the given sum.	
SA 1				
		Visulaisng Solid	Student will understand the convex and concave figures.Use the Eulers formulae to solve to identify the sides vertices of a given figure.	Chart on formulaes
		Visulaising solid	Recognizing 2D and 3D objects. Recognizing different shapes in nested objects.	

OCT	Visulaising solid		
		A map depicts the location of a particular place in relation to other places.	
	Understanding quadrilaterals	Students will learn the various properties of the gievn quadrilaterals A Parallelogram is a quad.with each pair of opposite sides parallel. Rhombus is a IIgm with sides of equal length.	group activity booklet / chart representation
NOV	Understanding quadrilaterals	Rectangle is a IIgm with a right angle. Square is a rectangle with sides of equal length.	
	Understanding quadrilaterals	Student will be able to use the properties of the quadrilaterals to undertand interlinked quadrilaterals	
	Understanding quadrilaterals	students will be able to use the various properties to compute the measure of the angles and eth length of the side of the quadrilaterls based on the properties.	
FA 3			
DEC	Introduction to graphs	to plot a bar graph , linear graph and a double graph	
	Introduction to graphs	introduction to pie charts.to compute data from the gaiven specifications	
	Introduction to graphs	To differentiate between linear and bar graph and double bar graphs,histogram and pie chart.	graph plotting chart on various types og graphs

		Introduction to graphs	to able to interpret graphs and answer the given Qs and to represent thegraph from the given data.	
JAN		Direct and Inverse proportion	Two quantities x and y are in direct variation if they increase (decrease) together in such a manner that the ratio of their corresponnding values remains constant.(i.e, x/y=k)	
		Direct and Inverse proportion	Two quantities x and y are in inverse variation,if an increase in one causes a decrease in the other. (i.e, xy=k)	
		Direct and Inverse proportion	students will be able to differentiate between the direct and inverse proportion sums by reading the sum and preparing the data table.	chart done by student group
		Factorisation	Students will be introduced to the term factorization	
FA 4				
		Factorisation	When a number is factorised, it is written as a product of factors. These factors may be numbers, algebraic variables or algebraic expressions.	

FEB	Factorisation	students will factorize based on the rules of identities. They will use the appropriate identity to factorise a given number or algebric expression.	lab activity
	Mensuration	To find the area of different plane faces and solid shapes respectively	
	Mensuration	To find the volume of different plane faces and solid shapes respectively	
MAR	Mensuration	to undertsand the concept of total surface area	models mades and area,perimeter found
	Mensuration	To find the lateral surface area of the given figure	
	Mensuration	To solve the story sums by using the various properties learnt and also use the area volume total surface area formulas	
	worksheets on various topics		
	worksheets on various topics		
SA 2			