

**The Orchid School**  
**Baner**  
**Syllabus Overview 2015- 2016**  
**Std VI**  
**Subject : Mathematics**

Month	Lesson / Content / Name of the Book	Expected Learning Objective	Activities/FAs Planned
<b>MARCH -APRIL</b>			
	<b>Lesson</b> : numbers <b>Content</b> :Revised big numbers <b>Lesson</b> :Whole numbers numbers <b>Content</b> :natural numbers,Representation of whole numbers on the number line,Properties of addition.	Students will be able to recognise big and small numbers . Students states the property of addition of whole numbers.	Exercise questions
	<b>Lesson</b> :Whole numbers <b>Content</b> :Properties of subtraction,multiplication.	Students states the closure property,commutative Property ,associative property,distributive property and identity property in addition,subtraction,multiplication of whole numbers	Exercise questions
	<b>Lesson</b> : Whole numbers <b>Content</b> :Properties of division	Students states the closure property,commutative Property ,associative property,distributive property and identity property in division of whole numbers	Activity to prepare poster "Research on 0"

JUNE	<p><b>Playing with numbers</b> :Prime and composite numbers,Test for divisibility</p> <p><b>Basic geometrical Ideas</b>:Point, Line,Line Segments and Rays.</p>	<p>1 )Students will be able to perform divisibility test 11 and 13.</p> <p>2) Students will be able to prime factorise bigger numbers</p> <p>3)Students will be able to define and give examples on point,line,ray and segments.</p>	<p>Math Lab Activity : solving a puzzle based on divisibility tests</p> <p>Creating polygons with chords.</p>
	<p><b>Basic geometrical Ideas</b>:Curves and Polygons</p> <p>Angles, Triangles and Quadrilaterals,Circles</p>	<p>1)Students will be able to measure and compare angle</p> <p>2)Will be able to identify linear and curvilinear boundaries.</p>	<p><b>Design a map of Your neighbourhood using different geometrical shapes</b></p>
	<p><b>Revision FA test 3</b></p>	<p>All students will be able to solve revision worksheet</p>	<p>FA test 3</p>
FA 1			
	<p><b>Integers</b>:Introduction</p>	<p>Students will be able to explain negative numbers and their necessity in the number system.</p>	<p>Exercise question</p>
	<p>Integers:Operation on integers</p>	<p>Students will be able to Perform operations of addition and subtraction with integers.</p>	<p>Exercise question</p>

JULY	Integers:Operations on integers	Students will be able to Perform operations of addition and subtraction with integers. Student defines Absolute value and integer rules.	Students form a number line and the pointer student moves as per the operation.
	<b>HCF and LCM</b> :Prime factorisation (HCF)	Students will be able to Find HCF by listing factors, prime factorisation and common division method	Exercise question
	<b>HCF and LCM</b> :Prime factorisation (LCM)	Finds LCM by common division method	Exercise question
AUG	<b>HCF and LCM</b> : Properties <b>Fractions</b> - Introduction as apart of a whole - Types of fractions, comparison of fractions	<b>1)students</b> Identifies and lists properties of HCF andLCM. <b>2)students</b> Defines the term fraction with its meaning <b>3)students</b> Defines and illustrate proper,improper,mixed,like,unlike and equivalent fractions	Exercise question,and worksheets
	<b>Fractions</b> - Conversion of fractions Operations	<b>1)Students</b> will be able to convert mixed into improper fractions and vice versa. <b>2)Add</b> and subtract fractions	Exercise questions
	<b>: Decimals</b> - Decimal fractions - comparision of decimals	<b>1)Students</b> are able to recognise decimals as fractions <b>2)Students</b> are able to compare two or more decimal fractions.	Exercise questions
	<b>Decimals</b> - Conversion to fractions	1)Students are able to convert fractions into decimal fractions and vice versa.	group activity

FA 2			
SEPT	<b>Decimals</b> - Conversion to fractions	1)Students are able to convert fractions into decimal fractions and vice versa.	<b>Exercise questions</b>
	<b>Revision for SA1</b>		<b>worksheets</b>
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	<b>SA1</b>		
	<b>Ratio and Proportion</b> :Introduction to	1)student defines and knows the meaning of ratio and will be able to use unitary method. 2)Student will be able to convert ratio in the simplest form	Excicise Questions
SA 1			

OCT	<b>Ratio and proportion</b> - Equivalent ratios - Unitary Method - Proportion	1) student will be able to compare two ratios. 2) student will be able to find proportion of numbers.	Exercise questions.
	<b>Introduction to percentage</b> <b>Perimeter and area</b> - Square, Rectangle, Triangles - Measurement of Area of various figures	1) student defines and knows the meaning of Percentage 2) Student defines perimeter and calculates the perimeter of different types of polygonal shapes.	Exercise questions.
	<b>Perimeter and area</b> <b>Understanding elementary shapes</b>	1) Student defines area and calculate area of different polygons.	<ul style="list-style-type: none"> <li>Group Work and Presentation of area calculation of the corridor of any floor.</li> </ul>
	<b>Understanding elementary shapes</b> - Polygons Triangles	1) student define and explain polygons, triangles and quadrilaterals. 2) student classify triangles based on their types.	Activity and exercise questions
	<b>Understanding elementary shapes</b> - Quadrilaterals	1) student define and explain quadrilaterals. 2) Student state different types of quadrilaterals and their properties	Activity and exercise questions

NOV	<b>Introduction to Algebra</b> - Variables , Algebraic Expressions, Like and unlike terms	1) student define and give examples of variables constants and algebraic expressions. 2) Frame algebraic expressions	exercise questions
	<b>Introduction to Algebra</b> - Factor - Algebra as generalisation	1) students Recognises algebra as generalisation of situations involving arithmetic. 2) define and students explain terms of expression.	Class discussion
FA 3			
DEC	<b>Algebraic equations</b> - Framing and solution of equations	1) students can explain with examples what an algebraic equation is.	exercise questions
	<b>Algebraic equations</b> - Types of methods to solve an equation	students Will be able to form mathematical expressions from statements using variables.	exercise questions
	<b>Algebraic equations</b> - Types of methods to solve an equation	students will be able to convert statement into algebraic expression.	exercise questions
	<b>Algebraic equations</b> - Types of methods to solve an equation	students Will be able to form and solve algebraic equations using balancing and transposition method.	Class discussion

JAN	<b>3 D shapes:</b> Elements	-	Students recognise and name 3d solid figures. Exercise questions
	<b>3 D shapes:</b> Polyhedrons	-	Students are able to prepare nets of simple prisms and pyramids Activity and exercise questions
	<b>Constructions :</b> segment Perpendicular bisector	-Line	1)Students are able to construct line segments 2)Students are able to construct perpendicular bisector. Exercise questions
	<b>Constructions:</b> Alternative method -Construction of a circle	-	Students are able to construct circle Exercise questions
FA 4			
FEB	<b>Constructions:</b> construction of circle	-	Students are able to construct circle Exercise questions
	<b>Constructions:</b> Construction of angles	-	Students are able to construct angles Exercise questions
	<b>Constructions:</b> special angles	-	Students are able to construct angles Activity

	<b>Symmetry</b> Line of symmetry	- Recognise Lines of symmetry in objects and figures.	activity
<b>MAR</b>	<b>Symmetry</b> creating symmetrical shapes	- students create objects and pictures using lines of symmetry.	exercise questions
	<b>Data Handling</b> - data - types of data Pictograph	- Students will be able to explain data and its types.	class discussion
	<b>Data Handling</b> -various ways of of data - Bar graphs	students Will be able to plot bar graph with the given data. Will be able to interpret information through graphs.	exercise questions
	<b>Revise SA2</b>		worksheets
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<b>SA 2</b>			