


**SPLIT UP OF SYLLABUS 2008-09**

**MATHS**

**TEXT BOOK — MATH-MAGIC FOR CLASS V**

MONTH	CHAPTER & TOPIC	COMPETENCY	EXPECTED LEARNING OUTCOME	SUGGESTED ACTIVITIES	SKILL/VALUES CORRELATION
April/ May	Chapter – 1 The Fish Tale	Concept of Number  Ability to Compute  Problem Solving Ability	<ul style="list-style-type: none"> <li>— Read and write the numerals in figure &amp; the corresponding number name.</li> <li>— To develop Mathematical concepts such as shapes, estimation, sense of large numbers, simple operations, speed, loans etc.</li> <li>— To solve the daily life problems.</li> </ul>	<ul style="list-style-type: none"> <li>— Draw the different kind of fish of different length and compare their lengths.</li> <li>— Find the price of potato and onion per kg from the market and calculate amount for different quantities.</li> <li>— Teacher can give the example of potato chips like fish-drying factory. Let them calculate the Profit and Loss.</li> <li>— Note the big numbers upto crore from their own experiences ? Write them in words.</li> </ul>	<ul style="list-style-type: none"> <li>— Reading and Writing the numbers.</li> <li>— Solving daily life problems involving basic operations.</li> <li>— Sketching with accuracy</li> <li>— Correlated with E. V. S. and G. K.</li> </ul>
June	L – 2 Shapes and	Understanding of Basic	— To know different kinds of angles	— Make different shapes with the help of Match	— To develop sequential

	Angles	<p>Concept</p> <p>Ability to Compute</p> <p>Mental Ability Solving Ability</p>	<ul style="list-style-type: none"> <li>— To compare the angles</li> <li>— Measurement of angles</li> <li>— Draw the different angles</li> <li>— To develop creativity</li> <li>— To know that when the angle changes the shape will also change</li> </ul>	<p>Sticks and observe their angles formed in.</p> <ul style="list-style-type: none"> <li>— Write your name by using straight line segments. Now count the right angles formed in your name.</li> <li>— Write what kind of angle is made by the hands in the clock in different time.</li> <li>— Draw different kind of angles and make the things of your choice showing the angle. E. g.:</li> </ul>  <ul style="list-style-type: none"> <li>— Draw angles of different measures.</li> <li>— Puzzles.</li> </ul>	<p>thinking and accuracy.</p> <p>— Sketching with accuracy.</p>
July	L – 3 How many squares ?	Understanding Basic Concept	<ul style="list-style-type: none"> <li>— To compare the things in terms of area.</li> <li>— To estimate the things which is bigger.</li> </ul>	<ul style="list-style-type: none"> <li>— Draw different shapes on a squared sheet and calculate their area by counting squares.</li> </ul>	<ul style="list-style-type: none"> <li>— Estimation</li> <li>— Skill of measurement</li> </ul>

		<p>Ability to Compute</p> <p>Mental Ability</p>	<p>— Children will be able to modify basic shapes to create different tiling shapes.</p> <p>— To find the area of different objects.</p>	<p>— Measure the area of irregular things as leaf, foot print, your palm etc.</p> <p>— Make different patterns of tiles of their choice.</p>	<p>— Skill of reasoning and thinking</p>
	L – 4 Parts and Wholes	<p>Understanding Basic Concept</p> <p>Ability to Compute</p>	<p>— To get the idea of parts and whole</p> <p>— To calculate the prices of parts of the whole food items : e. g. <math>\frac{1}{2}</math> kg of tomato.</p>	<p>— Draw figures for different fractions.</p> <p>— Paper folding and paper cutting.</p> <p>— Make your daily routine time table. What part of the day do you use for different activities ?</p> <p>— Collect the different bills and discuss the fraction of different items in the class.</p>	<p>— Develop analytical ability and comparison.</p>
August	L – 5 Does it look the same ?	<p>Understanding Basic Concept</p> <p>Problem Solving Ability</p>	<p>— Observe and understand the symmetry.</p> <p>— Applies the knowledge to divide the things with different symmetry.</p>	<p>— Show the symmetry by paper folding.</p> <p>— Show the symmetry in alphabets by dotted lines.</p> <p>— Make the concept of half turn and one fourth turn by giving the</p>	<p>— Develop analytical ability and comparison</p>

				<p>example of water tap and almirah lock.</p> <ul style="list-style-type: none"> <li>— Make a toy wind mill.</li> <li>— The children will get idea of <math>\frac{1}{3}</math> and <math>\frac{1}{6}</math> through various activities like cutting of apples, Roti, Bread etc.</li> </ul>	
	<p>L – 6 Be My Multiple, I'll be Your Factor.</p>	<p>Understanding Basic Concept</p> <p>Ability to Compute Tables</p>	<ul style="list-style-type: none"> <li>— Understands the concepts of prime and composite numbers.</li> <li>— Understands the concept of common factors and common multiples.</li> <li>— Makes prime factorisation of a number.</li> <li>— Determine the HCF and LCM.</li> </ul>	<ul style="list-style-type: none"> <li>— Find the multiples of different numbers by playing games.</li> <li>— Find the common multiples by playing dice game.</li> <li>— Puzzles.</li> <li>— Make factor tree.</li> <li>— Complete the multiplication chart to find the multiples and factors.</li> </ul>	<ul style="list-style-type: none"> <li>— Solving daily life problems involving basic operations of multiplication and division</li> </ul>
September	<p>L – 7 Can you see the pattern ?</p>	<p>Understanding Basic Concept</p> <p>Ability to Compute</p> <p>Problem Solving</p>	<ul style="list-style-type: none"> <li>— To understand the sequence of the patterns.</li> <li>— To develop creativity and logical thinking.</li> <li>— To develop their own</li> </ul>	<ul style="list-style-type: none"> <li>— Complete the number and picture patterns.</li> <li>— Creates patterns of their own.</li> <li>— Solve magic square, hexagon.</li> <li>— Activity : “Secret</li> </ul>	<ul style="list-style-type: none"> <li>— Creativity</li> <li>— Development of the mental ability</li> </ul>

		Ability	<p>pattern.</p> <p>— To enjoy and learn with numbers.</p>	<p>Numbers”.</p> <p>— Activity : “Number Surprises”.</p> <p>— Activity : “Fun with Numbers”.</p>	
	L – 8 Mapping Your Way	<p>Understanding Basic Concept</p> <p>Ability to Compute</p> <p>Problem Solving Ability</p>	<p>— To enable the children to observe the map and find out the route.</p> <p>— To understand the scale of the map.</p> <p>— To draw and make the map with different scales.</p>	<p>— Draw the route map of their house to school, any mall, any park etc.</p> <p>— Activity : “Central Hexagon”.</p> <p>— Enlarging and reducing the figures and maps through squares.</p> <p>— Draw the map of school building on square.</p> <p>— Find the distance between Gurgaon Bus stand to Delhi ISBT and any other places from the map.</p>	<p>— Reading of route map.</p> <p>— E. V. S.</p> <p>— Reading of map.</p> <p>— Use of scale in Map.</p>
October	L – 9 Boxes and Sketches	<p>Understanding Basic Concept</p> <p>Problem Solving Ability</p>	<p>— To develop mental image of shapes.</p> <p>— To identify the 2-D and 3-D shapes.</p> <p>— To enable the children to differentiate between</p>	<p>— To draw 3-dimensional shapes on paper.</p> <p>— Make a layout plan of your house.</p> <p>— Make the different types of boxes by</p>	<p>— Develop mathematical ability and creativity</p>

			<p>deep drawing and layout plan.</p>	<p>using Postal Sheet.</p> <ul style="list-style-type: none"> <li>— Make the floor map and deep drawing of your house.</li> <li>— Puzzles.</li> <li>— Draw a 2-D figure by cutting and flattening the edges of a match box of cube-shaped.</li> </ul>	
November	L – 10 Tenths and Hundredths	<p>Basic Concept</p> <p>Ability to Compute</p> <p>Problem Solving Ability</p>	<ul style="list-style-type: none"> <li>— Estimation of measurement</li> <li>— To measure the things in cm. and mm.</li> <li>— To convert a fraction into decimal and vice-versa.</li> <li>— To solve the problems of money transactions.</li> <li>— Measurement of temperature</li> <li>— Able to solve simple addition and subtraction of decimals.</li> </ul>	<ul style="list-style-type: none"> <li>— Measure the different things in cm. and mm. with the help of scale. They will also convert cm. into mm. and vice-versa.</li> <li>— Estimate different lengths of different objects in cm. and mm.</li> <li>— Organise a fun-fair in the class. Buying and selling things gives the child an understanding of ideas of money transaction individually.</li> <li>— With the help of graph paper and by using colours. Teacher will explain decimals, fractions and relation between them.</li> </ul>	

				<ul style="list-style-type: none"> <li>— Write money, unit of length, unit of mass in decimals and in fractions.</li> <li>— Students will note the temperature of different cities from the newspapers or T. V. (in degree Celsius) and find the difference of temperature at two different times of the day.</li> </ul>	<ul style="list-style-type: none"> <li>— Ability to measure the things with accuracy.</li> <li>— Sense of estimation.</li> <li>— Solve daily life problems.</li> </ul>
December	L – 11 Area and its Boundary	<p>Basic Concept</p> <p>Ability to Compute</p> <p>Problem Solving Ability</p>	<ul style="list-style-type: none"> <li>— Concept of area and perimeter.</li> <li>— Ability to Compute area and perimeter of a square and rectangle figure by formula.</li> <li>— State the unit of area and perimeter.</li> <li>— To understand that things of same area can take different forms and have different perimeters.</li> <li>— Estimate area in sq cm, sq m.</li> </ul>	<ul style="list-style-type: none"> <li>— Paste the different cutouts and find their area and perimeter.</li> <li>— Make your own designs of area 5 and 8 sq cm.</li> <li>— Make birthday cards. Find its length and width and calculate its area and perimeter.</li> <li>— Take a drawing sheet, find its area and perimeter. Then cut it into small strips. Make a belt and find the area. (Same area can</li> </ul>	<ul style="list-style-type: none"> <li>— Children area able to judge the area and perimeter of different things.</li> <li>— Skill of reasoning and thinking.</li> </ul>

			<ul style="list-style-type: none"> <li>— Estimate the area of different things into sq cm, sq m and sq km.</li> </ul>	<ul style="list-style-type: none"> <li>have different perimeter.)</li> </ul>	
December	L – 12 Smart Charts	<p>Basic Concept</p> <p>Ability to Compute</p>	<ul style="list-style-type: none"> <li>— To express the given data in tabulation form and in terms of pictures and vice-versa.</li> <li>— Collect and records data systematically.</li> <li>— Interpret information given in the table and pictorial representation.</li> </ul>	<ul style="list-style-type: none"> <li>— Record strength of different sections of Class V, represent them in tabulation form and in pictorial form.</li> <li>— Encourage children to look at the map of India to locate different cities. They can try to relate the temperature variations in a city to get an idea of the climate there.</li> <li>— Children should be encouraged to use tally mark simultaneously to record data of a variety of things with larger numbers.</li> <li>— Make a bar chart of birthday of your classmates in different months.</li> <li>— Make your family-tree or school staff tree.</li> <li>— Make growth chart of your marks in different unit-test.</li> </ul>	<ul style="list-style-type: none"> <li>— Observation, classification, collection of data and interpretation</li> <li>— Creativity.</li> </ul>

January	L – 13 Ways to multiply and divide	Understanding Basic Concept  Ability to Compute  Tables	<ul style="list-style-type: none"> <li>— To know the different ways of multiplication.</li> <li>— Division.</li> <li>— Terms used in multiplication and division. (Multiplier and product) (Divident, Divisor and Quotient.)</li> </ul>	<ul style="list-style-type: none"> <li>— Collect the number-game, tricks involving multiplication and division.</li> <li>— Multiply any two numbers in different ways by eg. Of breaking method and column method.</li> <li>— Multiply and divide sums with class-room situation.</li> <li>— Determine the division and multiplication facts of a given number of 1-digit or 2-digits using a 10 × 10 multiplication grid.</li> <li>— Problem sums related to daily life.</li> <li>— Do sums of division and check your result by multiplication.</li> </ul>	<ul style="list-style-type: none"> <li>— Calculation with accuracy and promptly.</li> <li>— Able to solve daily life problems.</li> </ul>
January	L – 14 How big ? How heavy	Basic Concept  Ability to Compute	<ul style="list-style-type: none"> <li>— Concept of Volume.</li> <li>— Calculate and compare the volume of different things.</li> </ul>	<ul style="list-style-type: none"> <li>— Children will paste a paper-strip on a glass and mark the level of water. Dip different things as stones, marbles etc., and note the level of water and</li> </ul>	<ul style="list-style-type: none"> <li>— Develop sense of size.</li> <li>— Drawing skill.</li> <li>— Skill of imagination</li> </ul>

		Problem Solving Ability	<ul style="list-style-type: none"> <li>— Guess the Volume by informal measurement (using marbles, coins, match boxes etc.)</li> <li>— Determine the volume in litre and cubic cm. by measuring devices.</li> <li>— Solve problems related to volume.</li> </ul>	<p>find their volume.</p> <ul style="list-style-type: none"> <li>— Find the volume of tea-box, match box, pencil box etc.</li> <li>— Collect empty match boxes, arrange them in an interesting way and find the total volume and volume of one match-box.</li> <li>— Make a paper cube and find volume.</li> <li>— For finding the volume of different shapes, the teacher can make different models.</li> </ul>	<p>and thinking.</p> <ul style="list-style-type: none"> <li>— Measurement skill.</li> </ul>
February			Revision of the whole syllabus for Session-Ending Examination. Revise Multiple Choice Questions also.		
March			Session-Ending Examination.		