## INFANT JESUS CONVENT SCHOOL ANNUAL PLAN MATHS

**CLASS: IV** 

MONTH/NO OF DAYS	TOPIC: SUB TOPIC	OBJECTIVES	AIDS/ACTIVITIES	MULTIPLE INTELLIGENCE SKILLS	LEARNING OUTCOME
April NO OF DAYS: 17	<ul> <li>NUMBERS</li> <li>Place and face value</li> <li>Indian and international system of numeration</li> <li>Comparing and ordering numbers</li> <li>Forming the greatest and smallest numbers</li> </ul>	Students will be able to:  Indicate place value and face value of a number.  Express big numbers into numerical form.  Apply their understanding in real life situations.  formulate the greatest and the smallest numbers without and with repetition	<ul> <li>Represent 4 digit number in TH,H,T,O Collect newspaper clippings in large numbers and Compare.</li> <li>Form the greatest and the smallest numbers with the given digits.</li> <li>SKILLS:</li> <li>Representation Skills</li> <li>Counting Skills</li> <li>Problem solving skills</li> <li>Problem solving skills</li> <li>APPLICATION: Demonstrate the numbers into greatest and smallest.</li> <li>Compare the numbers.</li> <li>Differentiate Indian and International numerical system.</li> </ul>	<ul> <li>Logical- mathematical intelligence</li> <li>Intrapersonal</li> </ul>	Students will be able to:  Recognise big numbers and apply them in appropriate place.  Understand numeration and able to use them at appropriate places.  Arrange numbers into ascending and descending orders.

			<ul> <li>UNDERSTANDING:</li> <li>Interpret and list the numbers into periods.</li> <li>Compare different numbers</li> </ul>		
MAY NO. OF DAYS:12	ADDITION AND SUBTRACTION ❖ Addition and subtraction 5 and 6 digit numbers ❖ Properties of addition and subtraction ❖ Related word problems	Students will be able to:  • Apply addition and subtraction of 5- and 6-digit numbers without and with regrouping  • Visualise a variety of methods, useful for approaching problems.  • identify the properties of addition	<ul> <li>KNOWLEDGE</li> <li>Know addition and subtraction of 3 digit and 4 digit numbers.</li> <li>Recall the properties.</li> <li>SKILLS</li> <li>Counting skills</li> <li>Representing skills</li> <li>Application skills</li> <li>Application skills</li> <li>Application skills</li> <li>Apply counting skills to solve word problems.</li> <li>UNDERSTANDING</li> <li>Arrange numbers by writing them vertically one below the other.</li> <li>Interpret real life cases when the problem is asked in the form of a statement.</li> </ul>	<ul> <li>Logical- mathematical intelligence</li> <li>Spatial intelligence</li> </ul>	Students will be able to:  • Develop an understanding of addition and subtraction  • Analyse and demonstrate the word problems.

## REVISION PT-1 CONDUCTION OF PT-1 ASSESSMENT( THIRD WEEK OF MAY)

	I a		T	Ta. 1
MULTIPLICATIO		KNOWLEDGE:	• Logical-	Students will be
❖ Multiplication h	~	• Recall tables up to	mathematical	able to:
2 digit,3digit ar		10.	intelligence	• Apply the
4 digit	understanding of	• Know repeated	<ul> <li>Intrapersonal</li> </ul>	concept of
	multiplication	addition concept.	Spatial	multiplication
❖ Properties of	<ul> <li>Visualise a</li> </ul>	• List skip counting by	intelligence	to solve
multiplication	variety of	2s,5s,10s		questions.
	methods, useful	• Read Hindu Arabic		• Use different
❖ Multiplies of	for approaching	Numerals		strategies to do
10,100	problems.	• know about patterns		multiplication.
	• Know	and their unit of		• Perform
❖ Word related	multiplication	repeat, growing and		multiplication
problems	tables from 11 to	reducing		of 3 digit
DOMAN	15.	shape/number/		number,4 digit
ROMAN	<ul> <li>identify Roman</li> </ul>	alphabet pattern,		by 2 digit
NUMERALS	Numerals	repeating pattern,		number and 3
JULY * Hindu Arabic	<ul> <li>understand and</li> </ul>			digit numbers
No of Days: 23 numerals	create growing	SKILLS:		Understand
Addition and	and reducing	Analytical Skills		Roman
subtraction in	patterns	• Computing Skills		numerals and
roman		• Problem solving skills		able to use
numerals		• Patterning skills		them at
PATTERNS		<ul> <li>Application skills</li> </ul>		appropriate
PATTERNS		• Representational		places.
		skills		-
				• Use
		APPLICATION:		mathematical
		•Demonstrate the		patterns, i.e.,
		product of the		number
		numbers multiplied		patterns in
		with 10 and 100		addition,
		• Analyse the numbers		Subtraction,
		to be multiplied first		multiplication
		and then find the		and division.

			product.  • Apply properties of multiplication.  • Represent numbers in the form of Roman numerals.  • Give examples of different patterns.		
			<ul> <li>UNDERSTANDING:</li> <li>Calculate 3 digit,4 digit numbers with 2 digit numbers</li> <li>Perform word problems.</li> <li>Compare Hindu Arabic- Roman numerals</li> <li>Infer numbers, pictures and alphabets patterns.</li> </ul>		
August No of Days: 23	DIVISION  ❖ Division of a 2-, 3-, 4-digit number  ❖ Related word problems	Students will be able to:  • Divide a 4-digit number by a 1-digit number and a 2-digit number.  • Identify different types of fractions	<ul> <li>KNOWLEDGE</li> <li>Memorize tables</li> <li>Know how to do division of 2 digit number by 1 digit number.</li> <li>Relate use of division in real life situations.</li> <li>Derived fractions from numbers.</li> <li>SKILLS</li> <li>Application skills</li> <li>Representational skills</li> <li>Creative-thinking</li> </ul>	<ul> <li>Logical- mathematical intelligence</li> <li>Intrapersonal</li> <li>Spatial intelligence</li> </ul>	Students will be able to:  Compare relationship between multiplication and division  Learn steps involved in division of a 2-, 3-, 4-digit number by a 1- and a 2-digit number without and with remainder

SEPTEMBER No. of Days:05	UNITARY METHOD  To find the value of many To find the value of one Miscellaneou s problems	Describe the concept of unitary method. Calculate the value of many objects of the same kind when the value of one of these objects is given. Calculate the value of a number of same types of objects when the value of another of the same type is given (unitary method)	skills.  Problem-solving skills Computing skills Computing skills  APPLICATION Demonstrate relationship between multiplication and division. Able to solve division word problem. Apply skills in real life situations. Create a grid of 10 by 10 of 100 squares  UNDERSTANDING Differentiate between multiply and division. Verify the answer by applying the formula. Evaluate division with long as well as short division method.  REVISION TERM-1	<ul> <li>Logical- mathematical intelligence</li> <li>Intrapersonal</li> <li>Spatial intelligence</li> </ul>	Understand fractions and use them to solve their day-to-day problems.  To find the value of many and one	
	CONDUCTION OF TERM 1 ASSESSMENT					
OCTOBER No of Days: 22	GEOMETERICAL SHAPES  ❖ Elements of a circle ❖ Relation between radius	Students will be able to: To measure and construct line segments. To identify closed	<ul> <li>knowlede</li> <li>know about plane and solid shapes, vertical lines, horizontal lines, circle and its</li> </ul>	<ul> <li>Logical- mathematical intelligence</li> <li>Spatial intelligence</li> </ul>	Students will be able to:  • Construct circles of different radius using a	

and diameter of	and anon alleria	related terms	20000000
the circle.	and open curves. To identify different		compass. Write and draw
	_	• list the types of	circle and its
	polygons and their	symmetry	
	types.	07777 7 0	parts.
❖ Geometrical	Identify circle and	SKILLS	A11 /
=	its parts.	• Creating	•Able to names
tiling	To construct circles	Working together	such as
❖ Symmetry	of different radii	• Inquiry	hundreds place,
DECIMAL	using a compass.		tens place, etc.
* Reading a		APPLICATION	Converting
decimal numeral		Construct parallel lines	fractions to
❖ Equivalent		and intersecting lines	decimals and
decimals		with ice-cream sticks	decimals to
❖ Comparison of		and write their	fractions
decimals		attributes as well.	•
❖ Comparison of		Practice to draw and	
unlike decimals		find relation between	
❖ Addition and		radius and diameter of	
subtraction of		the circle.	
decimals		Demonstrate decimals	
•		everyday while dealing	
		with money, weight,	
		length etc.	
		Give examples of real	
		life objects that	
		demonstrate the	
		relationship b/w	
		hundreds,	
		thousandths etc.	
		UNDERSTANDING:	
		• Usage of shapes	
		• Use different radius	
		and diameters	
		backgrounds	
		Write decimals	

numbers  More about factors  Finding prime numbers  Coprime	Students will be able to:  Create a variable  Write a script that uses variables  Create a simple game using variables  Make use of simple Animation such as changing Sprites, using different blocks	<ul> <li>KNOWLEDGE:</li> <li>Identify the icon of Scratch</li> <li>List method to create a new variable</li> <li>Enhance the use of different blocks including variables</li> <li>SKILLS:</li> <li>Logical Skills</li> <li>Critical thinking skill</li> <li>Observation skills</li> <li>APPLICATION:</li> <li>Practical Based explanation</li> <li>Make variables</li> <li>Create script using variables</li> <li>Understand more about Scratch</li> <li>Understand the term variable</li> </ul>	• Interpersonal • Spatial • Logical	Students will be able to:  • Use the commands to make variables and use them in programming  • Create an animated application:  • Example – Changing location & Costumes to give an effect of animation
CONDUCTIO	ON OF PT-2 ASSESS	MENT(Fourth Week Of N	• Interpersonal	Students will be

		Students will be	IIIIOW DDD GD.	• interpersonal	Students will be
	Fractional	able to:	KNOWLEDGE	<ul> <li>Intrapersonal</li> </ul>	able to:
DECEMBER	Numbers	Students will be	Demonstrate how to	• Logical	•able to read and
	* Types of	able to:	split the pizza in half,		write
No of Days: 11	fractions	Reducing fractions	quarters and fourths		<ul><li>Fractions and</li></ul>
	Reducing to	to its lowest form.	SKILLS		make
	lowest form		Application skills		comparisons
	•	•	<u> </u>	•	

	* Comparison of mixed numerals		Creative-thinking skills. Problem-solving skills APPLICATION Design the fraction problems. Interpret like and unlike . UNDERSTANDING Compare fractions Differentiate types of fractions.		using the formulae.
JANUARY No of Days: 18	ADDITIONAL AND SUBTRACTION OF FRACTIONAL NUMBERS  Addition of fractional numbers  Subtraction of fractional numbers  Mixed numerals  PERIMETER AND AREA  Concept of area  Unit of area  Determine area of a figure by counting squares.	Students will be able to: Compare fractions with like denominators To add and subtract fractions with like and unlike denominators  To solve fraction word problems using the CUBS strategy.  To find perimeter without using formula.  • To find area of regular and irregular shapes by counting squares.	ENOWLEDGE Demonstrate how to split the pizza in half, quarters and fourths Know basic addition and subtraction SKILLS Application skills Creative-thinking skills. Problem-solving skills APPLICATION Design the fraction problems. Interpret like and unlike Compute addition and subtraction fractional numbers Able to solve word problems with CUBS strategy.  • Measure the diary and find perimeter.	<ul> <li>Interpersonal</li> <li>Spatial</li> <li>Logical</li> </ul>	Students will be able to:  • Evaluate addition and subtraction of fractional numbers.  • Solve fraction word problems using CUBS strategy.  • Find perimeter and area with formulas and without formula.

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	<ul> <li>Standard unit of area</li> </ul>		UNDERSTANDING Compare fractions Differentiate types of fractions. Interpret real life cases when the problem is asked in the form of Fractional numbers.		
FEBRUARY No of Days: 23	TIME  ❖ Using a.m. and p.m.  ❖ Time in hours, minutes and seconds  ❖ The 24-hour clock time  ❖ Calendar 2022  ❖ Converting time  ❖ Addition and subtraction of time	Students will be able to: To read time on a clock to exact minute  • To express time in a.m. and p.m  • To understand the relation between 24-hour and 12-hour time and its conversion  • To understand duration of time and duration of time and days	<ul> <li>KNOWLEDGE</li> <li>Know about half past, quarter past, quarter to time, concept of a.m. and p.m.</li> <li>Sketch a clock on notebook as cover page.</li> <li>SKILLS</li> <li>Critical thinking</li> <li>Collaboration</li> <li>Communication</li> <li>Social skills</li> <li>Creativity</li> <li>Life skill</li> <li>APPLICATION</li> <li>Employ punctuality and time management in school life is the key to success for all students.</li> <li>Spot the mistake and correct it.</li> <li>UNDERSTANDING</li> <li>Differentiate b/w a.m. and p.m.</li> </ul>	<ul> <li>Interpersonal</li> <li>Spatial</li> <li>Logical</li> </ul>	Students will be able to: To tell time to the exact minute.  • To express time in a.m. and p.m.  • To be able to convert time in 12-hour clock to 24-hour clock and vice versa.  • To express time duration in hours, minutes and days.  • To understand and identify occurrence of leap year.  • To be able to write dates and work with timeline.

			<ul> <li>Solve different units of time and conversions.</li> <li>Prepare T-chart to find elapsed time is an easy strategy for the students.</li> </ul>		
MARCH	Data handling	Students will be able to:  • To construct and interpret bar graph with scale.  • To be able to construct and pictographs	<ul> <li>KNOWLEDGE</li> <li>Know about grouping of data collected, simple pictograph and bar graph.</li> <li>Select an image of their choice and based on that they will create a pictograph and frame questions related to it.</li> <li>SKILLS</li> <li>Creating</li> <li>Collaboration</li> <li>Inquiry</li> <li>APPLICATION</li> <li>Construct a pictograph of your family and relatives how many friends do they have and make a pictograph of the collected data by pasting stick-ones or bindis for each.</li> <li>UNDERSTANDING</li> <li>Compare different</li> </ul>	<ul> <li>Logical- mathematical intelligence</li> <li>Spatial intelligence</li> <li>Intrapersonal intelligence</li> </ul>	<ul> <li>To be able to interpret and construct pictographs</li> <li>To be able to interpret and construct bar graphs</li> </ul>

			bar graphs and answer the questions.			
REVISION TERM-2						
CONDUCTION OF TERM 2 ASSESSMENT						