## INFANT JESUS CONVENT SCHOOL ANNUAL PLAN <br> MATHS <br> CLASS: IV

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


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

## REVISION PT-1

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

JULY
No of Days: 23

MULTIPLICATION

* Multiplication by

2 digit,3digit and
4 digit

* Properties of multiplication
* Multiplies of 10,100
* Word related problems


## ROMAN

NUMERALS

* Hindu Arabic numerals
* Addition and subtraction in roman numerals

PATTERNS

Students will be able to:

- develop understanding of multiplication
- Visualise a variety of methods, useful for approaching problems.
- Know multiplication tables from 11 to 15
- identify Roman Numerals
- understand and create growing and reducing patterns


## KNOWLEDGE:

- Recall tables up to 10.
- Know repeated addition concept.
- List skip counting by 2s,5s,10s
- Read Hindu Arabic Numerals
- know about patterns and their unit of repeat, growing and reducing shape/number/ alphabet pattern repeating pattern,


## SKILLS:

- Analytical Skills
- Computing Skills
- Problem solving skills
- Patterning skills
- Application skills
- Representational skills


## APPLICATION:

- Demonstrate the product of the numbers multiplied with 10 and 100
- Analyse the numbers to be multiplied first and then find the
- Logicalmathematical intelligence
- Intrapersonal
- Spatial intelligence

Students will be able to:

- Apply the concept of multiplication to solve questions.
- Use different strategies to do multiplication.
- Perform multiplication of 3 digit number, 4 digit by 2 digit number and 3 digit numbers
- Understand Roman numerals and able to use them at appropriate places.
- Use
mathematical patterns, i.e., number patterns in addition, Subtraction, multiplication and division.

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


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


|  | and diameter of the circle. <br> * Circumference of a circle <br> * Geometrical shapes and tiling <br> * Symmetry <br> DECIMAL <br> * Reading a decimal numeral <br> * Equivalent decimals <br> * Comparison of decimals <br> * Comparison of unlike decimals <br> * Addition and subtraction of decimals | and open curves. To identify different polygons and their types. <br> Identify circle and its parts. <br> To construct circles of different radii using a compass. | related terms <br> - list the types of symmetry <br> SKILLS <br> - Creating <br> - Working together <br> - Inquiry <br> APPLICATION <br> Construct parallel lines and intersecting lines with ice-cream sticks and write their attributes as well. Practice to draw and find relation between radius and diameter of the circle. <br> Demonstrate decimals everyday while dealing with money, weight, length etc. <br> Give examples of real life objects that demonstrate the relationship b/w hundreds, thousandths etc. UNDERSTANDING: <br> - Usage of shapes <br> - Use different radius and diameters backgrounds <br> - Write decimals |  | compass. <br> Write and draw circle and its parts. <br> - Able to names such as hundreds place, tens place, etc. <br> Converting fractions to decimals and decimals to fractions |
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| NOVEMBER <br> No of Days: 22 | MULTIPLES AND FACTORS <br> * Even and odd numbers <br> * More about factors <br> * Finding prime numbers <br> * Coprime numbers <br> * Prime factorisation by divison method <br> * H.C.F \& L.C.M | Students will be able to: <br> - Create a variable <br> - Write a script that uses variables <br> - Create a simple game using variables <br> - Make use of simple Animation such as changing Sprites, using different blocks | KNOWLEDGE: <br> - Identify the icon of Scratch <br> - List method to create a new variable <br> - Enhance the use of different blocks including variables <br> SKILLS: <br> - Logical Skills <br> - Critical thinking skill <br> - Observation skills <br> APPLICATION: <br> - Practical Based explanation <br> - Make variables <br> - Create script using variables <br> UNDERSTANDING: <br> - Understand more about Scratch <br> - Understand the term variable | - Interpersonal <br> - Spatial <br> - Logical | Students will be able to: <br> - Use the commands to make variables and use them in programming <br> - Create an animated application: <br> - Example Changing location \& Costumes to give an effect of animation |
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| CONDUCTION OF PT-2 ASSESSMENT(Fourth Week Of November) |  |  |  |  |  |
| DECEMBER <br> No of Days: 11 | Fractional <br> Numbers <br> * Types of fractions <br> * Reducing to lowest form | Students will be able to: Students will be able to: Reducing fractions to its lowest form. | KNOWLEDGE: KNOWLEDGE <br> Demonstrate how to split the pizza in half, quarters and fourths SKILLS Application skills | - Interpersonal <br> - Intrapersonal <br> - Logical | Students will be able to: <br> -able to read and write <br> -Fractions and make comparisons |


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


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


|  |  |  | -Solve different units of time and conversions. <br> -Prepare T-chart to find elapsed time is an easy strategy for the students. |  |  |
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| MARCH | Data handling | Students will be able to: <br> - To construct and interpret bar graph with scale. <br> - To be able to construct and pictographs | KNOWLEDGE <br> - Know about grouping of data collected, simple pictograph and bar graph. <br> - Select an image of their choice and based on that they will create a pictograph and frame questions related to it. SKILLS <br> - Creating <br> - Collaboration <br> - Inquiry <br> APPLICATION <br> - 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. <br> UNDERSTANDING <br> - Compare different | - Logicalmathematical intelligence <br> - Spatial intelligence <br> - Intrapersonal intelligence | - To be able to interpret and construct pictographs <br> - To be able to interpret and construct bar graphs |


|  |  | bar graphs and <br> answer the <br> questions. |  |  |
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| REVISION TERM-2 |  |  |  |  |
| CONDUCTION OF TERM 2 ASSESSMENT |  |  |  |  |

