SIVASAKTHI INTERNATIONAL SCHOOL, THALANAYAR
PLANNED ACTIVITIES
MATHS SUBSTITUTION / KINDER SUBJECT INTEREST

GRADE: 1 **SUBJECT: MATHS**

CH: 1 NUMERALS

Children must know to

- Count the objects
- Identify the numbers (1-100)
- Read and write the numbers(1-100)
- Write before, between and after numbers
- Digit and place of the digit

CH: 2 SHAPES

Children able to

- Identify and draw the 2D(plane)shapes
- Read and write the names of the 2D(plane)shapes
- Identify the relevant objects

CH: 3 TABLES

Children know to

- Recite and write 1-5 tables upto 20 numbers

CH: 4 BASIC OPERATIONS

Children know to

- Identify the symbols of addition(＋), subtraction(－), multiplication(×)
- Add 1-digit numbers
- Subtract 1-digit numbers
- Count the numbers in backward and forward

CH: 5 MONEY VALUE

Children able to

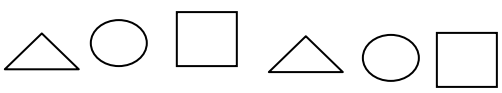
- Learn name of the Indian currency (It named us rupees)
- Identify the currency notes and coins of Hundred rupees, fifty rupees, ten rupees, twenty rupees, five rupees, one rupees, two rupees
- Count No.of tens, ones, fives, two etc… in the total amount
  (Eg: Rs.47= 4 tens, 1five, 1two rupees
  Or Rs.47= 2twentys, 7 ones)

CH: 6 PATTERNS

Children able to

- Complete the patterns

Eg: A) 1,2,3,4, ……., …….,

B) 

C) AAA,BBB,AAA, …….,

CH: 7 MENTAL ABILITY

Children able to

- ❖ Solve application sums(Refer text book)
- ❖ Answer understanding & knowledge based questions

Eg: 1. How many legs have 8 legs if one cow has 4 legs?
2. How can you share 15 chocolates to 3 children?
3. How many pen can you for Rs.50, if cost of one pen is Rs.5?

CH: 8 TIMES AND CALENDAR

TIME

Children able to

- ❖ Know the numbers on the clock and hands

CALENDAR

Children able to

- ❖ Read and write the week days month and of the year with a spellings
- ❖ Know the no.of months in a year, weeks in a year, days in a week

CH: 9 DATA HANDLING

Children know to

- ❖ Classifies the data
- ❖ Count the pictures

CH: 10 MENSURATIONS

Children able to

- ❖ Know length - Long and short, tall- short, thick- thin,
- ❖ Know weight - Heavy and light
- ❖ **Understand non-standard units-**
  (i) Body parts which helps to measure length- hand-span, cubit, fingers, pace
  (ii) To find weight of the objects by balancing method

SIVASAKTHI INTERNATIONAL SCHOOL, THALANAYAR
THE ACADEMIC YEAR 2020-21
MATHS SUBSTITUTION/ SUBJECT INTEREST

GRADE: 2 **SUBJECT:MATHS**

CH: 1 NUMERALS

Children must know to

- Count the objects
- Identify the numbers (1-200)
- Read and write the numbers(1-200)
- Write before, between and after numbers
- Digit and place of the digit
- Place value of the numbers
- Odd and even numbers
- Read and write ordinal numbers upto 10
- Write expanded and short form the 2-digit numbers

CH: 2 SHAPES

Children able to

- Identify and draw the 2D(plane) and 3D(solid)shapes
- Read and write the names of the 2D(plane) and 3D(solid)shapes
- Identify the relevant objects
- Know the no.of lines, corners and sides of the shape
- Identify the rolling, sliding and rolling& sliding objects
- Answer why and how questions (Eg:Why the ball is rolling? How the box is sliding? Why the coin can slide and roll?)

CH: 3 BASIC OPERATIONS

Children know to

- Identify the symbols of addition(＋), subtraction(－), multiplication(×)
- **Addition:**
  Add 2-digit numbers with regrouping
- **Subtraction:**
  Subtract 2-digit numbers with regrouping
- Count the numbers in backward and forward
- **Multiplication:**

(i) Recite and write 2-7 tables upto 20 numbers
(ii) Group the pictures with a help of tables

CH: 4 MONEY VALUE

Children able to

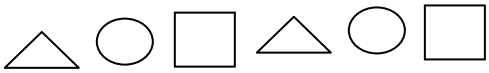
- Learn name of the Indian currency (It named us rupees)
- Identify the currency notes and coins of Hundred rupees, fifty rupees, ten rupees, twenty rupees, five rupees, one rupees, two rupees
- Count No.of tens, ones, fives, two etc… in the total amount
  (Eg: Rs.47= 4 tens, 1five, 1two rupees
  Or Rs.47= 2twentys, 7 ones)
- Know to find the total and balance

CH: 5 PATTERNS

Children able to

- ❖ Complete the patterns

Eg: A) 1,2,3,4, ……., …….,

B) 

D) AAA,BBB,AAA, …….

,

E) 

CH:6 MENTAL ABILITY

Children able to

- ❖ Solve application sums(Refer text book)
- ❖ Answer understanding & knowledge based questions

Eg: 1.How many legs have 8 legs if one cow has 4 legs?

2. How can you share 15 chocolates to 3 children?
3. How many pens can you for Rs.50, if cost of one pen is Rs.5?
4. What is the greatest 3-digit number?
5. Ahamed has a 2-digit number, the number 6 is in tens place and 3 is in ones place. What is the number?

CH:8 TIME AND CALENDAR

TIME

Children able to

- ❖ Know the numbers on the clock and hands
- ❖ Identify the hour and minute hand.
- ❖ Answer the following question(WHEN):

1. When did you wake up?
2. When you get ready for school?
3. When will you return back to school?

CALENDAR

Children able to

- ❖ Read and write the week days month and of the year with a spellings
- ❖ Know the no.of months in a year, weeks in a year and month, days in a week
- ❖ Understand the days before, after, yesterday

CH: 9 DATA HANDLING

Children know to

- ❖ What is data handling?
- ❖ Classifies the data with help of pictograph
- ❖ Count the pictures and find the total
- ❖ Answer the questions from the pictograph

CH: 10 MENSURATIONS

Children able to

- ❖ Know length - Long and short, tall- short, thick- thin,
- ❖ Know weight - Heavy and light

Understand non standard units-

(i) Body parts which helps to measure length- hand-span, cubit, fingers, pace

(ii) To find weight of the objects by balancing method

SIVASAKTHI INTERNATIONAL SCHOOL, THALANAYAR
THE ACADEMIC YEAR 2020-21
MATHS SUBSTITUTION/ SUBJECT INTEREST

GRADE: 3 **SUBJECT: MATHS**

CH:1 NUMERALS

Children must know to

- Count the objects
- Identify the numbers (1-1000)
- Read and write the numbers(1-1000)
- Write before, between and after numbers
- Digit and place of the digit
- Place value of the numbers
- Odd and even numbers
- Read and write ordinal numbers upto 20
- Write expanded and short form the 3-digit numbers

CH:2 SHAPES

Children able to

- Identify and draw the 2D(plane) and 3D(solid)shapes
- Read and write the names of the 2D(plane) and 3D(solid)shapes
- Identify the relevant objects
- Identify the rolling, sliding and rolling& sliding objects
- Answer why and how questions (Eg: Why the ball is rolling? How the box is sliding? Why the coin can slide and roll?)
- Characteristic of 2D and 3D shapes (Know the no.of lines, corners and sides of the shape)

CH:3 BASIC OPERATIONS

Children know to

- Identify the symbols of addition(＋), subtraction(－), multiplication(×), division(÷)
- **Addition:**

(i) Write addition statement
(ii) Add 3-digit numbers with regrouping

- **Subtraction:**

(i) Write subtraction statement
(ii) Subtract 3-digit numbers with regrouping
(iii) Count the numbers in backward and forward

- **Multiplication:**

(i) Write multiplication sentence
(ii) Recite and write 2-10 tables upto 20 numbers
(iii) Group the pictures with a help of tables
(iv) Multiplication by repeated addition
(v) Multiply 2-digit numbers with 2-digit numbers

- **Division:**

(i) Write division statement
(ii) Division by repeated subtraction
(iii) Division by sharing equally or grouping pictures
(iv) Division using tables

CH:4 MONEY VALUE

Children able to

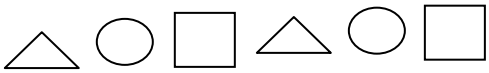
- Learn name of the Indian currency (It named us rupees)
- Identify the currency notes and coins of two thousand rupees, five hundred, two hundred rupees, Hundred rupees, fifty rupees, ten rupees, twenty rupees, five rupees, one rupees, two rupees
- Read and write rupees in words and figures
- Count No.of hundreds, thousands, tens, ones, fives, two in the total amount
  (Eg: Rs.47= 4 tens, 1five, 1two rupees
  Or Rs.47= 2twentys, 7 ones)
- Know to find the total and balance

CH:5 PATTERNS

Children able to

- Complete the patterns

Eg: A) 1,2,3,4, ……., …….,

B) 

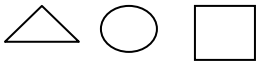
F) AAA,BBB,AAA, …….

,

G) 

- Draw/ make patterns

Eg: Draw AABBCC patterns

(i) Draw a patterns using given shape in the AA BB order 

(ii) Growing and decreasing patterns in numbers & shapes

CH: 6 MENTAL ABILITY

Children able to

- Solve application sums(Refer text book)
- Answer understanding & knowledge based questions

Eg: 1. How many legs have 8 legs if one cow has 4 legs?
2. How can you share 15 chocolates to 3 children?
3. How many pens can you for Rs.50, if cost of one pen is Rs.5?
4. What is the greatest 3-digit number?
5. Ahamed has a 2-digit number, the number 6 is in tens place and 3 is in ones place. What is the number?

CH: 8 TIMES AND CALENDAR

TIME

Children able to

- ❖ Identify the hour and minute hand.
- ❖ Read and write the time in words and figures
- ❖ Draw a clock and its hands on the clock
- ❖ Answer the following question(WHEN):

1. When did you wake up?
2. When you get ready for school?
3. When will you return back to school?

CALENDAR

Children able to

- ❖ Read and write the week days month and of the year with a spellings
- ❖ Know the no.of months in a year, weeks in a year and month, days in a week
- ❖ Understand the days before, after, yesterday

CH: 9 DATA HANDLING

Children know to

- ❖ What is data handling?
- ❖ Classifies the data with help of pictograph
- ❖ Count the pictures and find the total
- ❖ Answer the questions from the pictograph

CH: 10 MENSURATIONS

Children able to recall

- ❖ Know length - Long and short, tall- short, thick- thin,
- ❖ Know weight - Heavy and light
- ❖ **Understand the difference between non-standard and standard units-**
  Non-standard unit:

(i) Body parts which helps to measure length- hand-span, cubit, fingers, pace
(ii) To find weight of the objects by balancing method

Children able to

- ❖ **Learn and know Standard unit and metric:**

(i) Length are measured by the unit of **cm,m,km**
Centimetre - smaller length, metre- longer length, kilometre- distance between two places

100 cm=1 m, 1000 m = 1 km

The standard form of **cm is centimetre, km is kilometre, m is metre**
(ii) Weight are measured by the unit of **g,kg**
Gram- smaller quantity, kilogram- bigger quantity

1000 g = 1 kg

The standard form of **kg is kilogram, g is gram**
(iii) Capacity measured by the unit of **ml, l**
Litre- bigger quantity of liquid things, millilitre- smaller quantity of liquid things

1000 ml= 1 l

The standard form of **ml is millilitre, l is litre**

SIVASAKTHI INTERNATIONAL SCHOOL, THALANAYAR
THE ACADEMIC YEAR 2020-21
MATHS SUBSTITUTION/ SUBJECT INTEREST

GRADE: 4&5 **SUBJECT: MATHS**

1. NUMBERS

- Know to read and write numbers name in all digits.
- **They know to answer the following questions:**
  Eg: The smallest 1- digit number is ----------
  The greatest 1- digit number is ----------
- **Know to write the predecessors and successors:**
  Eg: Predecessor of 21 is --------- (before 21)
  Predecessor of 99 is -------- (before 99)
  Successors of 101 is --------- (after 101)
- **Know to write place value and face value:**

Eg; The place value of 2 in 421 is ---------- (tens-2tens)
The place value of 5 in 590 is ---------- (hundreds- 5 hundred)
The face value of 6 in 655 is ---------- (same 6)

- **They should know read and write ordinal numbers upto 50.**

2. ADDITION:

- Know to add the numbers in different digits (21+365+2347+1000)
- Application sum can be solved.**(Refer text books)**

3. SUBTRACTION:

- Know to subtraction the numbers in different digits (47659-1236)
- Problem solving questions can be solved.(**Refer text books**)

4. MULTIPLICATION:

- Know to multiply the numbers with application problem.
- Know to add numbers.
- To apply multiplication tables.

5. DIVISION

- Long division
- Divisions by repeated subtraction
- Division by using multiplication table
- Application questions.

6. MENSURATION

- Perimeter and its formula.
- Area using square blocks.
- Properties of circle
- Quantity (length , height, weight and its units and its conversion

7. TIME

- Conversion of time

8. MONEY

- Conversion of money, finding total and balance.
- Know to solve application sum.

9. DATA HANDLING

- Draw pictograph
- Data analyzing and Answer the questions

10. MENTAL ABILITIES

- Understanding & knowledge based questions can be solved.

11. PATTERNS

- Symmetry , asymmetry (non-symmetry)
- Know to draw patterns.
- Identify the patterns and its types.

12. FRACTION

- What is fraction?
- Comparing fraction numbers
- Know to write fraction numbers
- Help of pictures.

SIVASAKTHI INTERNATIONAL SCHOOL, THALANAYAR
THE ACADEMIC YEAR 2020-21
MATHS SUBSTITUTION/ SUBJECT INTEREST

GRADE: 6 **SUBJECT: MATHS**

1. NUMBERS

- Knowing Indian system and international system of numbers(put commas)
- Know about integers, whole numbers.
- Predecessors and successors and using symbols
- Knowing number name in corers.
- Decimal numbers (conversion)

2. PLAYING WITH NUMBERS

- Finding factors ,multiples, odd and even numbers , prime and composite numbers
- Finding L.C.M and H.C.F(using L division)

3. SHAPES

- Knowing point, line, line segment, and ray.
- Knowing names of triangle(based on sides and angles)
- Knowing properties of triangle, square, quadrilateral, pentagon, and hexagon.
- Knowing 3D shapes and its properties

4. BASIC OPERATIONS

- Addition, subtraction, multiplication, division
- They should know to add, sub, multiply and divide more than 3-digit numbers and its estimated value.
- Division: They should learn divisibility rule and long division

5. FRACTION

They should know to

- Identify the types of fraction
- Compare fraction numbers
- Convert mixed fraction into fraction, fraction to mixed fraction
- Simplifies the fraction numbers (addition, subtraction, multiplication, division) using LCM and HCF method

6. ALGEBRA

- They should tell what is algebra?
- They know to

Write the algebraic expression

Write the properties of arithmetic (commutative law: A+B=B+A, distributive law: A*(B+C)= A*B+A*C) and Solve the equations

7. TIME AND CALENDAR

- Application and time conversion
- They know to solve problem solving,
- Convert hour to minute and minute to hour, minutes to seconds and seconds to minutes, hour to seconds , day to hour and hour to day

8. DATA HANDLING

They know to

- Analyses and classifies the data
- Frame tables
- Draw the graph (pictograph, bar graph, tally mark)
- Write scale(x axis, y axis and units)

9. MENSURATION

- They should know the formulae for area and perimeter of square, rectangle and regular hexagon.(Refer books)
- They know to apply the formula for application sums

SIVASAKTHI INTERNATIONAL SCHOOL, THALANAYAR
THE ACADEMIC YEAR 2020-21
MATHS SUBSTITUTION/ SUBJECT INTEREST

GRADE: 7TH **SUBJECT: MATHS**

I.NUMBERS

- Knowing about number system
- Identify the whole, natural, integer, decimals, rational and irrational numbers

II. FRACTIONS

- Knowing types of fractions
- Operations of fraction (addition, subtraction, multiplication, division of fractions)
- Conversion of fractions to decimal
- Conversion of fraction to ratio

III. DATA HANDLING

- Knowing collection & organization of data
- Knowing about arithmetic mean, median, mode.
- Probability

IV.ALGEBRA

- Solve algebraic equation
- Covert equation to statement
- Convert statement to equation

V.LINES AND ANGLES

- Types of angles
- Finding complementary and supplementary angle for an angle

VI.GEOMETRY

- Triangle and its properties
- Pythagoras theorem
- Congruence of line segment, angles, triangle

VII.SYMMETRIC

- Types of symmetry
- Patterns

VIII. COMPARING QUANTITIES

- Conversion of percentage values (decimal to percentage, percentage to decimal)
- Find simple interest and find profit and loss %

SIVASAKTHI INTERNATIONAL SCHOOL, THALANAYAR
THE ACADEMIC YEAR 2020-21
MATHS SUBSTITUTION/ SUBJECT INTEREST

GRADE: 8 **SUBJECT: MATHS**

I.NUMERAL

- Knowing about rational numbers
- Verifying the properties for rational numbers(closure, commutative, associative)
- Roles of 0 and 1. Knowing to write reciprocals.
- Addition, subtraction, multiplication and division of rational numbers

II.SHAPES

- Knowing about solid shapes and its characters
- Mapping using shapes

III.ALGEBRA

- Solving linear equation. Ex. x+7=12, x=?
- Factorization of algebraic equation (using identities and division method)
- Multiplication of monomial and binomial

IV.FUN WITH NUMBERS

- Test of divisibility
- Making 2 digit and 3 digit numbers using given numbers
- Finding missing number. Ex . 2q9 + 32q =640, find q=?

V.MENSURATION

- Find area , volume, surface area of trapezium, cube, cuboid, cylinder and general quadrilateral.
- Knowing formulae

VI.CUBES AND SQUARE

- Find cubes and squares of a number
- Find cube root of a number
- Finding square roots for decimals and whole numbers by using prime factorization, division method)

VII.PROPORTIONS

- Knowing types of proportion
- Application of inverse and direct proportion

VIII.GEOMETRY

- Angle sum properties and find missing angles of polygons

IX.DATA HANDLING

- Using data make pie chart and bar chat
- Find mean, median, mode
- Find the probability of coin and dice

X.EXPONENTS

- Laws of exponents
- How to write negative exponents and positive exponents

XI.PERCENTAGE

- Find discount and value added tax(VAT)
- Find compound interest using formula

XII.RECITATION

- Formulae from all chapters
- Tables
- Properties and laws
- Identities

SIVASAKTHI INTERNATIONAL SCHOOL, THALANAYAR
THE ACADEMIC YEAR 2020-21
MATHS SUBSTITUTION/ SUBJECT INTEREST

GRADE: 9 **SUBJECT: MATHS**

I. NUMERAL

- Find rational numbers in number line
- Rational numbers and irrational numbers
- Real numbers and their identities

II.SHAPES

- Characteristics of circle, parallelogram and quadrilateral (parts name, identification of shapes)

III.ALGEBRA

- Knowing linear equation of two variables. Ex. x + y =3 and graphing
- Polynomial(finding values of variables, division, factor theorem, algebraic identities)

IV.GEOMETRY

- Define geometrical elements (line, point, straight line, surface, line segment, parallel and perpendicular lines)
- Euclid's five postulates
- Theorems of lines and angles

V.MENSURATION

- Area of parallelogram and triangle
- Surface area and volume of cuboid, cube, cylinder, cone, sphere

VI.TRIGONOMETRY

- Congruence of triangle (SAS, SSS, ASA, RHS)
- Properties of triangle
- Heron's formula

VII.PROBABILITY AND STATISTICS

- Make bar diagram, histogram, frequency table by using given data
- Find mean, median, mode
- Find probability of coin tossing and dice rolling by using formula

VIII.RECITATION

- All formulae from all chapter
- Properties and theorems.

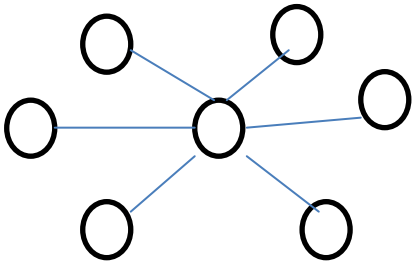
MENTAL ABILITY QUESTIONS FOR HIGHER CLASSES

1. COMPUTER is written as REUVQNPC then how will MEDICINE be written?

2. **134** means 'good and tasty'**. 478** means 'see good pictures'. **729** means 'pictures are fruit' here which digit stands for see?

3. ROSE is 6821, CHAIR is 73456, PREACH is 961473 than SEARCH is?

4. Put the numbers 1 to 7 in the circles . Each straight line of numbers adds up to the same total .



5. Guru walks 20 m towards north. He then turns left and walk 40 m. he again turn left and walk 20m . further he moves 20 m after turning to the right. How far he is from his original position.

6. If 2 x 3 =812, 4 x 5 = 1620, then 6 x 7 =?

7. If March is to August, then c is to?

8. 48, 45, 40, 33, 24, _, _