

## Topics to be Covered in 6<sup>th</sup> Class Mathematics

Topic	Content
Patterns in Mathematics	What is Mathematics?
Patterns in Mathematics	Patterns in Numbers
Patterns in Mathematics	Visualizing Number Sequences
Patterns in Mathematics	Relations among Number Sequences
Patterns in Mathematics	Patterns in Shapes
Patterns in Mathematics	Relation to Number Sequences
Lines and Angles	Point
Lines and Angles	Line Segment
Lines and Angles	Line
Lines and Angles	Ray
Lines and Angles	Angle
Lines and Angles	Comparing Angles
Lines and Angles	Comparing angles by superimposition

Lines and Angles	Comparing angles without superimposition
Lines and Angles	Making Rotating Arms Let us
Lines and Angles	Special Types of Angles
Lines and Angles	Classifying Angles
Lines and Angles	Measuring Angles
Lines and Angles	Degree measures of different angles
Lines and Angles	Unlabelled protractor
Lines and Angles	Labelled protractor
Lines and Angles	How can we measure angles directly without having to subtract?
Lines and Angles	Drawing Angles
Lines and Angles	Types of Angles and their Measures
Number Play	Numbers can Tell us Things
Number Play	Supercells
Number Play	Patterns of Numbers on the Number Line
Number Play	Playing with Digits
Number Play	Digit sums of numbers
Number Play	Pretty Palindromic Patterns

Number Play	Reverse-and-add palindromes
Number Play	The Magic Number of Kaprekar
Number Play	Clock and Calendar Numbers
Number Play	Playing with Number Patterns
Number Play	An Unsolved Mystery — the Collatz Conjecture!
Number Play	Simple Estimation
Number Play	Games and Winning Strategies
Data Handling and Presentation	Collecting and Organising Data
Data Handling and Presentation	Pictographs
Data Handling and Presentation	Drawing a Pictograph
Data Handling and Presentation	Bar Graphs
Data Handling and Presentation	Drawing a Bar Graph
Data Handling and Presentation	Artistic and Aesthetic Considerations
Data Handling and Presentation	Info-graphics
Prime Time	Common Multiples and Common Factors
Prime Time	Prime Numbers
Prime Time	Can we list all the prime numbers from 1 to 100?

Prime Time	Co-prime numbers for safekeeping treasures
Prime Time	Prime Factorisation
Prime Time	Prime factorisation of a product of two numbers
Prime Time	Using prime factorisation to check if two numbers are co-prime
Prime Time	Using prime factorisation to check if one number is divisible by another
Prime Time	Divisibility Tests
Prime Time	Fun with numbers
Prime Time	Special numbers
Prime Time	A prime puzzle
Perimeter and Area	Perimeter
Perimeter and Area	Perimeter of a rectangle
Perimeter and Area	Perimeter of a square
Perimeter and Area	Perimeter of a triangle
Perimeter and Area	Perimeter of a regular polygon
Perimeter and Area	Area
Perimeter and Area	Area of a Triangle
Fractions	Fractional Units and Equal Shares

Fractions	Fractional Units as Parts of a Whole
Fractions	Measuring Using Fractional Units
Fractions	Marking Fraction Lengths on the Number Line
Fractions	Mixed Fractions
Fractions	Equivalent Fractions
Fractions	Expressing a fraction in lowest terms (or in its simplest form)
Fractions	Comparing Fractions
Fractions	Addition and Subtraction of Fractions
Fractions	Adding fractions with the same fractional unit or denominator
Fractions	Adding fractions with different fractional units or denominators
Fractions	Subtraction of fractions with the same fractional unit or denominator
Fractions	Subtraction of fractions with different fractional units or denominators
Playing with Constructions	Artwork
Playing with Constructions	Squares and Rectangles
Playing with Constructions	Constructing Squares and Rectangles
Playing with Constructions	An Exploration in Rectangles
Playing with Constructions	Exploring Diagonals of Rectangles and Squares

Playing with Constructions	Points Equidistant from Two Given Points
Symmetry	Line of Symmetry
Symmetry	Reflection
Symmetry	Generating shapes having lines of symmetry
Symmetry	Rotational Symmetry
Symmetry	Symmetries of a circle
The Other Side of Zero	Integers
The Other Side of Zero	Adding and subtracting larger numbers
The Other Side of Zero	Adding, subtracting, and comparing any numbers
The Other Side of Zero	Back to the number line
The Other Side of Zero	Using the unmarked number line to add and subtract
The Other Side of Zero	Converting subtraction to addition and addition to subtraction
The Other Side of Zero	The Token Model
The Other Side of Zero	Using tokens for addition
The Other Side of Zero	Using tokens for subtraction
The Other Side of Zero	Integers in Other Places
The Other Side of Zero	Credits and debits

The Other Side of Zero	Geographical cross sections
The Other Side of Zero	Temperature
The Other Side of Zero	Explorations with Integers
The Other Side of Zero	A hollow integer grid
The Other Side of Zero	An amazing grid of numbers!