

Grade 4

Topic	objective	sub topics	objective
Number operation	whole numbers till 100,000, operations with numbers till 100,000, multiplication and division by 2-digit number, simplification of fractions, addition and subtraction of fractions, mixed numbers and improper fractions, using bar models	whole numbers multiplying and dividing fractions	Numbers up to 100,000; compare and arrange numbers up to 100,000; standard and expanded form; rounding off numbers; factors; multiples multiplication and division by a 1- digit number and by 10 using bar models; estimating and multiplying; estimating and dividing; multiplication and division by a 2-digit number; partial products; two-step word problems simplifying fractions; adding and subtracting unlike fractions; using bar models; mixed numbers- identification; fractions on number line; mixed numbers on number line; improper fractions; mixed numbers to improper and vice versa; fraction of a set (2/3 of 30 is?) using bar models
Decimals	Decimal introduction, place value of a decimal, comparing and ordering, addition and subtraction with decimals, multiply and divide decimals, estimation	place value operations with decimals	tenths, hundredths and thousandths; rounding off decimals to the nearest whole number; representing using bar models; comparing tenths, hundredths and thousandths using place value; decimal to fraction and vice versa; adding and subtracting decimals; add, subtract, multiply and divide decimals; estimating sum, difference, product and quotient; estimate and then add, subtract, multiply or divide decimals; one-step and two-step word problems using bar models;
Measurement	Multiplication and division with various units of measurement (like length, mass, volume, money), volume with unit cubes, units of volume	multiplication and division volume	use multiplication and division to deal with different measures of length (meters, centimeters, kilometers, inches, feet and yards, miles), mass (kilograms, grams, ounces and pounds), volume (liters, milliliters, gallons, quarts, pints and cups), time (hours and minutes) and money (dollars and cents) and their unit conversions; multiply or divide in compound units; two step word problems involving multiplication and division of all these units introducing cubic units; determine volume using unit cubes; units like cubic centimeter; volume of cuboid using unit cubes; Volume of cuboid=lwh; volume of water in a cube or cuboid;



	Angle measurement and drawing, identify perpendicular and parallel lines, 3D shapes (cube, cuboid), area and perimeter of squares, rectangles and composite shapes	Angles perpendicular	measuring angles using protractor; angle size; estimate angle measure; drawing angles; recognize perpendicular and parallel lines;
		and parallel lines	count the number of perpendicular and parallel lines in a given shape; using a set square to draw perpendicular and parallel lines;
Geometry		solid figures Area and perimeter	identifying solid figures like cube, cuboid, irregular shapes; draw the solid figures on dots Area and perimeter of rectangles and squares; finding missing length or width or side using area or perimeter or both; area and perimeter of composite figures; area between two rectangles (photo frame); word problems related to area and perimeter
Data analysis	analyzing data using data table and bar graph	tables and graphs	presenting data; reading and interpreting a bar graph, reading and interpreting a data table; solving questions related to bar graphs and data table
Symmetry	dealing with symmetrical and asymmetrical shapes using real life examples and using regular shapes	symmetric figures	draw line of symmetry of different shapes; make few symmetrical figures from a paper; introduce isosceles triangle, equilateral triangle, parallelogram, rhombus, trapezoid, complete the symmetric figure on a square grid

Order of subtopics

whole numbers		
multiplying and dividing whole numbers		
Decimals place value		
operations with decimals		
fractions		
Angles		
perpendicular and parallel lines		
solid figures		
measurement(multiplication and division)		
Area and perimeter		
tables and graphs		
volume		
symmetric figures		