

Objectives: Develop foundational number skills, introduce basic operations, and understand simple measurements and geometry.

- Counting (forward and backward)
 - Place value (units, tens, hundreds)



BASIC OPERATIONS

- Simple addition and subtraction (single-digit and two-digit numbers)
- Introduction to multiplication (using objects and arrays)
 - Introduction to division (sharing equally)
- Word problems involving basic operations
- Mental math strategies for basic operations

FRACTIONS

- diversional transformation of the second sec
- EX. Understanding the terms numerator and denominator
 - Identifying and shading simple fractions.

MEASUREMENT

- **C** Length (non-standard and standard units)
 - Time (reading clocks to the hour and half-hour)
- Weight (non-standard units)



🛃 Money

GEOMETRY



Identifying and naming 2D shapes (circle, triangle,

square, rectangle)

Basic properties of 2D shapes (sides and corners

DATA AND PROBABILITY

Sorting and classifying objects

📌 Introduction to pictographs





Objectives: Strengthen operations, introduce fractions and decimals, and explore more complex geometry and data analysis.



- Place value (up to thousands)
 - Reading and writing numbers (up to 10,000)
 - Comparing and ordering numbers
 - Addition and subtraction with larger numbers (up to 6 digits).
- Multiplication and division (2-digit by 1-digit numbers).
 - Estimation and rounding (nearest 10, 100)

FRACTIONS AND DECIMALS



- Simple equivalent fractions
- Addition and subtraction of fractions with the same denominator
- Introduction to decimals (tenths and hundredths)

MEASUREMENT



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E.

- Length, weight, and volume (using standard units)
- Time (reading clocks to the minute, understanding am/pm)
- Introduction to perimeter
 - Money skills (global currency value).

GEOMETRY.



Symmetry and tessellations

DATA AND PROBABILITY



Collecting and organizing data



Drawing bar graphs

Simple probability concepts (likely/unlikely, certain/impossible)





Objectives: Prepare students for standardized exams with advanced operations, fractions, and applied math.



- Place value (up to millions)
 - Reading and writing numbers (up to millions)
- Multiplication and division (multi-digit numbers) ST.
 - Prime numbers, factors, and multiples.
- Order of operations (BODMAS/BIDMAS).

Sequence

FRACTIONS, DECIMALS AND PERCENTAGES



- Equivalent fractions
- Addition and subtraction of fractions with different denominators EX.
 - Converting fractions to decimals and percentages
- Word problems involving fractions, decimals, and percentages
- Addition and subtraction of decimals

GEOMETRY



Properties of 2D and 3D shapes



Basic coordinate geometry (first quadrant)

MEASUREMENT



- Time (24-hour clock and elapsed time)
 - Area and perimeter of rectangles and compound shapes
 - Time zones (global exposure)
- Money skills (concept of profit and loss)

DATA AND PROBABILITY



- Collecting and interpreting data
- Bar graphs, pie charts, and line plots
- Mean, median, mode, and range



Objectives: Transition to advanced concepts, including algebra and trigonometry



Whole numbers, integers, and rational numbers

Powers, roots, and standard form



Estimation and approximation

ALGEBRA



Introduction to algebraic expressions and equations





Using formulas

Application of algebra in engineering and data science

FRACTIONS, DECIMALS AND PERCENTAGES



Ratio and proportion

Word problems involving mixed fractions and percentages

MEASUREMENT



Unit conversions

GEOMETRY AND TRIGONOMETRY

- Properties of polygons and circles
 - Introduction to angles (types and properties)
- Area and perimeter of circles, triangles, and parallelograms
- Introduction to basic trigonometry (right-angled triangles)
- Application of geometry in construction

DATA AND PROBABILITY



Constructing and interpreting line graphs

Introduction to data analysis



Probability experiments and tree diagrams



Objectives: Advanced math skills, including algebra, geometry, and statistics, for standardized exams.



Standard form and scientific notation

Indices and roots



🛃 Surds

ALGEBRA



Simultaneous equations

Sequences and series

GEOMETRY AND TRIGONOMETRY



Trigonometric ratios and equations

Properties of polygons and transformations

MEASUREMENT

Surface area and volume of cylinders, cones, and spheres

• Conversion between units of measurement

STATISTICS AND PROBABILITY

Cumulative frequency and histograms

Introduction to probability distributions



Objectives: Mastery of advanced math topics for higher education and standardized exams.

Advanced indices and logarithms

Binomial theorem

Complex numbers

ALGEBRA



EX

Advanced functions and graphs

Matrices and determinants

Polynomials

GEOMETRY AND TRIGONOMETRY



Vectors in 2D and 3D

CALCULUS



T Differentiation and integration

Applications of differentiation (optimization, rates of change)



STATISTICS AND PROBABILITY



Probability distributions (binomial, normal)



Hypothesis testing

Statistical inference