Math(Grade 3)
Math000 - Math for Beginners

Objective

To help students strengthen foundational arithmetic and geometric skills through hands-on practice, real-world examples, and problem-solving activities.
Essential Aims
• Build confidence with multi-digit arithmetic and number patterns.
• Develop an understanding of how math connects to daily life (time, money, measurement).
• Introduce algebraic and geometric reasoning early through symbols and shapes.
• Encourage mathematical communication, curiosity, and persistence.

Contents
Unit 1: Arithmetic Operations (Classes 1–3)

Class 1: Big Number Addition and Subtraction
• Topics: 3-digit addition and subtraction, carrying/borrowing, word problems
• Objectives: Perform addition and subtraction with regrouping; interpret real-life word problems
• Homework: 5 addition/subtraction problems, 1 word problem

Class 2: Multiplying Larger Numbers
• Topics: 2×2, 3×2, 3×3 multiplication, area model
• Objectives: Multiply multi-digit numbers accurately and visualize via arrays
• Homework: 6 multiplication exercises, 2 area-model questions

Class 3: Long Division Basics
• Topics: Division with and without remainders, 3-digit ÷ 1-digit, interpreting quotient/remainder
• Objectives: Divide larger numbers using long division; connect multiplication and division
• Homework: 6 division problems, 1 real-world division scenario

Unit 2: Number Sense and Place Value (Classes 4–6)

Class 4: Understanding Place Value
• Topics: Thousands, hundreds, tens, ones; expanded form
• Objectives: Read, write, and compare numbers up to 10,000
• Homework: Write numbers in different forms, compare >, <, =

Class 5: Rounding and Estimation
• Topics: Rounding to the nearest 10, 100; estimating sums/differences
• Objectives: Use rounding to make quick calculations and estimations
• Homework: 5 rounding problems + 3 estimation problems

Class 6: Inequalities and Number Lines
• Topics: Using >, <, =; comparing values on a number line
• Objectives: Represent inequalities visually and symbolically
• Homework: Compare numbers and draw inequalities on number lines

Unit 3: Fractions and Decimals (Classes 7–9)

Class 7: Introduction to Fractions
• Topics: Parts of a whole, numerator/denominator, visual models
• Objectives: Identify and write fractions; relate fractions to everyday life
• Homework: Label shapes with fractional parts

Class 8: Equivalent Fractions and Simplifying
• Topics: Equivalent fractions, simplifying to lowest terms
• Objectives: Recognize and simplify equivalent fractions using visual aids
• Homework: Match equivalent fractions

Class 9: Introduction to Decimals
• Topics: Tenths, hundredths, linking fractions to decimals
• Objectives: Understand decimal place value and convert between forms
• Homework: Convert fractions to decimals and vice versa

Unit 4: Measurement and Data (Classes 10–12)

Class 10: Measuring Length, Weight, and Volume
• Topics: Metric vs customary units (cm, m, g, L, etc.)
• Objectives: Measure objects and compare quantities
• Homework: Measurement chart practice

Class 11: Time and Money
• Topics: Reading clocks (to the minute), counting money and making change
• Objectives: Apply math in time-based and financial problems
• Homework: Practice reading clocks and adding money

Class 12: Reading Graphs and Charts
• Topics: Bar graphs, pictographs, and tables
• Objectives: Interpret and create visual data representations
• Homework: Complete a small survey and draw a graph

Unit 5: Geometry and Shapes (Classes 13–15)

Class 13: Shapes and Their Properties
• Topics: Triangles, rectangles, circles, polygons
• Objectives: Identify and describe 2D shapes and sides/angles
• Homework: Shape identification and classification worksheet

Class 14: Perimeter and Area
• Topics: Calculating perimeters and areas of rectangles/squares
• Objectives: Measure sides and compute perimeters and areas using formulas
• Homework: 4 perimeter problems + 2 area problems

Class 15: Angles and Symmetry
• Topics: Types of angles, lines of symmetry
• Objectives: Recognize angles and identify symmetry in shapes
• Homework: Draw symmetrical figures

Unit 6: Review and Real-World Application (Class 16)

Class 16: Math in Action — Cumulative Review
• Topics: Review of all major concepts
• Objectives: Reinforce understanding through fun activities (math games, puzzles)
• Homework: Final review worksheet