MATHEMATICS

Grade 1 Mathematics

Course Objectives:
Upon completion of this course, students will be able to:

Understand and work with numbers up to 100.
Perform basic addition and subtraction operations.
Identify and describe basic geometric shapes.
Understand and use basic measurement concepts.
Apply mathematical reasoning to solve problems.
Course Outline:

Unit 1: Numbers and Counting
1.1. Counting to 100
1.2. Reading and writing numbers
1.3. Comparing numbers
1.4. Skip counting (by 2s, 5s, and 10s)
1.5. Odd and even numbers

Unit 2: Addition and Subtraction within 20
2.1. Addition concepts
2.2. Subtraction concepts
2.3. Making ten and decomposing ten
2.4. Using number lines and number bonds
2.5. Solving word problems with addition and subtraction

Unit 3: Place Value
3.1. Understanding tens and ones
3.2. Comparing two-digit numbers
3.3. Adding and subtracting multiples of 10

Unit 4: Basic Geometry
4.1. Identifying and describing 2D shapes (circle, triangle, square, rectangle)
4.2. Identifying and describing 3D shapes (sphere, cube, cone, cylinder)
4.3. Creating and analyzing patterns

Unit 5: Measurement
5.1. Measuring length with non-standard units
5.2. Comparing and ordering objects by length
5.3. Telling time to the hour and half-hour
5.4. Recognizing and using coins (pennies, nickels, dimes, and quarters)

Unit 6: Data Analysis
6.1. Collecting and organizing data
6.2. Creating and interpreting simple graphs (bar graphs and picture graphs)
6.3. Analyzing data to answer questions