

Course Description: Grade 1 Mathematics – IB Program

Embark on an exciting journey of numbers with the Grade 1 Mathematics Adventure course! This engaging and interactive math course is designed specifically for first grade students, keeping in mind their developmental needs and cognitive abilities. Our goal is to make math not only educational, but also an enjoyable experience.

Aligned with the International Baccalaureate (IB) objectives, this course fosters inquiry-based learning, critical thinking, and a global perspective. It aims to develop students who are knowledgeable, principled, and reflective thinkers, ready to face future challenges with confidence and creativity.

The course commences with a focus on fundamental mathematical concepts, such as numbers and operations. Students will explore the world of counting, addition, and subtraction, honing their skills through fun-filled activities and practical examples. As we believe in the notion of learning by doing, the course incorporates ample opportunities for hands-on practice.

Next, we venture into the world of shapes and measurements, where students learn to identify and describe different basic shapes, and understand the concepts of length, weight, and volume through relatable real-world examples. This section is designed to enhance their spatial thinking and foster an intuitive understanding of the physical world around them.

The course also introduces concepts of data analysis at a basic level. Students will engage in simple data collection and interpretation activities, like tally marks and easy bar graphs, promoting early analytical thinking skills.

With a continuous assessment approach, the Grade 1 Mathematics Adventure allows for the tracking of each student's progress, ensuring they grasp the concepts thoroughly before moving on to the next. The course incorporates a mix of quizzes, puzzles, and games to keep the evaluation process light-hearted and fun.

By the end of this course, students will have built a solid foundation in basic math concepts, preparing them for more advanced studies. More importantly, they will be equipped with the ability to see the world with a mathematical lens, an essential skill in our increasingly data-driven society.

Join the Grade 1 Mathematics course, and let's transform math learning into an enjoyable expedition, while nurturing the attributes of the IB learner profile, shaping the leaders of tomorrow!

The high-level content of the Course are:

Number System:

- Develop confidence with number sequences up to 100 by ones from any Starting point.
- Skip count by twos, fives and tens starting from zero
- Recognize, model, read, Write and order numbers to at least 100.

- Locate these numbers on number line.
- Count collections to 100 by partitioning numbers using place value.
- Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and Rearranging parts.

Measurement:

- Measure, Compare and order several shapes and objects based on length, area and capacity using appropriate non-standard units.
- Read and write analogue and digital time to the full hour and half hour, using the language of 'past'.

Shape and Space:

- Recognize and classify familiar two-dimensional Shapes and three-dimensional objects using obvious feature.
- Describe the position of an object in relation to another object.
- Give and follow simple directions describing paths, regions, positions and boundaries of their immediate environment.

Pattern and Function:

- Describe, extend and create various patterns.
- Describe, extend and create number patterns, for example, odd and even numbers, skip counting.
- Identify missing elements in simple patterns.

Data Handling:

- Choose simple questions and gather responses.
- Represent data with objects and drawings where one Object or drawing represents one data value.
- Identify chance in daily events (certain/possible, impossible events).
- Describe outcomes of events as likely and unlikely.
- Sort, describe and label real objects into sets by one or more attributes.

The table below clarifies the course content, the chapters and the main skills in each chapter:

#	Chapter	Skills
1	Chapter One: Number System - Part 1 – Reading and writing numbers until 100 and place values	• Reading numbers up to 100, • Writing numbers up to 100, ones, tens, • Breaking down numbers into ones and tens
2	Chapter Two: Number System - Part 2 – Number Line, Skip Counting, Compare Numbers, Functions	• The number line, • Finding numbers on a number line, • Finding numbers using a table. • Skip counting (twos, fives, tens). • Comparing numbers. • Using the greater than and less than symbols.
3	Chapter Three: Number System - Part 3 – Counting, Arranging, Rounding, Classification	• Stable order counting, arranging numbers in ascending and descending orders, arranging numbers up to 100, rounding numbers to the nearest ten, classifying numbers in sets.
4	Chapter Four: Number System - Part 4 – Addition and Equation	• The composition of 1000, 100, 10. • Addition equations for 1000, 100, 10. • The equal sign and using it in writing equations.
5	Chapter Five: Number System - Part 5 – Addition Strategies	• The Properties of addition. • Adding numbers up to 10. • Adding numbers using the number line. • Adding numbers by counting and counting with the hand. • Adding numbers using the breaking down method, horizontal addition and vertical addition.
6	Chapter Six: Number System - Part 6 – Subtraction Methods	• Subtraction by counting down with the hand. • Subtraction using the number line. • Subtraction by taking away. • Subtraction by finding the difference. • Horizontal subtraction and vertical subtraction.
7	Chapter Seven: Data Handling - Data Processing, Property, Organization	• Classifying data based on one property. • Classifying data based on multiple properties. • Organizing data into tables, reading data using tables.
8	Chapter Eight: Shape and Space – Geometric Shapes, 2D, 3D, Number of Sides & vertices	• Two dimensional shapes (square, rectangle, triangle). • Describing two dimensional shapes based on the number of sides and vertices. • Three dimensional shapes (cube, pyramid, rectangular prism, sphere, cylinder, cone).

		• Describing figures based on the number of faces, the shape, number of vertices, number of sides. • Drawing geometric shapes using net diagrams.
9	Chapter Nine: Measurement Part I – (Measurement & Position)	• Lengths, measuring lengths using non-standard units of measurement. • Comparing different lengths, mass. • Measuring mass using non-standard units of measurement. • Measuring mass. • Comparing different masses. • Determining the position of things, determining direction.
10	Chapter Ten: Measurement Part 2 – Time and Days	• Identifying & arranging the days of the week. • Distinguishing times of day. • Distinguishing the types of clocks. • Reading an hour, a quarter of an hour, and a half hour. • Distinguishing between the hour hand and the minute hand. • Arranging the times of events in an hour and a day.