

## Course Curriculum: Grade 3 Math

Welcome to Mathematics Grade 3, an exciting journey into the world of numbers, shapes, and patterns. Designed for our third-grade students, this course aims to provide a solid foundation in elementary mathematics, enhancing computational skills, conceptual understanding, and a capacity to solve real-world problems. Our unique approach to teaching mathematics in Grade 3 will involve a combination of guided learning, hands-on activities, engaging mathematical games, and interactive problem-solving exercises. Throughout the course, students will delve into various segments of mathematics, including:

1. **Number Sense and Operations:** Here, students will strengthen their understanding of place value, work with three-digit numbers, and develop proficiency in addition, subtraction, multiplication, and division. They will also get familiar with fractions and learn how to compare and order them.
2. **Geometry and Measurement:** The course introduces students to fundamental geometric concepts such as identifying and describing shapes, understanding the properties of shapes, and recognizing symmetry. Measurement topics include telling time, understanding units of measure, and calculating perimeter and area.
3. **Data Analysis:** Students will explore basic concepts of statistics by learning to collect, organize, display, and interpret data using charts and graphs.
4. **Problem Solving:** This integral aspect of the course encourages students to apply their mathematical knowledge to real-world situations, fostering critical thinking and logical reasoning skills.

Our highly interactive course employs a variety of teaching methods, including hands-on activities, group discussions, and practical applications to ensure comprehensive understanding. The curriculum is aligned with standard educational requirements and aims to prepare students for more advanced mathematical concepts in the future.

Whether your child is new to math or wants to strengthen their foundational skills, Exploring Mathematics: Grade 3 provides the perfect platform for enhancing their mathematical competence and confidence.

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

| # | Chapter                            | Skills                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Chapter One:<br>Numbers up to 9999 | <ul style="list-style-type: none"><li>• Reading &amp; writing numbers up to 9999,</li><li>• Writing addition equations that add up to 1000,</li><li>• Specifying the place value of numbers,</li><li>• Writing numbers made of four place values using the decomposition method,</li><li>• Skip counting by fives, tens and hundreds,</li><li>• Skip counting - Counting up and counting down using a number line,</li></ul> |

|   |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                            | <ul style="list-style-type: none"> <li>• Completing a pattern using skip counting,</li> <li>• Comparing numbers made of four place values,</li> <li>• Comparing numbers using a number line and a place values chart,</li> <li>• Arranging numbers up to 9999 using a place values chart,</li> <li>• Arranging numbers up to 9999 in ascending and descending orders,</li> <li>• Rounding numbers using a number line,</li> <li>• Rounding numbers to the nearest ten, hundred and thousand</li> </ul>                                                                                                                                                                                                                                                                                                                               |
| 2 | Chapter Two:<br>Adding & Subtracting<br>Numbers up to 9999 | <ul style="list-style-type: none"> <li>• Finding the sum of two or more numbers up to 9999 using regrouping, and without regrouping,</li> <li>• Representing addition up to 9999 using various methods, making sure the addition up to 9999 is correct,</li> <li>• Finding the difference between two or more numbers using regrouping, and without regrouping,</li> <li>• Making sure the subtraction is correct using addition,</li> <li>• Representing subtraction using various methods</li> </ul>                                                                                                                                                                                                                                                                                                                               |
| 3 | Chapter Three:<br>Fractions                                | <ul style="list-style-type: none"> <li>• Reading &amp; writing simple fractions,</li> <li>• Representing &amp; writing fractions as part of a whole, and as part of a group,</li> <li>• Learning about mixed numbers and how to write them,</li> <li>• Writing mixed numbers represented in several ways,</li> <li>• Representing mixed numbers in different ways,</li> <li>• Finding the sum of equivalent fractions,</li> <li>• Using the fraction tables to add equivalent fractions,</li> <li>• Finding the difference of equivalent fractions,</li> <li>• Using fraction tables to find the difference of equivalent fractions</li> </ul>                                                                                                                                                                                       |
| 4 | Chapter Four:<br>Measurements                              | <ul style="list-style-type: none"> <li>• Measuring lengths using metric units ( mm, cm, m, km),</li> <li>• Choosing the appropriate unit for measuring different lengths,</li> <li>• Learning about the time units to read time,</li> <li>• Learning about the units for measuring time in a day, a month and a year,</li> <li>• Comparing between the different units of time,</li> <li>• Reading an analog clock and a digital clock,</li> <li>• Learning about (a quarter of an hour, a third of an hour, half an hour, three quarters of an hour, two thirds of an hour),</li> <li>• Learning the number of minutes that equal (a quarter of an hour, a third of an hour, half an hour, three quarters of an hour, two thirds of an hour),</li> <li>• Measuring different masses using metric units (gram, kilogram),</li> </ul> |

|   |                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                       | <ul style="list-style-type: none"> <li>• Learning the symbol for gram (g) and for kilogram (kg),</li> <li>• Distinguishing when to use the gram versus the kilogram,</li> <li>• Learning about volume,</li> <li>• Learning about the liter,</li> <li>• Measuring volume using the liter,</li> <li>• Estimating the volumes of vessels</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 5 | Chapter Five:<br>Multiplication                       | <ul style="list-style-type: none"> <li>• Learning and understanding the multiplication tables for 6 &amp; 7,</li> <li>• Solving any problems regarding the multiplication of 6 &amp; 7,</li> <li>• Learning the multiplication tables for 8 &amp; 9,</li> <li>• Solving problems regarding the multiplication of 8 &amp; 9,</li> <li>• Learning multiplication of the number 10,</li> <li>• Multiplying tens and solving problems in that area,</li> <li>• Multiplying hundreds and solving problems in that area</li> </ul>                                                                                                                                                                                                                                                                                                                          |
| 6 | Chapter Six:<br>Division                              | <ul style="list-style-type: none"> <li>• Learning division as equal groups, forming equal groups,</li> <li>• Solving problems regarding simple division as equal groups,</li> <li>• Learning the rules of multiplication and how it relates to division,</li> <li>• Learning division and solving division problems,</li> <li>• Learning to divide by 10 and solve related problems,</li> <li>• Learning and solving long division,</li> <li>• Learning about dividends and divisors,</li> <li>• Dividing by 5 &amp; 1 and solving related problems,</li> <li>• Learning about the division facts for dividing by 2, 4, &amp; 8 and how they relate to the multiplication facts,</li> <li>• Learning the division facts for dividing by 3, 6, 7, &amp; 9 and how they relate to the multiplication facts, and using them to solve problems</li> </ul> |
| 7 | Chapter Seven:<br>Geometry                            | <ul style="list-style-type: none"> <li>• Learning the basic terms (pattern, etc.),</li> <li>• Learning about ascending and descending patterns,</li> <li>• Forming numerical patterns with one calculation,</li> <li>• Describing a numerical pattern and finding its rule,</li> <li>• Writing patterns, solving problems regarding patterns and how to write them,</li> <li>• Learning about two dimensional shapes (square, rectangle, etc.),</li> <li>• Learning about three dimensional shapes (pyramid, cube, etc.),</li> <li>• Distinguishing between two dimensional and three-dimensional shapes</li> </ul>                                                                                                                                                                                                                                   |
| 8 | Chapter Eight:<br>Data Collection &<br>Representation | <ul style="list-style-type: none"> <li>• Learning about tallies and tally charts,</li> <li>• Organizing data in a tally chart,</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>• Learning about gathering data, learning different ways to gather and organize data,</li><li>• Obtaining and organizing outcomes by asking questions,</li><li>• Obtaining experimental outcomes,</li><li>• Solving problems regarding the gathered data,</li><li>• Reading data represented as pictures and shapes,</li><li>• Representing data using pictures and shapes,</li><li>• Discovering different ways to represent data</li></ul> |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|