



Singapore Maths Innovative Learning Experience (SMILE Philippines)

Grade 4 Content List

Grade 4

Welcome to word problems! Your child sees how to identify word problems and navigate tricky problem sums. We will share useful heuristics problem-solving concepts like Working Backwards, Constant Difference and more. Strengthen foundation through practices and examples on Fractions, as well as breeze through concepts on Angles, Decimals, Statistics and Time.

Content List

Whole Numbers

Title	Synopsis
Lesson 1	Solving word problems involving the four operations.
Lesson 2	Solving word problems involving the four operations.
Lesson 3	Solving word problems involving the four operations.
Lesson 4	Solving word problems involving the four operations.
Lesson 5	Solving word problems involving the four operations.
Lesson 6	Solving word problems involving the four operations.
Lesson 7	Solving word problems using models.
Lesson 8	Comparing and ordering numbers up to 100,000.
Lesson 9	Rounding off numbers to the nearest 10, 100 or 1000.
Worksheet 1	Homework for Lessons 8 and 9.
Quiz 1	Recap of Lessons 8 and 9.
Lesson 10	What is a factor and a multiple?
Lesson 11	Learn about factors and common factors. Using common factors to simplify fractions.
Lesson 12	Learn about multiples and common multiples. Using the lowest common multiple to find a common denominator.
Worksheet 2	Homework for Lessons 10 to 12.
Lesson 13	Multiplying a 4-digit number by a 1-digit number; and a 3-digit number by a 2-digit number.
Worksheet 3	Homework for Lesson 13.
Lesson 14	Dividing a 4-digit number by a 1-digit number.
Worksheet 4	Homework for Lesson 14.
Quiz 2	Recap of Lessons 10 to 14.
Lesson 15	Estimate the quotient of 3- to 4-digit numbers by 2- to 3- digit numbers.
Lesson 16	Estimate the quotient of 3- to 4-digit numbers by 2- to 3- digit numbers.
Lesson 17	Solving a word problem using concept of elimination and common multiples.

Lesson 18	Using "Constant difference" concept to solve a word problem.
Lesson 19	Practice using "Constant difference" concept to solve a word problem.
Worksheet 5	Homework for Lessons 18 and 19.
Lesson 20	Using "Work backwards" concept to solve a word problem.
Lesson 21	Practice using "Work backwards" concept to solve a word problem.
Worksheet 6	Homework for Lessons 20 and 21.
Lesson 22	Using the "Guess and check with assumption" concept to solve a word problem.
Lesson 23	Practice using "Guess and check with assumption" concept to solve a word problem.
Lesson 24	Using the "Guess and check with assumption" concept to solve a word problem.
Lesson 25	Practice using the "Guess and check with assumption" concept to solve a word problem.
Worksheet 7	Homework for Lessons 22 to 25.
Quiz 3	Recap of Lessons 18 to 25.
Lesson 26	Using "Constant total" concept to solve a word problem.
Lesson 27	Practice using "Constant total" concept to solve a word problem.
Worksheet 8	Homework for Lessons 26 and 27.
Lesson 28	Using "Constant part" concept to solve a word problem.
Lesson 29	Practice using "Constant part" concept to solve a word problem.
Worksheet 9	Homework for Lessons 28 and 29.
Lesson 30	Using "Total changed" concept to solve a word problem.
Lesson 31	Using "Total changed" concept to solve a word problem.
Lesson 32	Practice using "Total changed" concept to solve a word problem.
Worksheet 10	Homework for Lessons 20 to 32.
Quiz 4	Recap of Lessons 26 to 32.
Lesson 33	Using "Excess-shortage" concept to solve a word problem.
Lesson 34	Using "Excess-shortage" concept to solve a word problem.
Lesson 35	Practice using "Excess-shortage" concept to solve a word problem.
Worksheet 11	Homework for Lessons 33 to 35.
Lesson 36	Using "Excess-excess" concept to solve a word problem.
Lesson 37	Practice using "Excess-excess" concept to solve a word problem.
Worksheet 12	Homework for Lessons 36 and 37.
Lesson 38	Using "Shortage-shortage" concept to solve a word problem.
Lesson 39	Practice using "Shortage-shortage" concept to solve a word problem.
Worksheet 13	Homework for Lessons 36 and 37.
Quiz 5	Homework for Lessons 33 to 39.
Lesson 40	Using simultaneous concept to solve a word problem.
Lesson 41	Practice using simultaneous concept to solve a word problem.
Worksheet 14	Homework for Lessons 40 and 41.
Quiz 6	Recap of Lessons 40 and 41.
Lesson 42	Summary on comparing, ordering, rounding off numbers, finding factors and multiples.
Lesson 43	Summary on multiplication, division and identifying the type of concept to use to solve word problems.
Lesson 44	Identify number patterns in number sequence.
Lesson 45	Solving word problems involving the four operations.
Lesson 46	Finding Highest Common Factor (HCF) and Lowest Common Multiple (LCM) by prime factorisation.

Lesson 47	Practice finding HCF and LCM by prime factorisation.
Lesson 48	Practice finding HCF and LCM by prime factorisation.
Worksheet 15	Homework for Lessons 46 to 48.

Money

Title	Synopsis
Lesson 1	Solving word problems involving the four operations of money.
Lesson 2	Solving word problems involving the four operations of money in decimal notation.
Lesson 3	Multiplication and division of money in decimal notation.
Worksheet 1	Homework for Lessons 1 to 3.
Quiz 1	Recap of Lessons 1 to 3.

Fractions

Title	Synopsis
Lesson 1	Identifying mixed numbers and improper fractions.
Lesson 2	Converting mixed numbers to improper fractions and vice versa.
Worksheet 1	Homework for Lessons 1 and 2.
Lesson 3	Finding a fraction of a set of given quantities.
Worksheet 2	Homework for Lessons 3.
Lesson 4	Find the whole given its fractional part by finding one unit.
Lesson 5	Summary of converting mixed numbers to improper fractions and vice versa and finding a fraction of a set of given quantities.
Lesson 6	Adding and subtracting fractions of different denominators.
Worksheet 3	Homework for Lessons 4 to 6.
Lesson 7	Finding the fraction of a whole number.
Lesson 8	Practice solving word problems with fractions.
Worksheet 4	Homework for Lessons 7 and 8.
Lesson 9	Conversion between fractions and decimals.

Decimals

Title	Synopsis
Lesson 1	Learn about decimals.
Lesson 2	Converting a fraction to a decimal.
Lesson 3	Practice converting a decimal to a fraction.
Worksheet 1	Homework for Lessons 1 to 3.
Quiz 1	Recap of Lessons 1 to 3.
Lesson 4	Rounding off decimals to the nearest whole number, 1-decimal place or 2-decimal places.
Worksheet 2	Homework for Lesson 4.
Quiz 2	Recap of Lesson 4.

Geometry

Title	Synopsis
Lesson 1	Learn more about angles.
Lesson 2	Measuring angles and drawing an angle of a given size.
Worksheet 1	Homework for Lessons 1 and 2.
Lesson 3	Drawing perpendicular and parallel lines.
Worksheet 2	Homework for Lessons 3.
Quiz 1	Recap of Lessons 1 to 3.
Lesson 4	Learn how to find the area of a triangle.
Lesson 5	Practice finding the area of a triangle.
Lesson 6	Summary on finding the area of triangles, rectangles and squares.
Worksheet 3	Homework for Lessons 4 to 6.
Quiz 2	Recap of Lessons 4 to 6.
Lesson 7	Learn the different types of triangles.
Worksheet 4	Homework for Lesson 7.
Quiz 3	Recap of Lesson 7.
Lesson 8	Learn what is a rhombus and its properties.
Lesson 9	Learn what is a parallelogram and its properties.
Lesson 10	Drawing a triangle from given dimensions using ruler, protractor and set squares.
Lesson 11	Drawing a triangle from given dimensions using ruler, protractor and set squares.
Worksheet 5	Homework for Lessons 10 and 11.
Lesson 12	Recognising and finding angles on a straight line, angles at a point and vertically opposite angles.
Lesson 13	Solving problems involving shape patterns.
Lesson 14	Solving problems involving shape patterns.
Quiz 4	Recap of Lessons 13 and 14.

Time

Title	Synopsis
Lesson 1	Reading digital and analogue time in and up to seconds.
Lesson 2	Reading and writing time in 24-hour clock format.
Worksheet 1	Homework for Lessons 1 and 2.
Lesson 3	Understand the relationship between “Starting time”, “Finishing time” and “Duration”.

Mensuration

Title	Synopsis
Lesson 1	Finding the perimeter of rectangles and squares.
Lesson 2	Practice finding the perimeter of rectangles and squares.
Lesson 3	Practice finding the perimeter of rectangles and squares.
Worksheet 1	Homework for Lessons 1 to 3.
Quiz 1	Recap of Lessons 1 to 3.
Lesson 4	Finding a dimension of a rectangle or a square given its area or perimeter.

Lesson 5	Finding area of a composite figure made up of rectangles and squares.
Lesson 6	Solving problems on area and perimeter of composite figures made up of rectangles and squares.
Lesson 7	Practice solving problems on area and perimeter of composite figures made up of rectangles and squares.
Worksheet 2	Homework for Lessons 4 to 7.
Quiz 2	Recap of Lessons 4 to 7.
Lesson 8	Units of Volume and Volume of cuboid
Lesson 9	Identify cube and cuboid and calculate volume of cube and cuboid.
Worksheet 3	Homework for Lessons 8 and 9.
Quiz 3	Recap for Lessons 8 and 9.

Statistics

Title	Synopsis
Lesson 1	Reading and interpreting data from a table.
Lesson 2	Solving problems using information present in tables.
Lesson 3	Completing a table from given data.
Worksheet 1	Homework for Lessons 1 to 3.
Quiz 1	Recap of Lessons 1 to 3.