SIXCLOUDS
THE FUTURE MAKERS

Singapore Maths Innovative Learning Experience (SMILE Philippines)

Grade 5 Content List

Grade 5

Build on knowledge learnt in Grade 4 and pick up new techniques on tables, model diagrams and more, to solve real life word problems. See and extend application into areas of Ratios and Percentage. Plenty of practice opportunities to break down problems into simpler components in Fractions. With this base knowledge gained, your child can level up to Grade 6 confidently.

Content List

Whole Numbers

Title	Synopsis
Lesson 1	Identifying number patterns.
Lesson 2	Learn what is BODMAS.
Lesson 3	Using "Total changed" concept to solve a word problem.
Lesson 4	Practice using "Total changed" concept to solve a word problem.
Worksheet 1	Homework for Lessons 3 and 4.
Lesson 5	Solving word problems that have two given relationships.
Lesson 6	Practice solving word problems that have two given relationships.
Lesson 7	Practice solving word problems that have two given relationships.
Worksheet 2	Homework for Lessons 5 to 7.
Lesson 8	Solving a word problem that has three given relationships.
Lesson 9	Practice using simultaneous concept to solve a word problem.
Worksheet 3	Homework for Lessons 8 and 9.
Quiz 1	Recap of Lessons 5 to 9.
Lesson 10	Using "Excess-shortage" concept to solve a word problem.
Lesson 11	Practice using "Excess-shortage" concept to solve a word problem.
Worksheet 4	Homework for Lessons 10 and 11.
Lesson 12	Using "Excess-excess" concept to solve a word problem.
Lesson 13	Practice using "Excess-excess" concept to solve a word problem.
Worksheet 5	Homework for Lessons 12 and 13.
Lesson 14	Using "Shortage-shortage" concept to solve a word problem.
Lesson 15	Practice using "Shortage-shortage" concept to solve a word problem.
Worksheet 6	Homework for Lessons 14 and 15.
Quiz 2	Recap of Lessons 10 to 15.
Lesson 16	How to determine divisibility by 2 to 4.
Worksheet 7	Homework for Lesson 16
Lesson 17	How to determine divisibility by 5 to 7.

Worksheet 8	Homework for Lesson 17
Lesson 18	How to determine divisibility by 8 to 9.
Worksheet 9	Homework for Lesson 18
Lesson 19	How to determine divisibility by 10 to 12.
Worksheet 10	Homework for Lesson 19
Lesson 20	Finding Highest Common Factor (HCF) and Lowest Common Multiple (LCM) by prime factorisation.
Lesson 21	Practice finding HCF and LCM by prime factorisation.
Lesson 22	Practice finding HCF and LCM by prime factorisation.
Worksheet 7	Homework for Lessons 20 to 22.

Fractions

Title	Synopsis
Lesson 1	Solving word problems with fractions. Finding the remainder of a whole.
Lesson 2	Practice solving word problems with fractions and finding the remainder of a whole.
Lesson 3	Summary on finding fractions of a whole number with remainder and solving word problem with fractions.
Worksheet 1	Homework for Lessons 1 to 3.
Quiz 1	Recap of Lessons 1 to 3.
Lesson 4	Division of a proper fraction by a whole number.
Lesson 5	Multiplication of a proper fraction and a proper / improper fraction.
Lesson 6	Multiplication of an improper fraction and an improper fraction.
Lesson 7	Multiplication of a mixed number and a whole number.
Lesson 8	Addition and subtraction of mixed numbers
Lesson 9	Addition and subtraction of proper fractions
Lesson 10	Write fractions and decimals as percentages and vice versa.
Lesson 11	Making equal the "part" of the fraction and identifying the "whole" of the fraction.
Lesson 12	Practice solving a word problem on equal fractions.
Worksheet 2	Homework for Lessons 11 and 12.
Lesson 13	Comparing one fraction to another fraction in order to solve an equal fraction problem.
Lesson 14	Practice comparing one fraction to another fraction in order to solve an equal fraction problem.
Worksheet 3	Homework for Lessons 13 and 14.
Lesson 15	Making the numerator of fractions the same in order to compare the denominator for an equal fraction problem.
Lesson 16	Practice making the numerator of fractions the same in order to compare the denominator for an equal fraction problem.
Quiz 2	Recap of Lessons 11 to 16.
Lesson 17	Subtracting fractions with different denominators in order to find out remainder.
Lesson 18	Practice subtracting fractions with different denominators in order to find out remainder.
Lesson 19	Drawing the branching for remainder concept in a fraction word problem.
Lesson 20	Practice drawing the branching for remainder concept in a fraction word problem.
Worksheet 4	Homework for Lessons 17 to 20.
Quiz 3	Recap of Lessons 17 to 20.

Lesson 21	Finding the proportion of 3 subjects in relationship to one another.
Lesson 22	Finding the proportion of 3 subjects in relationship to one another.
Worksheet 5	Homework for Lessons 21 and 22.
Quiz 4	Recap of Lessons 21 and 22.

Decimals

Title	Synopsis
Lesson 1	Rounding off decimals to the nearest whole number, 1-decimal place or 2-decimal places.
Lesson 2	Adding and subtracting of decimals.
Worksheet 1	Homework for Lesson 2.
Lesson 3	Multiplying a decimal by a whole number (up to 2-digits).
Lesson 4	Dividing a decimal (up to 2 decimal places) by a whole number (1-digit).
Worksheet 2	Homework for Lessons 3 and 4.
Quiz 1	Recap of Lessons 1 to 4.
Lesson 5	Solving a word problem with models involving decimals.
Lesson 6	Solving word problems with the four operations.
Worksheet 3	Homework for Lessons 5 and 6.
Quiz 2	Recap of Lessons 5 and 6.

Ratio

Title	Synopsis
Lesson 1	Express a ratio in its simplest form.
Lesson 2	Identify and write equivalent ratio.
Lesson 3	Using "Constant part" concept to solve a word problem between two ratios.
Lesson 4	Practice using "Constant part" concept to solve a word problem between two ratios.
Worksheet 1	Homework for Lessons 1 to 4.
Lesson 5	Using "Constant total" concept to solve a word problem between two ratios.
Lesson 6	Practice using "Constant total" concept to solve a word problem between two ratios.
Worksheet 2	Homework for Lessons 5 and 6.
Lesson 7	Using "Constant difference" concept to solve a word problem between two ratios.
Lesson 8	Practice using "Constant difference" concept to solve a word problem between two ratios.
Lesson 9	Using "Constant difference" concept to solve a word problem between two ratios.
Lesson 10	Practice using "Constant difference" concept to solve a word problem between two ratios.
Lesson 11	Using "Constant difference" concept to solve a word problem between two ratios.
Lesson 12	Practice using "Constant difference" concept to solve a word problem between two ratios.
Worksheet 3	Homework for Lessons 7 to 12.
Lesson 13	Using "Total changed" concept to solve a word problem between two ratios.

Lesson 14	Practice using "Total changed" concept to solve a word problem between two ratios.
Lesson 15	Solving 3 step problems involving ratio.
Worksheet 4	Homework for Lessons 13 and 14.
Quiz 1	Recap of Lessons 1 to 14.

Percentage

Title	Synopsis
Lesson 1	Understanding the use of the percentage symbol (%).
Lesson 2	Learn about discount, cost price and selling price.
Lesson 3	Practice solving a word problem on percentage discount.
Worksheet 1	Homework for Lessons 1 - 3.
Lesson 4	Learn about principal amount and percentage interest.
Lesson 5	Practice solving a word problem on percentage interest.
Worksheet 2	Homework for Lessons 4 and 5.
Quiz 1	Recap of Lessons 1 to 5.
Lesson 6	Solving up to 2 step word problems involving percentage.

Geometry

Title	Synopsis
~~Lesson 1~~	~~Drawing and recognizing the nets for geometric objects.~~
~~Lesson 2~~	~~Drawing and recognizing the nets for geometric objects.~~
Lesson 1	Draw and describe polygons with their properties.
Lesson 2	Learn to visualise congruent polygons.
Lesson 3	Identify the terms related to a circle and draw circles with different radii.
Lesson 4	Identify the terms related to a circle and draw circles with different radii.
Lesson 5	Visualize solid figures and make models of different solid figures: cube, prism, pyramid, cylinder, cone, and sphere using plane figures.
Lesson 6	Visualize solid figures and make models of different solid figures: cube, prism, pyramid, cylinder, cone, and sphere using plane figures.

Time

Title	Synopsis
Lesson 1	Practice solving word problems on time.
Worksheet 1	Homework for Lesson 1.
Quiz 1	Recap of Lesson 1.

Mensuration

Title	Synopsis
Lesson 1	Properties and Volume of cube and cuboid. Relationship between cubic centimetres and millilitres.
Lesson 2	Properties and Volume of cube and cuboid. Relationship between cubic centimetres and millilitres.

Lesson 3	Solving 3 step word problems involving volume of cuboid.
Lesson 4	Finding the length of a cube given its volume. Finding the height of a cuboid given its base area. Finding the area of a face of a cuboid given its volume and a dimension.
Lesson 5	Practice finding the length of a cube given its volume. Finding the height of a cuboid given its base area. Finding the area of a face of a cuboid given its volume and a dimension.
Worksheet 1	Homework for Lessons 1 to 5.
Lesson 6	Revision on cube and cuboid word problems.
Worksheet 2	Homework for Lesson 6.
Quiz 1	Recap of Lesson 6.
Lesson 7	Solving word problems involving circumference of circles.
Lesson 8	Solving word problems involving area of circles.
Lesson 9	Solving word problems involving area of circles.
Lesson 10	Finding the area and circumference of a circle.
Lesson 11	Practice finding the area and circumference of a circle.
Worksheet 3	Homework for Lessons 7 to 11.
Lesson 12	Revision on circle word problems.
Worksheet 4	Homework for Lesson 12.
Quiz 2	Recap of Lessons 7 to 12.
Lesson 13	Solving word problem involving area of rectangles.
Lesson 14	Solving word problem involving area and proportion.
Lesson 15	Solving word problems involving fraction and area of triangles and squares.
Lesson 16	Solving word problems involving fraction and area of triangles and squares.
Lesson 17	Solving word problems involving fraction and area of rectangles and squares.

Statistics

Title	Synopsis
Lesson 1	Reading and interpreting data from line graphs.
Lesson 2	Reading and interpreting data from line graphs.
Lesson 3	Reading and interpreting data from line graphs.
Worksheet 1	Homework for Lessons 1 to 3.
Quiz 1	Recap of Lessons 1 to 3.
Lesson 4	Interpret average as "total amount divided by number of items".
Lesson 5	Word problem involving average.
Lesson 6	Solving 3 step word problems involving average with different total values.
Worksheet 2	Homework for Lessons 4 to 6.
Quiz 2	Recap of Lessons 4 to 6.
Lesson 7	Create and interpret data (tables and line graphs), and apply probability in mathematical problems and real-life situations.

Temperature

Title	Synopsis
Lesson 1	Read and measure temperature using liquid or digital thermometers.
Lesson 2	Read and measure temperature using liquid or digital thermometers.

Worksheet 1	Homework for Lessons 1 and 2.
Quiz 1	Recap of Lessons 1 and 2.