



Singapore Maths Innovative Learning Experience (SMILE International)

Grade 6 Content List

Grade 6

Through the wonderful world of animation, we break down the daunting topic of Algebra into simple ideas. Shown through simple and clear illustrations, complex concepts or workings on forming and expressing algebraic terms will no longer be stumbling blocks to your child's learning path. Using powerful visual cues and examples, he will breeze through seemingly confusing topics like Speed and Ratio in no time.

Content List

Whole Numbers

Title	Synopsis
Lesson 1	Solving word problems involving rounding off at intermediate steps of solution.
Lesson 2	Solving word problems using different concepts.
Lesson 3	Solving word problems using models to compare and assess.
Revision 1	Revision on whole numbers (constant difference) word problems.
Revision 2	Revision on whole numbers (working backwards) word problems.
Revision 3	Revision on whole numbers (guess and check with assumptions) word problems.
Revision 4	Revision on whole numbers (constant total) word problems.
Revision 5	Revision on whole numbers (constant part) word problems.
Revision 6	Revision on whole numbers (total change) word problems.
Revision 7	Revision on whole numbers involving model and simultaneous concept.
Revision 8	Revision on whole numbers involving simultaneous concept.
Revision 9	Revision on whole numbers (simultaneous concept) word problems.
Revision 10	Revision on whole numbers (excess and shortage) word problems.
Worksheet 1	Homework for Revisions 1 to 10.
Quiz 1	Recap of Revisions 1 to 10.

Fractions

Title	Synopsis
Revision 1	Revision on fraction word problems.
Revision 2	Revision on fraction word problems.
Worksheet 1	Homework for Revision 1 and 2.
Quiz 1	Recap of Revision 1 and 2.

Algebra

Title	Synopsis
Lesson 1	Learn about inequality (part 1).
Lesson 2	Learn about inequality (part 2).
Lesson 3	Forming an algebraic expression from a word problem.
Lesson 4	Practice forming an algebraic expression from a word problem.
Lesson 5	Simplifying algebraic expressions.
Lesson 6	Practice simplifying algebraic expressions.
Worksheet 1	Homework for Lessons 3 to 6.
Lesson 7	Forming an algebraic equation from a word problem.
Lesson 8	Manipulating algebraic equations.
Lesson 9	Practice manipulating algebraic equations.
Worksheet 2	Homework for Lessons 7 to 9.
Lesson 10	Substituting values in an algebraic expression.
Lesson 11	Practice substituting values in an algebraic expression.
Worksheet 3	Homework for Lessons 10 and 11.
Quiz 1	Recap of Lessons 1 to 11.
Lesson 12	Solving a word problem using algebra and models.
Revision 1	Revision on forming and simplifying expressions and substitution in algebra.
Revision 2	Revision on solving algebraic word problems.
Revision 3	Revision on solving algebraic word problems.
Worksheet 4	Homework for Revisions 1 to 3.
Quiz 2	Recap of Revisions 1 to 3.

Area/Volume

Title	Synopsis
Lesson 1	Solving word problem involving area of rectangles.
Lesson 2	Solving word problem involving area and proportion.
Lesson 3	Solving word problems involving fraction and area of triangles and squares.
Lesson 4	Solving word problems involving fraction and area of triangles and squares.
Lesson 5	Solving word problems involving fraction and area of rectangles and squares.
Lesson 6	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 7	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 7.
Revision 1	Revision on cube and cuboid word problems.
Worksheet 2	Homework for Revision 1.
Quiz 1	Recap of Lessons 1 and 2 in addition with Revision 1.

Speed

Title	Synopsis
Lesson 1	Finding the relationship of speed and time between two objects given a constant distance involving ratio.
Lesson 2	Finding the relationship of speed and distance between two objects given a constant time involving ratio.
Lesson 3	Finding the distance between 2 objects travelling in the same direction from the same point.
Lesson 4	Finding the time taken for 2 objects, travelling towards each other, to meet.
Lesson 5	Solving word problems on speed.
Lesson 6	Solving a word problem on speed in an overtaking situation.
Lesson 7	Practice solving a word problem on speed in an overtaking situation.
Worksheet 1	Homework for Lessons 1 to 7.
Lesson 8	Finding the distance between 2 objects given different starting times.
Lesson 9	Practice finding the distance between 2 objects given different starting times.
Worksheet 2	Homework for Lessons 8 and 9.
Lesson 10	Finding the distance between 2 objects travelling towards each other given a certain set of conditions.
Lesson 11	Finding the time between 2 objects travelling towards each other given a certain set of conditions.
Worksheet 3	Homework for Lessons 10 and 11.
Lesson 12	Finding the difference between average speeds using the Distance-Speed-Time triangle.
Lesson 13	Practice finding the difference between average speeds using the Distance-Speed-Time triangle.
Worksheet 4	Homework for Lessons 12 and 13.
Quiz 1	Recap of Lessons 1 to 13.
Quiz 2	Recap of Lessons 1 to 13.
Revision 1	Revision on speed word problems.
Revision 2	Revision on speed (overtaking) word problems.
Revision 3	Revision on speed (increasing distance between 2 objects) word problems.
Revision 4	Revision on speed (decreasing distance traveling towards each other) word problems.
Worksheet 5	Homework for Revisions 1 to 4.
Quiz 3	Recap of Revisions 1 to 4.

Rate

Title	Synopsis
Lesson 1	Solving word problems involving volume and rate.
Revision 1	Revision on rate word problems.
Revision 2	Revision on combined rates word problems.
Revision 3	Revision on inverse rates word problems.
Worksheet 1	Homework for Revisions 1 to 3.
Quiz 1	Recap of Revisions 1 to 3.

Ratio

Title	Synopsis
Lesson 1	Solving word problems involving ratio and percentage.
Revision 1	Revision on ratio (constant part) word problems.
Revision 2	Revision on ratio (constant total) word problems.
Revision 3	Revision on ratio (constant difference) word problems.
Revision 4	Revision on ratio (constant difference) word problems.
Revision 5	Revision on ratio (everything change) word problems.
Worksheet 1	Homework for Revisions 1 to 5.
Quiz 1	Recap of Revisions 1 to 5.

Percentage

Title	Synopsis
Lesson 1	Solving a word problem on percentage increase.
Lesson 2	Practice solving a word problem on percentage increase.
Worksheet 1	Homework for Lessons 1 and 2.
Lesson 3	Solving a word problem on percentage decrease.
Lesson 4	Practice solving a word problem on percentage decrease.
Worksheet 2	Homework for Lessons 3 and 4.
Lesson 5	Solving a word problem on percentage.
Lesson 6	Practice solving a word problem on percentage.
Worksheet 3	Homework for Lessons 5 and 6.
Quiz 1	Recap of Lessons 1 to 6.
Revision 1	Revision on percentage word problems (percentage discount).
Revision 2	Revision on percentage word problems (percentage profit or loss).
Revision 3	Revision on percentage word problems (percentage increase).
Revision 4	Revision on percentage word problems (percentage decrease).
Revision 5	Revision on percentage word problems.
Worksheet 4	Homework for Revisions 1 to 5.
Quiz 2	Recap of Revisions 1 to 5.

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.
Lesson 4	Reading and interpreting data from line graphs.
Lesson 5	Reading and interpreting data from line graphs.
Lesson 6	Reading and interpreting data from line graphs.
Worksheet 2	Homework for Lessons 4 to 6.
Quiz 1	Recap of Lessons 1 to 6.

Money

Title	Synopsis
Lesson 1	Solving word problems involving money.