



**Singapore Maths Innovative Learning Experience (SMILE Philippines)**

**Grade 6 Content List**

**Grade 6**

We break down the daunting topic of Algebra into simple ideas. Shown through 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 for learning, he will breeze through topics like Speed and Ratio in no time.

**Content List**

**Whole Numbers**

<b>Title</b>	<b>Synopsis</b>
Lesson 1	Learn what is BODMAS.
Lesson 2	Solving word problems involving rounding off at intermediate steps of solution.
Lesson 3	Solving word problems using different concepts.
Lesson 4	Solving word problems using models to compare and assess.
Lesson 5	Revision on whole numbers (constant difference) word problems.
Lesson 6	Revision on whole numbers (working backwards) word problems.
Lesson 7	Revision on whole numbers (guess and check with assumptions) word problems.
Lesson 8	Revision on whole numbers (constant total) word problems.
Lesson 9	Revision on whole numbers (constant part) word problems.
Lesson 10	Revision on whole numbers (total change) word problems.
Lesson 11	Revision on whole numbers involving model and simultaneous concept.
Lesson 12	Revision on whole numbers involving simultaneous concept.
Lesson 13	Revision on whole numbers (simultaneous concept) word problems.
Lesson 14	Revision on whole numbers (excess and shortage) word problems.
Worksheet 1	Homework for Lessons 5 to 14.
Quiz 1	Recap of Lessons 5 to 14.
Lesson 15	Learn what is BODMAS.
Lesson 16	Solving word problems involving rounding off at intermediate steps of solution.
Lesson 17	Solving word problems using different concepts.
Lesson 18	Solving word problems using models to compare and assess.
Worksheet 2	Homework for Lessons 15 to 18.
Quiz 2	Recap of Lessons 15 to 18.

### **Fractions**

<b>Title</b>	<b>Synopsis</b>
Lesson 1	Revision on fraction word problems.
Lesson 2	Revision on fraction word problems.
Worksheet 1	Homework for Lessons 1 and 2.
Quiz 1	Recap of Lessons 1 and 2.

### **Decimals**

<b>Title</b>	<b>Synopsis</b>
Lesson 1	Solving a word problem with models involving decimals.
Lesson 2	Solving word problems with the four operations.
Lesson 3	Multiply and divide by 10, 100 and 1000, during conversion of units.
Worksheet 1	Homework for Lessons 1 to 3.
Quiz 1	Recap of Lessons 1 to 3.

### **Ratio**

<b>Title</b>	<b>Synopsis</b>
Lesson 1	Finding the ratio of two or three given quantities.
Lesson 2	Find one quantity given the other quantity and their ratio.
Lesson 3	Solving word problems involving ratio and percentage.
Worksheet 1	Homework for Lessons 1 to 3.
Quiz 1	Recap of Lessons 1 to 3.
Lesson 4	Revision on ratio (constant part) word problems.
Lesson 5	Revision on ratio (constant total) word problems.
Lesson 6	Revision on ratio (constant difference) word problems.
Lesson 7	Revision on ratio (constant difference) word problems.
Lesson 8	Revision on ratio (everything change) word problems.
Worksheet 2	Homework for Lessons 3 to 8.
Quiz 2	Recap of Lessons 3 to 8.

### **Percentage**

<b>Title</b>	<b>Synopsis</b>
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.
Lesson 7	Revision on percentage word problems (percentage discount).
Lesson 8	Revision on percentage word problems (percentage profit or loss).

Lesson 9	Revision on percentage word problems (percentage increase).
Lesson 10	Revision on percentage word problems (percentage decrease).
Lesson 11	Revision on percentage word problems.
Worksheet 4	Homework for Lessons 7 to 11.
Quiz 2	Recap of Lessons 7 to 11.

### **Algebra**

<b>Title</b>	<b>Synopsis</b>
Lesson 1	Forming an algebraic expression from a word problem.
Lesson 2	Practice forming an algebraic expression from a word problem.
Lesson 3	Simplifying algebraic expressions.
Lesson 4	Practice simplifying algebraic expressions.
Worksheet 1	Homework for Lessons 1 to 4.
Lesson 5	Forming an algebraic equation from a word problem.
Lesson 6	Manipulating algebraic equations.
Lesson 7	Practice manipulating algebraic equations.
Worksheet 2	Homework for Lessons 5 to 7.
Lesson 8	Substituting values in an algebraic expression.
Lesson 9	Practice substituting values in an algebraic expression.
Worksheet 3	Homework for Lessons 8 and 9.
Quiz 1	Recap of Lessons 1 to 9.
Lesson 10	Solving a word problem using algebra and models.
Lesson 11	Revision on forming and simplifying expressions and substitution in algebra.
Lesson 12	Revision on solving algebraic word problems.
Lesson 13	Revision on solving algebraic word problems.
Worksheet 4	Homework for Lessons 11 to 13.
Quiz 2	Recap of Lessons 11 to 13.

### **Geometry**

<b>Title</b>	<b>Synopsis</b>
Lesson 1	Finding unknown angles in composite geometric figures.
Lesson 2	Draw and recognise the nets for geometric objects.
Lesson 3	Draw and recognise the nets for geometric objects.
Worksheet 1	Homework for Lessons 2 and 3.
Quiz 1	Recap of Lessons 2 and 3.
Lesson 4	Finding the surface area of prisms.
Lesson 5	Finding the volume of a composite figure (prisms).
Worksheet 2	Homework for Lessons 4 and 5.
Quiz 2	Recap of Lessons 4 and 5.
Lesson 6	Finding the volume of a triangular and rectangular pyramid.
Lesson 7	Finding the surface area of a triangular and rectangular pyramid.
Lesson 8	Practice questions on the volume and surface area of triangular and rectangular pyramids.
Worksheet 3	Homework for Lessons 6 to 8.
Quiz 3	Recap of Lessons 6 to 8.
Lesson 9	Learn about the surface area and volume of cones.

Lesson 10	Learn about the surface area and volume of spheres.
Lesson 11	Learn about the surface area and volume of spheres.
Worksheet 4	Homework for Lessons 9 to 11.
Quiz 4	Recap of Lessons 9 to 11.

### Rate

Title	Synopsis
Lesson 1	Reading rate from charts.
Lesson 2	Solving word problems on rate.
Worksheet 1	Homework for Lessons 1 and 2.
Quiz 1	Recap of Lessons 1 and 2.
Lesson 3	Solving a rate problem involving volume.
Lesson 4	Practice solving a rate problem involving volume.
Worksheet 2	Homework for Lessons 3 and 4.
Quiz 2	Recap of Lessons 3 and 4.
Lesson 5	Using inverse rates concept to solve a word problem.
Lesson 6	Practice using inverse rates concept to solve a word problem.
Worksheet 3	Homework for Lessons 5 and 6.
Quiz 3	Recap of Lessons 5 and 6.
Lesson 7	Solving word problems involving direct proportion.
Lesson 8	Using direct proportion to solve a word problem.
Lesson 9	Practice using direct proportion to solve a word problem.
Worksheet 4	Homework for Lessons 7 to 9.
Quiz 4	Recap of Lessons 7 to 9.
Lesson 10	Solving 2 step problems involving rate.
Lesson 11	Solving 3 step problems involving rate.
Worksheet 5	Homework for Lessons 10 and 11.
Lesson 12	Solving word problems involving volume and rate.
Lesson 13	Revision on rate word problems.
Lesson 14	Revision on combined rates word problems.
Lesson 15	Revision on inverse rates word problems.
Worksheet 6	Homework for Lessons 12 to 15.
Quiz 5	Recap of Lessons 13 to 15.

### 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 6 and 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.
Lesson 14	Revision on speed word problems.
Lesson 15	Revision on speed (overtaking) problems.
Lesson 16	Revision on speed (increasing distance between 2 objects) word problems.
Lesson 17	Revision on speed (decreasing distance traveling towards each other) word problems.
Worksheet 5	Homework for Lessons 14 to 17.
Quiz 3	Recap of Lessons 14 to 17.

### **Statistics**

<b>Title</b>	<b>Synopsis</b>
Lesson 1	Solving word problems involving pie charts.
Worksheet 1	Homework for Lesson 1.
Quiz 1	Recap of Lesson 1.
Lesson 2	Learn what is probability.
Lesson 3	Practice questions on probability.
Worksheet 2	Homework for Lessons 2 and 3.
Quiz 2	Recap of Lessons 2 and 3.
Lesson 4	Learn what experimental probability is.
Lesson 5	Learn what experimental probability is.

### **Money**

<b>Title</b>	<b>Synopsis</b>
Lesson 1	Solving word problems involving Solving word problems involving money.