



Singapore Maths Innovative Learning Experience (SMILE Singapore)

Secondary 1 Content List

Secondary 1

Algebra and Geometry take the centre stage at the level. Detailed, step-by-step explanations taking you through concepts of variables and unknowns in Algebra and Geometry, and imparting useful tips and techniques to help your child overcome more algebraic problems.

Content List

Numbers

Title	Synopsis
Lesson 1	Learn what is prime factorisation (part 1).
Lesson 2	Learn what is prime factorisation (part 2).
Lesson 3	Practice questions on prime factorisation.
Lesson 4	Practice questions on prime factorisation.
Worksheet 1	Homework for Lessons 1 to 4.
Lesson 5	Finding Highest Common Factor (HCF) and Lowest Common Multiple (LCM) by prime factorisation.
Lesson 6	Practice finding HCF and LCM by prime factorisation.
Lesson 7	Practice finding HCF and LCM by prime factorisation.
Worksheet 2	Homework for Lessons 5 to 7.
Lesson 8	Finding squares and square roots by prime factorisation.
Lesson 9	Finding cubes and cube roots by prime factorisation.
Lesson 10	Practice squares, square root, cube, cube roots by prime factorisation.
Worksheet 3	Homework for Lessons 8 to 10.
Quiz 1	Recap of Lessons 1 to 10.
Lesson 11	Introduction to significant figures.
Lesson 12	Making connections between percentages, fractions and decimals.
Lesson 13	Making connections between percentages, fractions and decimals.
Lesson 14	Solving ratio word problems.
Lesson 15	Distance-Time graph. How to read and interpret straight line graphs.
Lesson 16	Learn how to convert compound units.

Algebra

Title	Synopsis
Lesson 1	Introducing algebra to solve a problem.
Worksheet 1	Homework for Lesson 1.

Lesson 2	Adding and subtracting of algebraic terms.
Lesson 3	Practice adding and subtracting of algebraic terms.
Worksheet 2	Homework for Lessons 2 and 3.
Lesson 4	Multiplying algebraic terms.
Worksheet 3	Homework for Lesson 4.
Lesson 5	Dividing algebraic terms (part 1).
Lesson 6	Dividing algebraic terms (part 2).
Worksheet 4	Homework for Lessons 5 and 6.
Quiz 1	Recap of Lessons 1 to 6.
Lesson 7	Learn what is BODMAS.
Lesson 8	Simplifying linear algebraic expression.
Worksheet 5	Homework for Lessons 7 and 8.
Lesson 9	Multiplying a polynomial by a monomial.
Lesson 10	Practice multiplying a polynomial by a monomial.
Lesson 11	Multiplying a polynomial by a polynomial.
Lesson 12	Practice multiplying a polynomial by a polynomial.
Worksheet 6	Homework for Lessons 9 to 12.
Lesson 13	Learn how to change the subject of an equation.
Lesson 14	Practice changing the subject of an equation.
Worksheet 7	Homework for Lessons 13 and 14.
Quiz 2	Recap of Lessons 7 to 14.
Lesson 15	Learn about roots of an equation.
Worksheet 8	Homework for Lesson 15.
Lesson 16	Solving an equation with one unknown.
Lesson 17	Practice solving equations with one unknown.
Worksheet 9	Homework for Lessons 16 and 17.
Quiz 3	Recap of Lessons 16 to 17
Lesson 18	Removing common factor in algebraic factorisation.
Lesson 19	Practice removing common factor in algebraic factorisation.
Lesson 20	Factoring algebraic terms by grouping.
Lesson 21	Practice factoring algebraic terms by grouping.
Worksheet 10	Homework for Lessons 18 to 21.
Quiz 4	Recap of Lessons 18 to 21.
Lesson 22	Learn what is an algebraic fraction.
Lesson 23	Multiplying and dividing of algebraic fractions.
Lesson 24	Practice multiplying and dividing of algebraic fractions.
Worksheet 11	Homework for Lessons 22 to 24.
Lesson 25	Finding a common denominator for algebraic fractions.
Lesson 26	Adding and subtracting algebraic fractions (part 1).
Lesson 27	Adding and subtracting algebraic fractions (part 2).
Worksheet 12	Homework for Lessons 25 to 27.
Quiz 5	Recap of Lessons 22 to 27.
Lesson 28	Learn about the Cartesian coordinate plane.
Lesson 29	Practice questions on Cartesian coordinate plane.
Worksheet 13	Homework for Lessons 28 and 29.
Lesson 30	Learn about straight line graphs.
Lesson 31	Practice questions on straight line graphs.
Lesson 32	Practice questions on straight line graphs.

Worksheet 14	Homework for Lessons 30 to 32.
Quiz 6	Recap of Lessons 28 to 32.
Lesson 33	Learn about inequality (part 1).
Lesson 34	Learn about inequality (part 2).
Lesson 35	Learn about the four operations of inequalities.
Lesson 36	Practice adding and subtracting inequalities.
Lesson 37	Practice multiplying and dividing inequalities.
Lesson 38	Multiplying and dividing inequalities with negative numbers.
Lesson 39	Practice multiplying and dividing inequalities with negative numbers.
Lesson 40	Solving inequalities.
Worksheet 15	Homework for Lessons 33 to 40.
Quiz 7	Recap of Lessons 33 to 40.

Geometry

Title	Synopsis
Lesson 1	Learn what is a point, line, ray and plane.
Quiz 1	Recap of Lesson 1.
Lesson 2	Learn what is an angle bisector and its properties.
Lesson 3	Constructing angle bisectors and other basic angles.
Lesson 4	Learn the different types of angles.
Lesson 5	Practice questions on types of angles.
Worksheet 1	Homework for Lessons 1 to 5.
Quiz 2	Recap of Lessons 2 to 5.
Lesson 6	Learn what is an isosceles trapezium and its properties.
Lesson 7	Practice questions on rhombus and isosceles trapezium.
Worksheet 2	Homework for Lessons 6 and 7.
Quiz 3	Recap of Lessons 6 and 7.
Lesson 8	Finding the surface area of prisms.
Lesson 9	Finding the volume of a composite figure (prisms).
Lesson 10	Learn what are lines of symmetry.
Worksheet 3	Homework for Lesson 10.
Quiz 4	Recap of Lesson 10.
Lesson 11	Learn about the sum of interior angles of convex polygon (part 1).
Lesson 12	Learn about the sum of interior angles of convex polygon (part 2).
Lesson 13	Practice questions on the sum of interior angles.
Worksheet 4	Homework for Lessons 11 to 13.
Quiz 5	Recap of Lessons 11 to 13.
Lesson 14	Learn about the exterior angles of regular polygon (triangle).
Lesson 15	Practice questions on exterior angles of triangles.
Worksheet 5	Homework for Lessons 14 and 15.
Quiz 6	Recap of Lessons 14 and 15.

Statistics

Title	Synopsis
Lesson 1	Analyse and interpret tables, bar graphs, line graphs and pie charts.
Lesson 2	Analyse and interpret tables, bar graphs, line graphs and pie charts.
Lesson 3	Analyse and interpret tables, bar graphs, line graphs and pie charts.