

Dimensions Math 7A			
Chapter	Chapter Title	Lesson	Lesson Title
1	Factors and Multiples	1	Factors and Multiples
		1A	Factors
		1B	Multiples
		2	Prime Factorization and Exponential Notation
		2A	Prime Factorization
		2B	Exponential Notation
		3	Greatest Common Factor (GCF)
		4	Least Common Multiple (LCM)
		5	Square Roots and Cube Roots
		5A	Square Roots
		5B	Cube Roots
2	Real Numbers	1	Idea of Negative Numbers and the Number Line
		1A	Negative Numbers
		1B	The Number Line
		1C	Absolute Value
		2	Addition and Additive Inverse
		2A	Addition of Integers
		2B	Additive Inverse
		3	Subtraction and Absolute Value of the Difference
		3A	Subtraction of Integers
		3B	Absolute Value of the Difference
		4	Multiplication, Division, and Combined Operations of Integers
		4A	Multiplication of Integers
		4B	Division of Integers
		4C	Combined Operations of Integers
		5	Rational Numbers
		5A	Definition
		5B	Addition and Subtraction of Rational Numbers
		5C	Multiplication and Division of Rational Numbers
		6	Real Numbers and Use of Calculators
		6A	Real Numbers
		6B	Use of Calculators
		7	Rounding Numbers to Decimal Places
		7A	Idea of Rounding
		7B	Rounding Numbers to Decimal Places
3	Introduction to Algebra	1	The Use of Letters in Algebra
		1A	The Use of Letters
		1B	Basic Notations in Algebra
		1C	Exponential Notation
		2	Evaluation of Algebraic Expressions and Formulas
		2A	Evaluation of Algebraic Expressions
		2B	Formulas
		3	Writing Algebraic Expressions to Represent Real-world Situations
4	Algebraic Manipulation	1	Like Terms and Unlike Terms
		2	Distributive Law, Addition, and Subtraction of Linear Algebraic Expressions
		2A	Use of Parentheses
		2B	Addition and Subtraction of Linear Algebraic Expressions
		3	Simplification of Linear Algebraic Expressions
		4	Factorization by Extracting Common Factors
		5	Factorization by Grouping Terms

Chapter	Chapter Title	Lesson	Lesson Title
5	Simple Equations in One Variable	1	Simple Linear Equations in One Variable
		2	Equations Involving Parentheses
		3	Simple Fractional Equations
		4	Forming Linear Equations to Solve Problems
6	Ratio, Rate, and Speed	1	Ratios Involving Rational Numbers
		1A	Meaning of Ratio
		1B	Simplification of Ratios
		1C	Ratio of Three Quantities
		1D	Problems Involving Ratios
		2	Average Rate
		3	Speed
		3A	Uniform Speed and Average Speed
7	Percentage	3B	Conversion of Units
		1	Meaning of Percentage
		1A	Introduction
		1B	Expressing One Quantity as a Percentage of Another
		2	Reverse Percentages
		3	Percentage Increase and Decrease
		3A	Percentage Increase
		3B	Percentage Decrease
		4	Discount and Sales Tax
		4A	Discount
8	Angles, Triangles, and Quadrilaterals	4B	Sales Tax
		1	Points, Lines, and Planes
		2	Angles
		2A	Angles and Measurements
		2B	Types of Angles
		2C	Complementary, Supplementary, and Adjacent Angles
		2D	Properties of Angles
		3	Perpendicular Bisectors and Angle Bisectors
		3A	Use of Compasses
		3B	Perpendicular Bisectors
		3C	Angle Bisectors
		4	Triangles
		4A	Classification of Triangles
		4B	Construction of Triangles
		5	Quadrilaterals
		5A	Types of Quadrilaterals
		5B	Properties of Special Quadrilaterals
		5C	Construction of Quadrilaterals

Dimensions Math 7B			
9	Number Patterns	1	Number Patterns and Sequences
		2	General Term of a Sequence
		2A	General Term
		2B	Application of Number Patterns
10	Coordinates and Linear Graphs	1	Cartesian Coordinate System
		2	Linear Graphs
		3	Slopes of Linear Graphs
		3A	Positive Slopes
		3B	Negative Slopes
		3C	Special Cases

Chapter	Chapter Title	Lesson	Lesson Title
11	Inequalities	1	Solving Simple Inequalities
		1A	Idea of Inequality
		1B	Solving an Inequality
		2	More Properties of Inequalities
		3	Simple Linear Inequalities
		4	Applications of Simple Inequalities
12	Perimeters and Areas of Plane Figures	1	Perimeters and Areas of a Square, a Rectangles, and a Triangle
		2	Circumference and Area of a Circle
		3	Area of a Parallelogram
		4	Area of a Trapezoid
		5	Perimeters and Areas of Composite Plane Figures
13	Volumes and Surface Areas of Solids	1	Volumes and Total Surface Areas of a Cube and a Cuboid
		1A	Nets of Cube, Cuboid, and Other Prisms
		1B	Cube
		1C	Cuboid
		2	Volume and Total Surface Area of a Prism
		2A	Prism
		2B	Volume of Prism
		2C	Surface Area of Prism
		3	Volumes and Surface Areas of Composite Solids
		3A	Conversion between Different Units
		3B	Composite Solids
14	Proportions	1	Scale Drawings
		2	Map Scale and Calculation of Area
		2A	Map Scale
		2B	Calculation of Area
		3	Direct Proportion
		4	Inverse Proportion
15	Data Handling	1	Collection of Data
		2	Dot Plots
		3	Measure of Center: Mean
		3A	Measure of Center
		3B	Mean
		3C	Using Mean to Compare Two Populations
		3D	Variation from the Mean
		4	Measure of Center: Median
		5	Mode
		5A	Definition of Mode
		5B	Comparison between Mean, Median, and Mode
16	Probability of Simple Events	1	Set Notation
		1A	Sets
		1B	Equal Sets
		1C	Subsets
		1D	Universal Set and Empty Set
		1E	Complement of a Set
		2	The Meaning of Probability
		2A	Introduction
		2B	Terms and Definitions
		3	Sample Space
		3A	Sample Space
		3B	Basic Properties of Probabilities

Chapter	Chapter Title	Lesson	Lesson Title
17	Probability of Combined Events	1	Probabilities of Simple Combined Events
		1A	Possibility Diagram
		1B	Tree Diagram
		2	Mutually Exclusive Events
		3	Independent Events
		4	Further Probabilities