

Term 1

Chapter 1: Whole numbers (3 weeks) (Number)

Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
1	Assessment of prior learning		Chapter 1 Progress check	Chapter 1 Progress check
1	1.1 Naming, writing and comparing numbers	- Investigation: Perfect numbers - Exercise 1.1	Additional exercise 1.1	
1	1.2 Powers and roots	- Investigation: Powers with 5s and 9s - Exercise 1.2	Additional exercise 1.2	Worksheet 1: Powers and roots
1	1.3 Scientific notation	Exercise 1.3	- Interactive tutorial 1.3: Scientific notation - Alternative method: Scientific notation 1 - Alternative method: Scientific notation 2 - Additional exercise 1.3	Worksheet 2: Scientific notation
2		TUESDAY HAND OUT EPW 1 (CS)		
2	1.4 Using whole numbers	Exercise 1.4	- Interactive tutorial 1.4a: Addition - Interactive tutorial 1.4b: Subtraction - Interactive tutorial 1.4c: Multiplication - Interactive tutorial 1.4d: Division	

			- Alternative method: Division - TLF L82 The multiplier: Make your own multiplications - Additional exercise 1.4	
2	1.5 Order of operations	Exercise 1.5	- Interactive tutorial 1.5: Order of operations - Additional exercise 1.5	Worksheet 3: Order of operations
2	1.6 Approximation methods	- Investigation: Fermi problems - Exercise 1.6	- Interactive tutorial 1.6: Leading digit calculation - Additional exercise 1.6	
3		TUESDAY EPW1 VALIDATION (CS)		
3	1.7 Operations with integers	Exercise 1.7	- Teacher notes: Addition and subtraction - Teacher notes: Multiplication and division - TLF L585 Integer cruncher: Addition and subtraction - Additional exercise 1.7	Worksheet 4: Operations with integers
3	Revision and consolidation	- Chapter 1 summary - Chapter 1 review - Project: Prime numbers		
4		TUESDAY ASSESSMENT CHAPTER 1 (JB)		

Chapter 2: Rules and functions (3 weeks) (Algebra)				
Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
4	Assessment of prior learning		Chapter 2 Progress check	Chapter 2 Progress check
4	2.1 Patterns and variables	Exercise 2.1	- TLF L1924 Bridge builder: Quadrilaterals - TLF L1926 Bridge builder: Complex pentagons - TLF L1936 Circus towers: Triangular towers - TLF L1939 Circus towers: Square pyramids - Additional exercise 2.1	
4	2.2 Expressions	Exercise 2.2	Additional exercise 2.2	
5	2.3 Functions	- Investigation: What rule? - Exercise 2.3	- Interactive tutorial 2.3: Function – inputs and outputs - Additional exercise 2.3	Worksheet 5: Functions
5	2.4 Graphing linear functions	- Technology: Drawing graphs with Excel - Technology: Drawing graphs with Casio ClassPad 330 - Exercise 2.4	- Spreadsheet: Drawing graphs - Additional exercise 2.4	- Worksheet 6: Graphing functions - Worksheet 7: Cartesian Coordinates

5	2.5 Gradient	Exercise 2.5	- Interactive tutorial 2.5: Gradient - Additional exercise 2.5	- Worksheet 8: Gradient (rise/run) - Worksheet 9: Gradient $((y_2 - y_1) / (x_2 - x_1))$ - Worksheet 10: Gradients and y-intercepts
6	2.6 Non-linear functions	Exercise 2.6	- TLF L759 Filling glasses: Graphing and comparing - TLF L761 Filling glasses: Create the right glass - TLF 760 Filling glasses: Create the right graph - Additional exercise 2.6	
6	Revision and consolidation	- Chapter 2 summary - Chapter 2 review - Project: Patterns		
7		TUESDAY ASSESSMENT 2 (CS)		

Chapter 3: Geometry of shapes (3 weeks) (Space)				
Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
7	Assessment of prior learning		Chapter 3 Progress check	Chapter 3 Progress check
7	3.1 Plane Shapes	Exercise 3.1	Additional exercise 3.1	Worksheet 11: Plane shapes
8	3.2 Similarity and scale drawings	Exercise 3.2	- Interactive tutorial 3.2: Similar triangles - TLF L2309 Measures: Similar shapes - TLF L2326 Trigonometry: Measuring with triangles - Additional exercise 3.2	Worksheet 12: Similarity and scale drawings
8	3.3 Congruence	- Investigation: Congruent triangles - Exercise 3.3	Additional exercise 3.3	Worksheet 13: Congruent triangles
8	3.4 Circles and ellipses	- Investigation: Eccentricity - Investigation: In-circles and circumcircles - Exercise 3.4	- Spreadsheet: Eccentricity - Teacher notes: Constructions 1 - Additional exercise 3.4	Worksheet 14: Circles and ellipses
9	3.5 Three-dimensional shapes and nets	- Investigation: Cross-sections - Exercise 3.5	- TLF L588 Shape maker: Stacker - TLF L1059 Shape maker: Replicator - Additional exercise 3.5	

9	3.6 Transformations	Exercise 3.6	Additional exercise 3.6	
9	3.7 Symmetry and tessellations	- Investigation: Creating tessellations - Exercise 3.7	- TLF L7798 Finding symmetry: 3 lines: garden - Additional exercise 3.7	
10	Revision and consolidation	- Chapter 3 summary - Chapter 3 review		Term 1 review: Chapters 1 to 3
10		TUESDAY ASSESSMENT 3 (GP) HAND OUT EPW 2 (JB)		

Term 2

Chapter 4: Fractions and decimals (2 weeks) (Number)

Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
1	Assessment of prior learning		Chapter 4 Progress check	Chapter 4 Progress check
1	4.1 Comparing fractions and decimals	- Investigation: Fraction estimations - Exercise 4.1	- Interactive tutorial 4.1a: Mixed fractions - Interactive tutorial 4.1b: Improper fractions - TLF L1082 Decimaster Collections: match-up 2 - TLF L2800 Fraction fiddle: Tool - TLF L135 Shape fractions - Additional exercise 4.1	
1	4.2 Adding and subtracting fractions and decimals	Exercise 4.2	- Interactive tutorial 4.2a: Fraction addition - Interactive tutorial 4.2b: Fraction subtraction - Alternative method: Fraction subtraction - TLF L2806 Fraction fiddle: Reach the target - Additional exercise 4.2	Worksheet 15: Adding and subtracting fractions
2		TUESDAY EPW 2 VALIDATION (JB)		

2	4.3 Multiplying and dividing fractions and decimals	Exercise 4.3	- Interactive tutorial 4.3a: Decimal multiplication - Interactive tutorial 4.3b: Decimal division - Teacher notes: Multiplication of fractions - Interactive tutorial 4.3c: Fraction multiplication - Alternative method: Fraction multiplication - Teacher notes: Division of fractions - Interactive tutorial 4.3d: Fraction division - Alternative method: Fraction division - Additional exercise 4.3	- Worksheet 16: Multiplying and dividing fractions - Worksheet 17: Fractions - Worksheet 18: Decimals
2	4.4 Mixed operations and approximations	Exercise 4.4	Additional exercise 4.4	
2	Revision and consolidation	- Chapter 4 summary - Chapter 4 review - Project: Fractominoes	Teacher notes: Fractominoes	
3		TUESDAY ASSESSMENT 4 (CS)		

Chapter 5: Linear measurement (4 weeks) (Measurement & Space)				
Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
3	Assessment of prior learning		Chapter 5 Progress check	Chapter 5 Progress check
3	5.1 Measuring length	Exercise 5.1	Additional exercise 5.1	Worksheet 19: Converting units – length
4	5.2 Pythagoras's rule	- Investigation: Pythagoras's rule - Technology: Pythagoras's rule with Casio ClassPad 330 - Exercise 5.2	- Teacher notes: Proof of Pythagoras's theorem - Teacher notes: Pythagorean triples (triads) - Additional exercise 5.2	Worksheet 20: Pythagoras's rule
4	5.3 Perimeter	- Investigation: Variations of squares and rectangles - Exercise 5.3	- Interactive tutorial 5.3: Perimeter - Additional exercise 5.3	Worksheet 21: Perimeter
4	5.4 Circumference	- Investigation: Measuring circumference - Exercise 5.4	- Interactive tutorial 5.3: Perimeter of a sector - Additional exercise 5.4	
5	5.5 Perimeters of combined shapes	Exercise 5.5	Additional exercise 5.5	
5	5.6 Measuring mass	Exercise 5.6	- Interactive tutorial 5.6: Mass conversion - Additional exercise 5.6	Worksheet 22: Converting units – mass

5	5.7 Time intervals	- Investigation: Wait a minute - Exercise 5.7	- Interactive tutorial 5.7: Time intervals - TLF L1112 Journey planner: Quickest route 4 - TLF L347 Rainforest: Book a flight - Additional exercise 5.7	Worksheet 23: Converting units – time
6	5.8 Time zones	Exercise 5.8	- TLF L696 Earth rotation: Night and day - Additional exercise 5.8	
6	Revision and consolidation	- Chapter 5 summary - Chapter 5 review - Project: Constructions and designs	- Teacher notes: Constructions 2 - Alternative method: Regular polygons	
7		TUESDAY ASSESSMENT 5 (JB)		

Chapter 6: Algebraic expressions (3 weeks) (Algebra & Space)

Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
7	Assessment of prior learning		Chapter 6 Progress check	Chapter 6 Progress check
7	6.1 Index notation	- Investigation: Binary numbers - Exercise 6.1	Additional exercise 6.1	- Worksheet 24: Like terms - Worksheet 25: Index laws
8	6.2 Algebra skills—simplifying expressions	Exercise 6.2	- Teacher notes: Algebra skills - Interactive tutorial 6.2: Simplifying	Worksheet 26: Operations with rational expressions

			Additional exercise 6.2	
8	6.3 The distributive law	- Investigation: The distributive law - Exercise 6.3	- Interactive tutorial 6.3: The distributive law (expansion) - Additional exercise 6.3	Worksheet 27: Expansion
8	6.4 Common factors	Exercise 6.4	- Interactive tutorial 6.4: Highest common factor - Additional exercise 6.4	Worksheet 28: Factorisation
9	6.5 Multiplying binomials	- Investigation: Binomial products - Exercise 6.5	Additional exercise 6.5	- Worksheet 29: Rules for expansion - Worksheet 30: Expanding trinomials - Worksheet 31: Factorising trinomials
9	Revision and consolidation	Chapter 6 review		Term 2 review: Chapters 4 to 6
10		TUESDAY ASSESSMENT 6 (CS)		

Term 3

Chapter 7: Chance and data (4 weeks)

Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
1	Assessment of prior learning		Chapter 7 Progress check	Chapter 7 Progress check
1	7.1 Collecting and displaying data	- Technology: Scatter plot - Investigation: Favourite flavours - Exercise 7.1	- Interactive tutorial 7.1a: Circle graphs - Alternative method: Circle graphs - Interactive tutorial 7.1b: Stem and leaf plots - Teacher notes: Histograms and polygons - Spreadsheet: Scatter plot - TLF L3161 Healthy life survey: Lunchtime activities - TLF L3157 Leisure survey: Artistic activities - Additional exercise 7.1	Worksheet 32: Frequency tables and histograms
1	7.2 Using data measures	Exercise 7.2	- Interactive tutorial 7.2a: Mean - Interactive tutorial 7.2b: Cumulative frequency - Additional exercise 7.2	- Worksheet 33: Mode, median and mean for single scores - Worksheet 34: Mode, median and mean using a frequency table
2		TUESDAY HAND OUT EPW 3 (GP)		
2	7.3 Data variation and relationships	Exercise 7.3	TLF L5858 Scatter plots: About scatter plots	

			Additional exercise 7.3	
2	7.4 Experimental probability	- Investigation: Card hands - Exercise 7.4	- TLF L2382 Mystery spinner - TLF L3673 Dice duals: Find the bias - TLF L2635 Dice duals: Fair or unfair - Additional exercise 7.4	
2	7.5 Theoretical probability	- Investigation: Comparing probabilities Technology: Casio ClassPad 330 simulation - Exercise 7.5	- Teacher notes: Theoretical probability - Interactive tutorial 7.5: Theoretical probability - TLF L2640 Dice duals: Airport subtraction - TLF L2637 Dice duals: Bike race - TLF L2639 Dice duals: Lucky 16 game - Additional exercise 7.5	Worksheet 35: Theoretical probability
3		TUESDAY EPW 3 VALIDATION (GP)		
3	7.6 Combined probabilities	Exercise 7.6	- Interactive tutorial 7.6: Probability tree diagrams - Additional exercise 7.6	
4	Revision and consolidation	- Chapter 7 summary - Chapter 7 review - Project: Bean sprouts	Teacher notes: Wall chart	
5		TUESDAY ASSESSMENT 7 (CS)		

Chapter 8: Ratio and proportion (2.5 weeks) (Number & Space)				
Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
5	Assessment of prior learning		Chapter 8 Progress check	Chapter 8 Progress check
5	8.1 Rates	Exercise 8.1	- Teacher notes: Triangle method - TLF L1933 School canteen: Two traders: Level 2 - TLF L1934 School canteen: Estimate and check: Level 2 - Additional exercise 8.1	Worksheet 37: Rates
5	8.2 Ratios	- Technology: The zoom mode for maps - Investigation: Newspaper ratios - Exercise 8.2	- Interactive tutorial 8.2: Ratio - Additional exercise 8.2	Worksheet 36: Ratios
6	8.3 Direct proportion	Exercise 8.3	- Interactive tutorial 8.3: Direct proportion - TLF L1996 Squirt: Three containers: Complex proportional relationships - Additional exercise 8.3	Worksheet 38: Direct proportion
6	8.4 Inverse proportion	- Technology: Inverse proportion using a spreadsheet - Exercise 8.4	- Interactive tutorial 8.3: Inverse proportion - Spreadsheet: Inverse proportion - Additional exercise 8.4	Worksheet 39: Inverse proportion

6	Revision and consolidation	- Chapter 8 summary - Chapter 8 review - Project: Golden ratio		
7		TUESDAY ASSESSMENT 8 (GP)		
Chapter 9: Areas and volumes (2.5 weeks) (Measurement)				
Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
7	Assessment of prior learning		Chapter 9 Progress check	Chapter 9 Progress check
7	9.1 Area	- Investigation: Area conversion - Exercise 9.1	- Teacher notes: Area rules - Interactive tutorial 9.1: Area - TLF L153 Compound shapes - TLF L2310 Measures: Scaling up - TLF L145 Area of triangles - Additional exercise 9.1	- Worksheet 40: Converting units – area - Worksheet 41: Area
8	9.2 Surface area	- Technology: Casio ClassPad 330 and the surface area of a cylinder - Exercise 9.2	- Interactive tutorial 9.2: Surface area - TLF L2315 Measures: Scaling surface areas - Additional exercise 9.2	Worksheet 42: Surface area

8	9.3 Volume and capacity	- Investigation: Capacities of common containers - Exercise 9.3	- Teacher notes: Volume formulas - Interactive tutorial 9.3: Volume - TLF L163 How big is a cubic metre - TLF L167 Working it out! - TLF L166 What's in a cube - TLF L2314 Measures: Scaling down solids - Additional exercise 9.3	Worksheet 43: Volume
9	Revision and consolidation	- Chapter 9 summary - Chapter 9 review		Term 3 review: Chapters 7 to 9
10		TUESDAY ASSESSMENT 9 (CS) HAND OUT EPW 4 (CS)		

Term 4

Chapter 10: Equations (3 weeks) (Algebra)

Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
1	Assessment of prior learning		Chapter 10 Progress check	Chapter 10 Progress check
1	10.1 Equations and solutions	Exercise 10.1	Additional exercise 10.1	- Worksheet 45: Solving equations - Worksheet 46: Solving equations with brackets - Worksheet 47: Solving equations with the unknown on both sides
1	10.2 Graphing	- Technology: Solving equations - Technology: Graphing with Casio ClassPad 330 - Exercise 10.2	- Spreadsheet: Solving equations - Additional exercise 10.2	Worksheet 44: Solving equations by graphing
		TUESDAY EPW 4 VALIDATION (CS)		
2	10.3 Backtracking and inverse operations	Exercise 10.3	- Interactive tutorial 10.3: Solving equations by using inverse operations - Additional exercise 10.3	Worksheet 48: Solving equations with fractions
2	10.4 Solving more complex equations	Exercise 10.4	- Interactive tutorial 10.4: Solving equations that involve fractions - Additional exercise 10.4	

2	10.5 Solving word equations	Exercise 10.5	- Teacher notes: Modelling and problem solving - Interactive tutorial 10.5: Solving equations that involve worded problems - Additional exercise 10.5	Worksheet 49: Solving word problems
3	Revision and consolidation	- Chapter 10 summary - Chapter 10 review - Project: Areas on dot paper	Teacher notes: Dot paper	
4		TUESDAY ASSESSMENT 10 (CS)		

Chapter 11: Money and percentage (3 weeks) (Number)

Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
4	Assessment of prior learning		Chapter 11 Progress check	Chapter 11 Progress check
4	11.1 Personal accounts	- Investigation: Mobile phone costs - Exercise 11.1	- Interactive tutorial 11.1: Electricity bills - Additional exercise 11.1	Worksheet 50: Mobile phones
5	11.2 Percentages	Exercise 11.2	- Alternative method: Percentage used - Alternative method: Percentage of - Interactive tutorial 11.2: Percentage of - Alternative method: Percentage application 1	Worksheet 51: Percentages

			- Alternative method: Percentage application 2 - Alternative method: Percentage application 3 - TLF L133 Playground percentages - Additional exercise 11.2	
5	11.3 Business percentages	Exercise 11.3	- Interactive tutorial 11.3: Percentage profit - Alternative method: Business applications 1 - Alternative method: Business applications 2 - Additional exercise 11.3	Worksheet 52: Business percentages
5	11.4 Interest and loans	- Exercise 11.4 - Technology: Flat-rate loans	- Teacher notes: Interest - Interactive tutorial 11.4: Loan repayments - Spreadsheet: Flat-rate loans - Additional exercise 11.4	Worksheet 53: Interest
6	Revision and consolidation	- Chapter 11 summary - Chapter 11 review - Project: Flat budget		
6		TUESDAY ASSESSMENT 11 (GP)		

Chapter 12: Geometry of angles and sides (3 weeks) (Space)				
Week	Contents	Text Resources	CD-ROM Resources	Teacher Pack Resources
7	Assessment of prior learning		Chapter 12 Progress check	Chapter 12 Progress check
7	12.1 Measuring, classifying and drawing angles	Exercise 12.1	- Teacher notes: Geometric constructions - Additional exercise 12.1	
7	12.2 Angles at a point and on lines	Exercise 12.2	Additional exercise 12.2	Worksheet 54: Angles at a point and on lines
7	12.3 Angles in triangles and quadrilaterals	Exercise 12.3	- Interactive tutorial 12.3: Finding angles reasoning - Additional exercise 12.3	Worksheet 55: Angles in triangles and quadrilaterals
8	12.4 Angles on parallel lines	Exercise 12.4	Additional exercise 12.4	Worksheet 56: Angles on parallel lines
8	12.5 The tangent ratio	Exercise 12.5	- Interactive tutorial 12.3: Using tan to solve sides of a triangle. - Additional exercise 12.5	Worksheet 57: The tangent ratio
8	Revision and consolidation	- Chapter 12 summary - Chapter 12 review		Term 4 review: Chapters 10 to 12