



Junior Division Framework for Reading, Writing, and Math

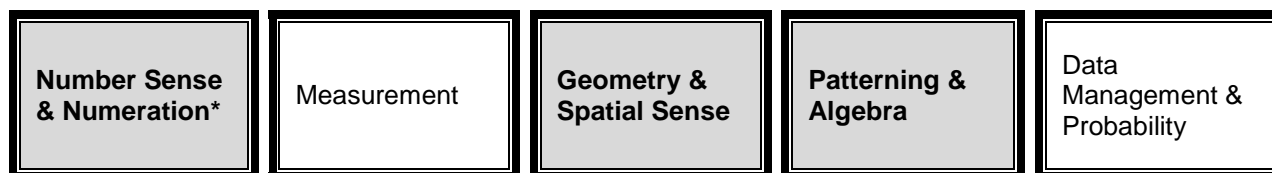
Mathematics Framework – Grade 4

Year at a Glance

Report: Introduce/teach, assess, evaluate and report

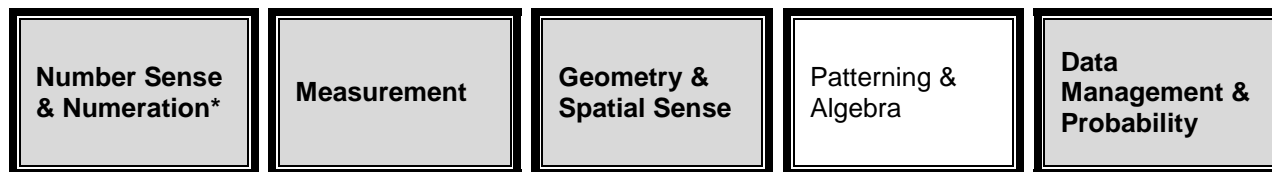
TERM 1: SEPT, OCT, NOV – REPORT

Suggested order of strands:



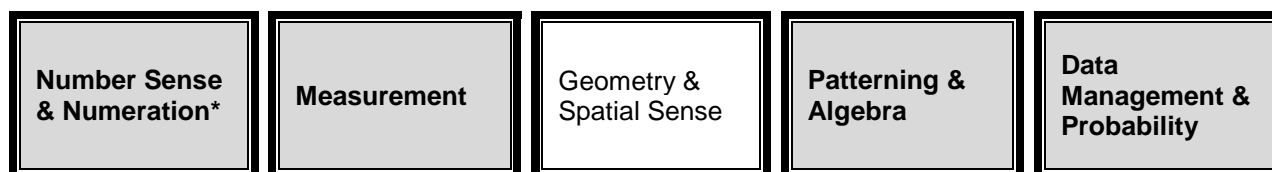
TERM 2: NOV, DEC, JAN, FEB, MAR – REPORT

Suggested order of strands:



TERM 3: MAR, APR, MAY, JUN – REPORT

Suggested order of strands:



* Number Sense & Numeration should be incorporated throughout each term

Overview of Lessons and Expectations from Math Makes Sense**UNIT 1: NUMBER PATTERNS**

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Patterns in Charts	Required	1.1, 1.2
Lesson 2: Exploring Number Patterns	Required	1.1, 1.3
Lesson 3: Number Patterns with a Calculator	Required	1.1
Lesson 4: Equations Involving Addition	Optional	
Lesson 5: Equations Involving Subtraction	Optional	
Lesson 6: Strategies Toolkit	Optional	
Unit Problem: Calendar Patterns	Required	

UNIT 2: WHOLE NUMBERS

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Whole Numbers to 10 000	Required	1.1, 1.2, 1.3, 1.11
Lesson 2: Rounding Numbers	Required	1.4
Lesson 3: Comparing and Ordering Numbers	Required	1.1, 1.2
Lesson 4: Estimating Sums	Required	3.10
Lesson 5: Using Mental Math to Add	Required	3.1
Lesson 6: Adding 3-Digit Numbers	Required	3.2
Lesson 7: Adding 4-Digit Numbers	Required	3.2
Lesson 8: Estimating Differences	Required	3.2, 3.10
Lesson 9: Using Mental Math to Add	Required	3.1, 3.2
Lesson 10: Subtracting 3-Digit Numbers	Required	3.2
Lesson 11: Subtracting from a 4-Digit Number	Required	3.2
Lesson 12: Strategies Toolkit	Required	
Unit Problem: Where Shall We Go?	Required	

UNIT 3: GEOMETRY

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Congruent Figures	Optional	
Lesson 2: Exploring Angles	Required	1.3
Lesson 3: Measuring Angles	Required	1.3, 1.4
Lesson 4: Exploring Sides in Quadrilaterals	Required	1.2
Lesson 5: Exploring Angles in Quadrilaterals	Required	1.2
Lesson 6: Attributes of Quadrilaterals	Required	1.2
Lesson 7: Similar Figures	Optional	
Technology: Using a Computer to Explore Pentominoes	Optional	
Lesson 8: Faces of Solids	Optional	
Lesson 9: Solids in our World	Required	1.5
Lesson 10: Designing Skeletons	Required	2.2
Lesson 10A: Nets (masters 3.30 to 3.33 in Curriculum Companion)	Required	2.3, 2.4
Lesson 11: Strategies Toolkit	Required	M 1.8
Lesson 12: Another Strategy for Division	Required	
Unit Problem: Under Construction	Required	

UNIT 4: MULTIPLICATION AND DIVISION

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Skip Counting	Required	3.5
Lesson 2: Multiplying by Numbers to 9	Required	3.5, 4.1, P 2.3
Lesson 3: Other Strategies for Multiplying	Required	3.5, 4.1, P 2.3
Lesson 4: Exploring Multiplication Patterns	Required	3.5, 3.6, 4.1
Lesson 5: Estimating Products	Required	3.7
Lesson 6: Strategies for Multiplication	Required	3.8, P 2.2, P 2.4
Lesson 7: Strategies Toolkit	Required	
Lesson 8: Dividing by Numbers from 1 to 7	Required	P 2.1
Lesson 9: Dividing by Numbers from 1 to 9	Required	P 2.1, 3.5
Lesson 10: Division with Remainders	Required	3.5
Lesson 11: Using Base Ten Blocks to Divide	Required	3.9
Lesson 12: Another Strategy for Division	Required	3.9
Unit Problem: At the Garden Centre	Required	

UNIT 5: DATA MANAGEMENT

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Reading Data in Tables	Required	2.1
Lesson 2: Reading Pictographs and Bar Graphs	Required	2.1
Lesson 3: Reading Circle Graphs	Required	2.1
Lesson 4: Drawing Pictographs	Required	1.1, 1.2
Technology: Making Pictographs Using Graphers	Required	1.2
Lesson 5: Drawing Bar Graphs	Required	1.2
Technology: Making Bar Graphs Using Graphers	Required	1.2
Lesson 6: Conducting a Survey	Required	1.1
Lesson 6A: Double-Bar Graphs (masters 5.18 to 5.20 Curriculum Companion)	Required	1.2, 2.1, 2.4
Lesson 6B: Stem and Leaf Plots (masters 5.22 to 5.24 Curriculum Companion)	Required	1.2, 2.1, 2.2, 2.3, 2.4
Lesson 7: Strategies Toolkit	Required	
Unit Problem: At the Vet	Required	

UNIT 6: MEASUREMENT

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Exploring Units of Time	Required	1.3, 2.9
Lesson 2: Telling Time	Required	1.3
Lesson 3: Estimating Time	Required	1.4
Lesson 4: Exploring Elapsed Time	Required	1.4
Lesson 5: Estimating and Counting Money	Required	NS 1.10
Lesson 6: Making Change	Required	NS 1.10
Lesson 7: Strategies Toolkit	Required	
Lesson 8: Measuring Capacity	Required	1.7, 2.5, 2.7, 2.8
Lesson 9: Measuring Mass	Required	1.6, 2.5, 2.6, 2.8
Unit Problem: The Cooking Show	Required	

UNIT 7: TRANSFORMATIONAL GEOMETRY

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Grids and Coordinates	Required	3.1
Lesson 2: Translations	Optional	
Lesson 3: Reflections	Required	3.2
Lesson 4: Lines of Symmetry	Required	1.1
Lesson 5: Rotations	Optional	
Technology: Transformations on a Computer	Optional but recommended	
Lesson 6: Patterns with Transformations	Required	1.2, 3.3, P&A 1.5
Lesson 7: Strategies Toolkit	Optional	
Unit Problem: At the Funhouse	Optional but recommended	

UNIT 8: FRACTIONS AND DECIMALS

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Fractions of a Whole	Required	1.6, 2.1
Lesson 2: Fraction Benchmarks	Required	1.8
Lesson 3: Fractions of a Set	Required	1.6
Lesson 4: Strategies Toolkit	Required	
Lesson 5: Different Names for Fractions	Required	1.9
Lesson 6: More than One	Optional but recommended	
Lesson 7: Comparing and Ordering Fractions	Required	1.7
Lesson 8: Exploring Tenths	Required	1.2, 1.5, 2.2, 4.2
Technology: Calculator Counting	Required	
Lesson 9: Exploring Hundredths	Optional	
Technology: Fractions and Decimals on a Calculator		
Lesson 10: Comparing and Ordering Decimals	Optional	
Lesson 11: Adding Decimals	Required	3.3
Lesson 12: Subtracting Decimals	Required	3.3
Lesson 13: Adding and Subtracting Money	Required	3.4
Unit Problem: Spring Activities Day	Optional	

UNIT 9: LENGTH, PERIMETER, AND AREA

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Measuring Linear Dimensions	Required	1.1, 1.2, 2.1
Lesson 2: Measuring in Millimetres	Required	1.1, 1.2, 2.1
Lesson 3: Measuring in Decimetres	Required	2.1
Lesson 4: Strategies Toolkit	Required	
Lesson 5: Relating Units of Measure	Required	2.1
Lesson 6: Measuring Perimeter	Required	1.5, 2.2
Lesson 7: Finding the Perimeter of a Large Region	Required	1.5, 2.2
Lesson 8: Exploring Area	Required	1.5
Lesson 9: Measuring Area in Square Centimetres	Required	1.5
Lesson 9A: Perimeter and Area of Rectangles (masters 9.26 to 9.28 Curriculum Companion)	Required	2.3
Lesson 10: Estimating and Measuring Area	Required	1.5
Lesson 11: Finding Area in Square Metres	Required	1.5, 2.4
Lesson 12: Exploring Figures with Equal Perimeters	Required	2.10
Lesson 13: Exploring Figures with Equal Areas	Required	2.10
Unit Problem: Design a Backyard	Required	

UNIT 10: PATTERNS IN NUMBER AND GEOMETRY

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Repeating Patterns	Required	1.4
Lesson 2: Patterns in Multiplication	Required	2.4
Lesson 3: Multiplying a 3-Digit Number by a 1-Digit Number	Optional	
Lesson 4: Growing Patterns	Required	1.2, 1.3, 1.4
Lesson 5: Changing Step Growing Patterns	Required	1.2, 1.3, 1.4
Lesson 6: Strategies Toolkit	Required	
Lesson 7: Patterns in Division with Remainders	Required	NS 3.9
Lesson 8: Dividing a 3-Digit Number by a 1-Digit Number	Optional	
Lesson 9: Area Patterns	Required	GS 3.3
Technology: Creating Patterns on a Computer	Required	
Unit Problem: Fun and Games	Required	

UNIT 11: PROBABILITY

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: The Language of Probability	Optional but recommended	
Lesson 2: Identifying Outcomes and Predicting Results	Optional but recommended	
Lesson 3: Strategies Toolkit	Optional	
Lesson 4: Exploring Predictions	Required	3.1
Lesson 5: Predicted and Actual Results	Required	3.1, 3.2
Unit Problem: At the Carnival	Required	