Junior Division Framework for Reading, Writing, and Math

Mathematics Framework – Grade 6

Year at a Glance

Report: Introduce/teach, assess, evaluate and report

TERM 1: SEPT, OCT, NOV – REPORT

Suggested order of strands:

Number Sense & Numeration*	Measurement	**Geometry & Spatial Sense**	**Patterning & Algebra**	Data Management & Probability

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

Suggested order of strands:

Number Sense & Numeration*	**Measurement**	**Geometry & Spatial Sense**	Patterning & Algebra	**Data Management & Probability**

TERM 3: MAR, APR, MAY, JUN – REPORT

Suggested order of strands:

Number Sense & Numeration*	**Measurement**	Geometry & Spatial Sense	**Patterning & Algebra**	**Data Management & Probability**

* Number Sense & Numeration should be incorporated throughout each term

Overview of Lessons and Expectations from Math Makes Sense

UNIT 1: NUMBER PATTERNS (PATTERNING AND ALGEBRA)

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Input/Output Machines	Required	1.2, 1.4, 1.5
Lesson 2: Number Patterns	Required	1.4, 1.5
Lesson 3: Patterns in Division	Optional	
Lesson 4: Solving Equations	Required	2.1, 2.3, 2.4
World of Work	Optional	
Lesson 5: Exploring Integers	Optional	
Game: Equation Baseball	Optional	
Lesson 6: Strategies Toolkit	Optional but recommended	
Unit Problem: Crack the Code	Optional but recommended	

UNIT 2: WHOLE NUMBERS (NUMBER SENSE)

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Exploring One Million	Required	1.1, 1.6
Lesson 2: Understanding Large Numbers (only need to know to 1 000 000)	Required	1.1, 1.2
Lesson 3: Comparing and Ordering Numbers (only need to know to 1 000 000)	Required	1.1,
Lesson 4: Exploring Multiples	Optional but recommended	
Lesson 5: Prime and Composite Numbers	Required	1.7
Lesson 6: Strategies Toolkit	Optional	
Lesson 7: Using Mental Math	Required	2.1
Game: Buzz!	Optional	
Lesson 8: Order of Operations	Required	2.8
Game: OoOps Bingo!	Optional	
World of Work: Environmentalist	Optional	
Lesson 9: Adding and Subtracting Whole Numbers	Required	2.7
Lesson 10: Multiplying Whole Numbers	Required	2.2
Lesson 11: Dividing by a 2-Digit Number	Required	2.2
Lesson 12: Another Method for Dividing	Required	2.2
Unit Problem: At the Apiary	Optional, but recommended	

UNIT 3: GEOMETRY

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Investigating Angles (only need to measure angles to 180°)	Required	1.3
Lesson 2: Exploring Thousandths	Required	1.1
Lesson 3: Strategies Toolkit	Optional but recommended	
Lesson 4: Constructing Figures	Required	1.4
Technology: Using The Geometer's Sketchpad to Draw and Measure Polygons	Required	1.1
Lesson 5: Nets of Objects	Optional but recommended	
Lesson 6: Illustrating Objects	Required	2.1, 2.2
Unit Problem: Angle Hunt	Optional but recommended	

UNIT 4: DECIMALS (NUMBER SENSE)

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Numbers in the Media	Required	1.1, 1.2
Lesson 2: Exploring Thousandths	Required	1.1, 1.2
Lesson 3: Comparing and Ordering Decimals	Required	1.1
World of Work: Currency Trader		
Lesson 4: Rounding Decimals	Required	M1.1
Lesson 5: Estimating Sums and Differences	Required	M1.2, 2.3, 2.7
Lesson 6: Adding and Subtracting Decimals	Required	2.3
Lesson 7: Multiplying Decimals by 10, 100, 1000, 10 000	Required	M2.2, 2.6
Lesson 8: Dividing Decimals by 10, 100, 1000, 10 000	Required	2.6, 3.3
Lesson 9: Multiplying Whole Numbers by 0.1, 0.01, 0.001	Required	M2.2, 2.5
Game: Place Value Concentration	Required	
Lesson 10: Multiplying Decimals by a 1-Digit Whole Number	Required	2.4, 3.3
Lesson 11: Dividing Decimals by a 1-Digit Whole Number	Required	2.4, 3.3
Lesson 12: Dividing Decimals	Required	M2.2, 2.4
Lesson 13: Strategies Toolkit	Optional but recommended	
Unit Problem: Harnessing the Wind	Optional but recommended	

UNIT 5: DATA MANAGEMENT

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Interpreting Data	Required	2.1, 2.5
Lesson 2: Finding the Median	Required	2.1, 2.4
Lesson 3:Strategies Toolkit	Optional	
Lesson 4: Constructing and Interpreting Graphs	Required	1.1, 1.2, 1.3, 2.1
Technology: Drawing Bar Graphs and Line Graphs with	Required	1.2, 1.3, 2.2, 2.3
Lesson 5: Graphing on a Coordinate Grid	Required	GS 3.1
Lesson 6: Scatter Plots	Required	1.1, 2.1
Technology: Drawing a Scatter Plot with Appleworks	Required	1.2, 1.3, 2.2, 2.3
Lesson 7: Conducting a Survey	Required	1.1, 1.2, 1.4, 2.1
Unit Problem: Playing with Letters	Optional but recommended	

UNIT 6: MEASUREMENT

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Time Zones	Optional	
Lesson 2: The 24 Hour Clock	Optional	
Game: Clock Concentration		
Lesson 3: Money to $10 000	Optional but recommended	
Lesson 4: Strategies Toolkit	Optional	
Lesson 5: Surface Area of a Rectangular Prism	Required	2.9, 2.10
Lesson 6: Volume of a Rectangular Prism	Required	2.10
Lesson 7: The Cubic Metre	Required	2.2
Lesson 8: Capacity and Volume	Required	2.2
World of Work: Shipping Manager	Optional	
Game: Go for a Million!	Optional	
Lesson 9: Relating Units of Mass	Optional but recommended	
Unit Problem: Travelling Time	Optional but recommended	

UNIT 7: TRANSFORMATIONAL GEOMETRY

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Transformations	Required	3.1, 3.2
Lesson 2: Combined Transformations	Required	3.2, 3.3
Lesson 3: Congruent Figures	Optional but recommended	
Lesson 4: Similar Figures	Optional	
Technology: Using the Geometer's Sketchpad to Explore Similar Figures	Optional	
Lesson 5: Line Symmetry	Required	1.2
Lesson 6: Rotational Symmetry	Required	1.2
Lesson 7: Strategies Toolkit	Optional	
World of Work: Animator	Optional	
Lesson 8: Tiling Patterns	Required	PA 1.6
Unit Problem: Art and Architecture	Optional but recommended	

UNIT 8: FRACTIONS AND DECIMALS (NUMBER SENSE)

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Equivalent Fractions	Required	1.4
Lesson 2: Relating Mixed Numbers and Improper Fractions	Required	1.4
Lesson 3: Comparing and Ordering Mixed Numbers and Fractions	Required	1.4
World of Work: Machinist	Optional	
Lesson 4: Adding Fractions	Optional but recommended	
Lesson 5: Subtracting Fractions	Optional but recommended	
Game: Fraction Match Up	Optional	
Lesson 6: Exploring Percents	Optional	
Lesson 7: Relating Fractions, Decimals, and Percents	Required	3.2
Lesson 8: Estimating and Finding a Percent	Required	1.5
Lesson 9: Exploring Ratios	Required	1.5, 3.1
Lesson 10: Equivalent Rations	Required	3.1
Lesson 11: Exploring Rates	Required	3.3
Lesson 12: Strategies Toolkit	Optional	
Unit Problem: Read the Label	Optional	

UNIT 9: PERIMETER, AREA, AND VOLUME (MEASUREMENT)

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Perimeter	Required	PA 2.2, 2.1
Lesson 2: Exploring Rectangles	Required	2.7
Lesson 3: Strategies Toolkit	Optional	
Lesson 4: Area of a Parallelogram	Required	PA 9.4, 2.4, 2.6
Lesson 5: Exploring Triangles and Rectangles	Required	2.4, 2.6
Lesson 6: Exploring Triangles and Parallelograms	Required	PA 9.4, 2.5, 2.6
Lesson 7: Volume of a Triangular Prism	Required	2.8, 2.10
Lesson 8: Surface Area of a Triangular Prism	Required	2.9, 2.10
Lesson 9: Sketching Polygons	Required	2.3, 2.6
World of Work: Plumber	Optional	
Unit Problem: Stationery Design	Optional	

UNIT 10: PATTERNS IN NUMBER AND GEOMETRY (PATTERNING AND ALGEBRA)

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Representing Patterns	Required	1.1, 1.2, 1.3, 1.5
Lesson 2: Relating Graphs and Input/Output Machines	Required	1.2, 1.5
Lesson 3: Patterns in Geometry	Required	1.1, 1.2, 1.4, 1.5
World of Work: Biometric Engineer	Optional	
Lesson 4: Relating Distance, Average Speed, and Time	Required	NS 3.3
Lesson 5: Strategies Toolkit	Optional	
Unit Problem: Camping in Treetops	Optional but recommended	

UNIT 11: PROBABILITY

LESSON	CURRICULUM COVERAGE	EXPECTATIONS COVERED
Lesson 1: Describing Probabilities	Required	3.1, 3.2
Lesson 2: Probability and Percent	Required	3.1,
Lesson 3: Tree Diagrams	Optional	
Lesson 4: Strategies Toolkit	Optional	
Lesson 5: Conducting Experiments	Required	3.3
Unit Problem: Alien Encounters	Optional but recommended	