



Correlation to WNCP Curriculum and Grade 6 Classroom Resources

Note: *Leaps and Bounds 5/6* is a math intervention resource and therefore does not include new content and concepts being introduced to students for the first time in Grade 6. *Leaps and Bounds* includes content from Grades 3 to 5 that will prepare students who are struggling for work at the Grade 5 or 6 level.

GRADE 6 Core Resources - Correlation with Grade 6 WNCP core resources			INTERVENTION Resources and Outcomes Correlation between <i>Leaps and Bounds 5/6</i> and prerequisite outcomes from WNCP Grades 3 to 5.			
Number						
Grade 6 WNCP Outcomes	<i>Math Focus 6</i>	<i>Math Makes Sense 6</i>	<i>Leaps and Bounds 5/6 Topics</i>	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
1. Demonstrate an understanding of place value for numbers: • greater than one million • less than one thousandth. [C, CN, R, T]	Chapter 2: Lessons 1, 4, 5, 6, 7, 8, Curious Math, Math Game	Unit 2, Lesson 1, pp. 46–50; Unit 3, Lesson 1, pp. 88–91	Representing Whole Numbers <i>Pathway 1:</i> Representing Numbers to 100 000 <i>Pathway 2:</i> Representing Numbers to 10 000 <i>Pathway 3:</i> Representing Numbers to 1000 <i>Pathway 4:</i> Multiplying and Dividing by 10s Comparing Whole Numbers <i>Pathway 1:</i> Comparing Numbers to 100 000 <i>Pathway 2:</i> Comparing Numbers to 10 000 <i>Pathway 3:</i> Comparing Numbers to 1000	1. Represent and describe whole numbers to 1 000 000. [C, CN, V, T]	1. Represent and describe whole numbers to 10 000, pictorially and symbolically. [C, CN, V] 2. Compare and order numbers to 10 000. [C, CN]	2. Represent and describe numbers to 1000, concretely, pictorially and symbolically. [C, CN, V] 3. Compare and order numbers to 1000. [CN, R, V] 4. Estimate quantities less than 1000 using referents. [ME, PS, R, V] 5. Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000. [C, CN, R, V]
2. Solve problems involving large numbers, using technology. [ME, PS, T]	Chapter 2: Lessons 1, 2, 3, 5, Chapter Task	Unit 2, Lesson 2, pp. 51–54; Unit Problem, pp. 84, 85				

Number						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
3. Demonstrate an understanding of factors and multiples by: - determining multiples and factors of numbers less than 100 - identifying prime and composite numbers - solving problems involving multiples. [PS, R, V]	Chapter 3: Lessons 1, 2, 3, 4, 5, 6, Curious Math, Math Game	Unit 2, Lesson 3, pp. 55–58; Lesson 4, pp. 59–62; Lesson 5, pp. 63–66; Game, p. 67; Lesson 6, pp. 68, 69	Adding and Subtracting <i>Pathway 1:</i> Different Numbers of Digits <i>Pathway 2:</i> Same Number of Digits <i>Pathway 3:</i> Using Mental Math to Subtract <i>Pathway 4:</i> Using Mental Math to Add Multiplying Whole Numbers <i>Pathway 1:</i> Multiplying Two-Digit Numbers <i>Pathway 2:</i> Multiplying by One-Digit Numbers <i>Pathway 3:</i> Multiplication Fact Strategies Dividing Whole Numbers <i>Pathway 1:</i> Dividing Three-Digit Numbers <i>Pathway 2:</i> Dividing Two-Digit Numbers <i>Pathway 3:</i> Division Fact Strategies Relating Situations to Operations <i>Pathway 1:</i> Division Situations <i>Pathway 2:</i> Multiplication Situations <i>Pathway 3:</i> Subtraction Situations	2. Use estimation strategies including: - front-end rounding - compensation - compatible numbers in problem-solving contexts. [C, CN, ME, PS, R, V] 3. Apply mental mathematics strategies and number properties, such as: - skip counting from a known fact - using doubling or halving - using patterns in the 9s facts - using repeated doubling or halving to determine answers for basic multiplication facts to 81 and related division facts. [C, CN, ME, R, V] 4. Apply mental mathematics strategies for multiplication, such as: - annexing then adding zero - halving and doubling - using the distributive property. [C, ME, R]	3. Demonstrate an understanding of addition of numbers with answers to 10 000 and their corresponding subtractions (limited to 3 and 4-digit numerals) by: - using personal strategies for adding and subtracting - estimating sums and differences - solving problems involving addition and subtraction. [C, CN, ME, PS, R] 4. Apply mental mathematics strategies for multiplication, such as: - annexing then adding zero - halving and doubling - using the distributive property. [C, ME, R] 5. Describe and apply mental mathematics strategies, such as: - skip counting from a known fact - using doubling or halving	1. Say the number sequence forward and backward from 0 to 1000 by: 5s, 10s or 100s using any starting point 3s using starting points that are multiples of 3 4s using starting points that are multiples of 4 25s using starting points that are multiples of 25. [C, CN, ME] 6. Describe and apply mental mathematics strategies for adding two 2-digit numerals, such as: - adding from left to right - taking one addend to the nearest multiple of ten and then compensating - using doubles. [C, ME, PS, R, V] 7. Describe and apply mental mathematics strategies for subtracting two 2-digit numerals, such as: - taking the subtrahend to the nearest multiple of ten and then compensating - thinking of addition - using doubles. [C, ME, PS, R, V]

Number						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
				5. Demonstrate an understanding of multiplication (2-digit by 2-digit) to solve problems. [C, CN, PS, V] 6. Demonstrate, with and without concrete materials, an understanding of division (3-digit by 1-digit) and interpret remainders to solve problems. [C, CN, PS]	• using doubling or halving and adding or subtracting one more group • using patterns in the 9s facts • using repeated doubling to determine basic multiplication facts to 9×9 and related division facts. [C, CN, ME, PS, R] 6. Demonstrate an understanding of multiplication (2-or 3-digit by 1-digit) to solve problems by: • using personal strategies for multiplication with and without concrete materials • using arrays to represent multiplication • connecting concrete representations to symbolic representations • estimating products. [C, CN, ME, PS, R, V]	8. Apply estimation strategies to predict sums and differences of two 2-digit numerals in a problem solving context. [C, ME, PS, R] 9. Demonstrate an understanding of addition and subtraction of numbers with answers to 1000 (limited to 1, 2 and 3-digit numerals) by: • using personal strategies for adding and subtracting with and without the support of manipulatives • creating and solving problems in contexts that involve addition and subtraction of numbers concretely, pictorially and symbolically. [C, CN, ME, PS, R] 10. Apply mental mathematics strategies and number properties, such as: • using doubles • making 10 • using the commutative property • using the property of zero • thinking addition for subtraction to recall basic addition facts to 18 and related subtraction facts. [C, CN, ME, R, V]

Number						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
					7. Demonstrate an understanding of division (1-digit divisor and up to 2-digit dividend) to solve problems by: • using personal strategies for dividing with and without concrete materials • estimating quotients • relating division to multiplication. [C, CN, ME, PS, R, V]	11. Demonstrate an understanding of multiplication to 5×5 by: • representing and explaining multiplication using equal grouping and arrays • creating and solving problems in context that involve multiplication • modelling multiplication using concrete and visual representations, and recording the process symbolically • relating multiplication to repeated addition • relating multiplication to division. [C, CN, PS, R] 12. Demonstrate an understanding of division by: • representing and explaining division using equal sharing and equal grouping • creating and solving problems in context that involve equal sharing and equal grouping • modelling equal sharing and equal grouping using concrete and visual representations, and recording the process symbolically • relating division to repeated subtraction • relating division to multiplication. (limited to division related to multiplication facts up to 5×5) [C, CN, PS, R]

Number						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
4. Relate improper fractions to mixed numbers. [CN, ME, R, V]	Chapter 7: Lessons 1, 2, 3, 4, 5, 6, 7, Math Game, Curious Math, Chapter Task	Unit 5, Lesson 1, pp. 162–165; Lesson 2, pp. 166–169; Game, p. 170; Lesson 3, pp. 171–175; Lesson 6, pp. 184, 185; Unit Problem, pp. 196, 197	Representing Fractions <i>Pathway 3:</i> Proper Fractions: Parts of Sets <i>Pathway 4:</i> Proper Fractions: Parts of Wholes Comparing Fractions <i>Pathway 2:</i> Equivalent Fractions <i>Pathway 3:</i> Comparing: Same Numerators <i>Pathway 4:</i> Comparing: Same Denominators <i>Pathway 5:</i> Comparing Fractions to $\frac{1}{2}$ and 1	7. Demonstrate an understanding of fractions by using concrete and pictorial representations to: • create sets of equivalent fractions • compare fractions with like and unlike denominators. [C, CN, PS, R, V]	8. Demonstrate an understanding of fractions less than or equal to one by using concrete and pictorial representations to: • name and record fractions for the parts of a whole or a set • compare and order fractions • model and explain that for different wholes, two identical fractions may not represent the same quantity • provide examples of where fractions are used. [C, CN, PS, R, V]	13. Demonstrate an understanding of fractions by: • explaining that a fraction represents a part of a whole • describing situations in which fractions are used • comparing fractions of the same whole with like denominators. [C, CN, ME, R, V]
5. Demonstrate an understanding of ratio, concretely, pictorially and symbolically. [C, CN, PS, R, V]	Chapter 6: Lessons 1, 2, 5, 7, Chapter Task	Unit 5, Lesson 4, pp. 176–179; Lesson 5, pp. 180–183; Lesson 6, pp. 184, 185; Unit Problem, pp. 196, 197				
6. Demonstrate an understanding of percent, (limited to whole numbers) concretely, pictorially and symbolically. [C, CN, PS, R, V]	Chapter 6: Lessons 3, 4, 6, 7, Math Game, Curious Math, Chapter Task	Unit 5, Lesson 7, pp. 186–189; Lesson 8, pp. 190–193; Unit Problem, pp. 196, 197				

Number						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
7. Demonstrate an understanding of integers, concretely, pictorially and symbolically. [C, CN, R, V]	Chapter 3: Lessons 7, 8, Curious Math	Unit 2, Lesson 8, pp. 74–77; Lesson 9, pp. 78–81; Unit Problem, pp. 84, 85				
8. Demonstrate an understanding of multiplication and division of decimals (1-digit whole number multipliers and 1-digit natural number divisors). [C, CN, ME, PS, R, V]	Chapter 9: Lessons 1, 2, 3, 4, 5, 6, 7, Math Game, Curious Math, Chapter Task	Unit 3, Lesson 2, pp. 92–94; Lesson 3, pp. 95–98; Lesson 4, pp. 99–102; Lesson 5, pp. 103–107; Lesson 6, pp. 108–111; Lesson 7, pp. 112–114; Game, p. 115; Lesson 8, pp. 116, 117; Unit Problem, pp. 120, 121	Representing Decimals <i>Pathway 1:</i> Representing Thousandths <i>Pathway 2:</i> Representing Hundredths <i>Pathway 3:</i> Representing Tenths Comparing Decimals <i>Pathway 1:</i> Comparing Mixed Decimals <i>Pathway 2:</i> Comparing Thousandths <i>Pathway 3:</i> Comparing Tenths and Hundredths Decimal Computation <i>Pathway 1:</i> Multiply and Divide by 10 or 100 <i>Pathway 2:</i> Add and Subtract to Thousandths <i>Pathway 3:</i> Add and Subtract Thousandths <i>Pathway 4:</i> Add and Subtract to Hundredths <i>Pathway 5:</i> Add and Subtract Tenths or Hundredths	8. Describe and represent decimals (tenths, hundredths, thousandths) concretely, pictorially and symbolically. [C, CN, R, V] 9. Relate decimals to fractions (to thousandths). [CN, R, V] 10. Compare and order decimals (to thousandths) by using: • benchmarks • place value • equivalent decimals. [CN, R, V] 11. Demonstrate an understanding of addition and subtraction of decimals (limited to thousandths). [C, CN, PS, R, V]	9. Describe and represent decimals (tenths and hundredths) concretely, pictorially and symbolically. [C, CN, R, V] 10. Relate decimals to fractions (to hundredths). [CN, R, V] 11. Demonstrate an understanding of addition and subtraction of decimals (limited to hundredths) by: • using compatible numbers • estimating sums and differences • using mental math strategies to solve problems. [C, ME, PS, R, V]	

Number						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
9. Explain and apply the order of operations, excluding exponents, with and without technology (limited to whole numbers). [CN, ME, PS, T]	Chapter 3: Lesson 9, Math Game	Unit 2, Lesson 7, pp. 70–73				
Patterns and Relations: Patterns						
1. Demonstrate an understanding of the relationship within tables of values to solve problems. [C, CN, PS, R] 2. Represent and describe patterns and relationships using graphs and tables. [C, CN, ME, PS, R, V]	Chapter 1: Lessons 1, 2, 3, 4, 6, Curious Math, Chapter Task Chapter 4: Lessons 5, 6, 7, Chapter Task	Unit 1, Lesson 1, pp. 6–10; Lesson 2, pp. 11–15; Lesson 3, pp. 16, 17; Game, p. 18; Lesson 4, pp. 19–23; Lesson 6, pp. 29–32; Unit Problem, pp. 42, 43	Patterns <i>Pathway 1: Using Pattern Rules</i> <i>Pathway 2: Growing and Shrinking Patterns</i>	1. Determine the pattern rule to make predictions about subsequent elements. [C, CN, PS, R, V]	1. Identify and describe patterns found in tables and charts, including a multiplication chart. [C, CN, PS, V] 2. Reproduce a pattern shown in a table or chart using concrete materials. [C, CN, V] 3. Represent and describe patterns and relationships using charts and tables to solve problems. [C, CN, PS, R, V]	1. Demonstrate an understanding of increasing patterns by: • describing • extending • comparing • creating patterns using manipulatives, diagrams, sounds and actions (numbers to 1000). [C, CN, PS, R, V] 2. Demonstrate an understanding of decreasing patterns by: • describing • extending • comparing • creating patterns using manipulatives, diagrams, sounds and actions (numbers to 1000). [C, CN, PS, R, V]

Variables and Equations						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
3. Represent generalizations arising from number relationships using equations with letter variables. [C, CN, PS, R, V] 4. Demonstrate and explain the meaning of preservation of equality concretely, pictorially and symbolically. [C, CN, PS, R, V]	Chapter 1: Lessons 3, 4, 5, Math Game, Chapter Task Chapter 8: Lesson 8, 9, 10	Unit 1, Lesson 4, pp. 19–23; Lesson 7, pp. 33–35; Lesson 8, pp. 36–39; Unit Problem, pp. 42, 43 Unit 6, Lesson 7, pp. 226–230; Lesson 8, pp. 231–234	Equality <i>Pathway 1: Using Algebra</i> <i>Pathway 2: Solving Equations</i>	2. Solve problems involving single-variable, one-step equations with whole number coefficients and whole number solutions. [C, CN, PS, R]	4. Identify and explain mathematical relationships using charts and diagrams to solve problems. [CN, PS, R, V] 5. Express a given problem as an equation in which a symbol is used to represent an unknown number. [CN, PS, R] 6. Solve one-step equations involving a symbol to represent an unknown number. [C, CN, PS, R, V]	3. Solve one-step addition and subtraction equations involving symbols representing an unknown number. [C, CN, PS, R, V]
Shape and Space: Measurement						
1. Demonstrate an understanding of angles by: - identifying examples of angles in the environment - classifying angles according to their measure - estimating the measure of angles using 45°, 90° and 180° as reference angles - determining angle measures in degrees - drawing and labeling angles when the measure is specified. [C, CN, ME, V]	Chapter 8: Lessons 1, 2, 3, 4, 5, 11, Math Game, Curious Math, Chapter Task Chapter 11: Lessons 3, 4, 5, Math Game, Curious Math, Chapter Task	Unit 4, Lesson 1, pp. 126–129; Lesson 2, pp. 130–132; Lesson 3, pp. 133–138; Lesson 4, pp. 139–142; Game, p. 143; Lesson 5, pp. 144, 145; Unit Problem, pp. 156, 157	Angles <i>Pathway 1: Measuring and Drawing Angles</i> <i>Pathway 2: Comparing Angles</i>			

Shape and Space: Measurement						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
2. Demonstrate that the sum of interior angles is: • 180° in a triangle • 360° in a quadrilateral. [C, R]	Chapter 8: Lessons 6, 7, 11	Unit 4, Lesson 6, pp. 146–149; Lesson 7, pp. 150–153; Unit Problem, pp. 156, 157				
3. Develop and apply a formula for determining the: • perimeter of polygons • area of rectangles • volume of right rectangular prisms. [C, CN, PS, R, V]	Chapter 8: Lessons 8, 9, 10, 11	Unit 6, Lesson 7, pp. 226–230; Lesson 8, pp. 231–234; Lesson 9, pp. 235–238; Game, p. 239; Unit Problem, pp. 242, 243	Length <i>Pathway 1:</i> Perimeter of a Rectangle <i>Pathway 2:</i> Perimeter: Using Standard Units <i>Pathway 3:</i> Length: Using Standard Units Area <i>Pathway 1:</i> Area of a Rectangle <i>Pathway 2:</i> Using Standard Units of Area Volume and Capacity <i>Pathway 1:</i> Volume Related to Area of Base <i>Pathway 2:</i> Relating Volume and Capacity <i>Pathway 3:</i> Volume: Cubic Centimetres <i>Pathway 4:</i> Capacity: Litres or Millilitres	1. Design and construct different rectangles given either perimeter or area, or both (whole numbers) and draw conclusions. [C, CN, PS, R, V] 2. Demonstrate an understanding of measuring length (mm) by: • selecting and justifying referents for the unit mm • modelling and describing the relationship between mm and cm units, and between mm and m units. [C, CN, ME, PS, R, V] 3. Demonstrate an understanding of volume by: • selecting and justifying referents for cm³ or m³ units • estimating volume by using referents for cm³ or m³ • measuring and recording volume (cm³ or m³) • constructing rectangular prisms for a given volume. [C, CN, ME, PS, R, V]	3. Demonstrate an understanding of area of regular and irregular 2-D shapes by: • recognizing that area is measured in square units • selecting and justifying referents for the units cm² or m² • estimating area by using referents for cm² or m² • determining and recording area (cm² or m²) • constructing different rectangles for a given area (cm² or m²) in order to demonstrate that many different rectangles may have the same area. [C, CN, ME, PS, R, V]	5. Demonstrate an understanding of perimeter of regular and irregular shapes by: • estimating perimeter using referents for centimetre or metre • measuring and recording perimeter (cm, m) • constructing different shapes for a given perimeter (cm, m) to demonstrate that many shapes are possible for a perimeter. [C, ME, PS, R, V] 3. Demonstrate an understanding of measuring length (cm, m) by: • selecting and justifying referents for the units cm and m

Shape and Space: Measurement						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
				4. Demonstrate an understanding of capacity by: - describing the relationship between mL and L - selecting and justifying referents for mL or L units - estimating capacity by using referents for mL or L - measuring and recording capacity (mL or L). [C, CN, ME, PS, R, V]		- modelling and describing the relationship between the units cm and m - estimating length using referents - measuring and recording length, width and height. [C, CN, ME, PS, R, V]
			Time <i>Pathway 1:</i> Using Elapsed Time <i>Pathway 2:</i> Reading a Clock		1. Read and record time using digital and analog clocks, including 24-hour clocks. [C, CN, V] 2. Read and record calendar dates in a variety of formats. [C, V]	1. Relate the passage of time to common activities using non-standard and standard units (minutes, hours, days, weeks, months, years). [CN, ME, R] 2. Relate the number of seconds to a minute, the number of minutes to an hour and the number of days to a month in a problem-solving context. [C, CN, PS, R, V]

Shape and Space: Measurement						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
			Mass <i>Pathway 1:</i> Mass: Kilograms and Grams <i>Pathway 2:</i> Mass: Using One Standard Unit			4. Demonstrate an understanding of measuring mass (g, kg) by: • selecting and justifying referents for the units g and kg • modelling and describing the relationship between the units g and kg • estimating mass using referents • measuring and recording mass. [C, CN, ME, PS, R, V]
3-D Objects and 2-D Shapes						
4. Construct and compare triangles, including: • scalene • isosceles • equilateral • right • obtuse • acute in different orientations. [C, PS, R, V] 5. Describe and compare the sides and angles of regular and irregular polygons. [C, PS, R, V]	Chapter 11: Lessons 1, 2, 3, 4, 5, 6, 7, Math Game, Curious Math, Chapter Task	Unit 6, Lesson 1, pp. 200–204; Lesson 2, pp. 205–208; Lesson 3, pp. 209–213; Lesson 4, pp. 214–218; Lesson 5, pp. 219–223; Lesson 6, pp. 224, 225; Unit Problem, pp. 242, 243	3-D Shapes <i>Pathway 1:</i> Modelling with Nets <i>Pathway 2:</i> Modelling with Skeletons <i>Pathway 3:</i> Modelling with Solid Shapes 2-D Shapes <i>Pathway 1:</i> Classifying Triangles <i>Pathway 2:</i> Classifying Quadrilaterals <i>Pathway 3:</i> Line Symmetry	5. Describe and provide examples of edges and faces of 3-D objects, and sides of 2-D shapes that are: • parallel • intersecting • perpendicular • vertical • horizontal. [C, CN, R, T, V] 6. Identify and sort quadrilaterals, including: • rectangles • squares • trapezoids • parallelograms • rhombuses according to their attributes. [C, R, V]	4. Describe and construct rectangular and triangular prisms. [C, CN, R, V] 5. Demonstrate an understanding of line symmetry by: • identifying symmetrical 2-D shapes • creating symmetrical 2-D shapes • drawing one or more lines of symmetry in a 2-D shape. [C, CN, V]	6. Describe 3-D objects according to the shape of the faces, and the number of edges and vertices. [C, CN, PS, R, V] 7. Sort regular and irregular polygons, including: • triangles • quadrilaterals • pentagons • hexagons • octagons according to the number of sides. [C, CN, R, V]

Transformations						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
6. Perform a combination of translation(s), rotation(s) and/or reflection(s) on a single 2-D shape, with and without technology, and draw and describe the image. [C, CN, PS, T, V] 7. Perform a combination of successive transformations of 2-D shapes to create a design, and identify and describe the transformations. [C, CN, T, V]	Chapter 5: Lessons 4, 5, 6, Math Game, Curious Math, Chapter Task Chapter 8: Lesson 6	Unit 8, Lesson 3, pp. 303–307; Lesson 4, pp. 308–312; Lesson 5, pp. 313–317; Lesson 6, pp. 318, 319; Technology Lesson, p. 320; Game, p. 321; Unit Problem, pp. 324, 325	Transformations <i>Pathway 1:</i> Single Rotations <i>Pathway 2:</i> Multiple Reflections <i>Pathway 3:</i> Multiple Translations <i>Pathway 4:</i> Single Reflections and Translations	7. Perform a single transformation (translation, rotation, or reflection) of a 2-D shape (with and without technology) and draw and describe the image. [C, CN, T, V] 8. Identify a single transformation, including a translation, rotation and reflection of 2-D shapes. [C, T, V]		
8. Identify and plot points in the first quadrant of a Cartesian plane using whole number ordered pairs. [C, CN, V]	Chapter 4: Lesson 4, Math Game, Curious Math, Math Game, Chapter Task	Unit 1, Lesson 5, pp. 24–28; Unit Problem, pp. 42, 43; Unit 8, Lesson 1, pp. 290–294	Location and Movement <i>Pathway 1:</i> Using Cardinal Directions on Grids <i>Pathway 2:</i> Locating Objects on Grids			
9. Perform and describe single transformations of a 2-D shape in the first quadrant of a Cartesian plane (limited to whole number vertices). [C, CN, PS, T, V]	Chapter 5: Lessons 1, 2, 3	Unit 8, Lesson 2, pp. 295–300; Technology Lesson, pp. 301, 302; Game, p. 321				

Statistics and Probability: Data Analysis						
Grade 6 WNCP Outcomes	Math Focus 6	Math Makes Sense 6	Leaps and Bounds 5/6 Topics	Grade 5 WNCP Outcomes	Grade 4 WNCP Outcomes	Grade 3 WNCP Outcomes
			Summarizing Data <i>Pathway 1:</i> Data: Using the Mean <i>Pathway 2:</i> Data: Using the Median and Mode			
1. Create, label and interpret line graphs to draw conclusions. [C, CN, PS, R, V] 2. Select, justify and use appropriate methods of collecting data, including: • questionnaires • experiments • databases • electronic media. [C, PS, T] 3. Graph collected data and analyze the graph to solve problems. [C, CN, PS]	Chapter 4	Unit 7	Displaying Data <i>Pathway 1:</i> Data: Using Broken-Line Graphs <i>Pathway 3:</i> Data: Using Double Bar Graphs <i>Pathway 4:</i> Data: Using Line Plots	1. Differentiate between first-hand and second-hand data. [C, R, T, V] 2. Construct and interpret double bar graphs to draw conclusions. [C, PS, R, T, V]	1. Demonstrate an understanding of many-to-one correspondence. [C, R, T, V] 2. Construct and interpret pictographs and bar graphs involving many-to-one correspondence to draw conclusions. [C, PS, R, V]	1. Collect first-hand data and organize it using: • tally marks • line plots • charts • lists to answer questions [C, CN, V] 2. Construct, label and interpret bar graphs to solve problems. [PS, R, V]
Chance and Uncertainty						
4. Demonstrate an understanding of probability by: • identifying all possible outcomes of a probability experiment • differentiating between experimental and theoretical probability • determining the theoretical probability of outcomes in a probability experiment • determining the experimental probability of outcomes in a probability experiment • comparing experimental results with the theoretical probability for an experiment. [C, ME, PS, T]	Chapter 10: Lessons 1, 2, 3, 4, Math Games, Curious Math, Chapter Task	Unit 7, Lesson 6, pp. 271–275; Lesson 7, pp. 276–279; Technology Lesson, p. 280; Game, p. 281; Lesson 8, pp. 282, 283; Unit Problem, pp. 286, 287	Probability <i>Pathway 1:</i> Probability: Using Numbers <i>Pathway 2:</i> Probability: Using Words	3. Describe the likelihood of a single outcome occurring using words, such as: • impossible • possible • certain. [C, CN, PS, R] 4. Compare the likelihood of two possible outcomes occurring using words, such as: • less likely • equally likely • more likely. [C, CN, PS, R]		

