

To the Reader: This document provides a curriculum correlation for Etraffic’s Pilot Math 6 student print and digital media resources (Concept Capsule and Notepad Tutor Lessons) with the Western and Northern Canadian Protocol (WNCP) Common Curriculum Framework for K-9 Mathematics (2006).

## Strand: Number

WNCP Common Curriculum Framework (Specific Outcomes) It is expected the student will:	Pilot Math 6
1. Demonstrate an understanding of place value for numbers: <ul style="list-style-type: none"> <li>• greater than one million</li> <li>• less than one thousandth.</li> </ul> [C, CN, R, T]	Unit 1, Lesson 1 Notepad Tutor Lessons: 1. Place Value to 100 000 000
2. Solve problems involving large numbers, using technology. [ME, PS, T]	Unit 1, Lessons 2 and 11 Notepad Tutor Lessons: 1. Translating Word Problems 2. When and When Not to Use Technology 3. Determining if a Decimal Answer is Reasonable 4. Order of Operations in Problem Solving with Decimals
3. Demonstrate an understanding of factors and multiples by: <ul style="list-style-type: none"> <li>• determining multiples and factors of numbers less than 100</li> <li>• identifying prime and composite numbers</li> <li>• solving problems involving multiples.</li> </ul> [PS, R, V]	Unit 1, Lessons 3 – 5 Concept Capsules: 1. Identifying Multiples 2. Prime Factorization Notepad Tutor Lessons: 1. Comparing Factors Using Graphic Organizers
4. Relate improper fractions to mixed numbers. [CN, ME, R, V]	Unit 1, Lessons 6 – 7 Notepad Tutor Lessons: 1. Making Predictions
5. Demonstrate an understanding of ratio, concretely, pictorially and symbolically. [C, CN, PS, R, V]	Unit 4, Lessons 1 – 2 Concept Capsule: 1. Adding Mixed Numbers with Like Denominators 2. Understanding Ratios Notepad Tutor Lessons: 1. Understanding Ratios 2. Fractions as Parts of a Whole or Set
6. Demonstrate an understanding of percent (limited to whole numbers) concretely, pictorially and symbolically. [C, CN, PS, R, V]	Unit 4, Lessons 3 – 5 Concept Capsule: 1. Creating Circle Graphs 2. Pictorial Representations of Percents Notepad Tutor Lessons: 1. Percents as Ratios and Fractions

<p>7. Demonstrate an understanding of integers, concretely, pictorially and symbolically. [C, CN, R, V]</p>	<p>Unit 2, Lessons 1 – 2 Concept Capsule: 1. Ordering Decimals (to thousandths) Notepad Tutor Lessons: 1. Understanding Integers 2. Comparing Integers</p>
<p>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]</p>	<p>Unit 1, Lessons 9 – 10 Notepad Tutor Lessons: 1. Multiplication with Decimals (1-Digit Whole Number Multiplier) 2. Long Division (1-Digit Divisor by 3-Digit Dividend) 3. Division with Decimals (3-Digit by 1-Digit Natural Number Divisor)</p>
<p>9. Explain and apply the order of operations, excluding exponents, with and without technology (limited to whole numbers). [CN, ME, PS, T]</p>	<p>Unit 2, Lesson 3 Notepad Tutor Lessons: 1. Order of Operations (excluding exponents)</p>

## Strand: Patterns and Relations (Patterns)

<b>WNCP Common Curriculum Framework (Specific Outcomes)</b> <b>It is expected the student will:</b>	<b>Pilot Math 6</b>
<p>1. Demonstrate an understanding of the relationships within tables of values to solve problems. [C, CN, PS, R]</p>	<p>Unit 1, Lessons 7 – 9 Concept Capsule: 1. Modelling and Describing Patterns in Tables Unit 2, Lessons 4 and 9 Concept Capsule: 1. Problem Solving Using a Table of Values</p>
<p>2. Represent and describe patterns and relationships using graphs and tables. [C, CN, ME, PS, R, V]</p>	<p>Unit 2, Lesson 11 Concept Capsule: 1. Tables of Values and Graphs</p>

## Strand: Patterns and Relations (Variables and Equations)

<b>WNCP Common Curriculum Framework (Specific Outcomes)</b> <b>It is expected the student will:</b>	<b>Pilot Math 6</b>
<p>3. Represent generalizations arising from number relationships using equations with letter variables. [C, CN, PS, R, V]</p>	<p>Unit 2, Lessons 4 and 5 Concept Capsule: 1. Writing Addition and Subtraction Equations for Word Problems Notepad Tutor Lessons:</p>

<b>WNCP Common Curriculum Framework (Specific Outcomes)</b> <b>It is expected the student will:</b>	<b>Pilot Math 6</b>
	1. Expressions vs. Equations  Unit 2, Lesson 7 Notepad Tutor Lesson: 1. Writing Equivalent Forms of a Given Equation  Unit 3, Lessons 11 and 12
4. Demonstrate and explain the meaning of preservation of equality concretely, pictorially and symbolically. [C, CN, PS, R, V]	Unit 2, Lesson 6 and 8 Notepad Tutor Lessons: 1. Problem Solving Using a Subtraction Equation 2. Multiplication Equations 3. Division Equations 4. Solving Equations Using Preservation of Equality

## Strand: Shape and Space (Measurement)

<b>WNCP Common Curriculum Framework (Specific Outcomes)</b> <b>It is expected the student will:</b>	<b>Pilot Math 6</b>
1. Demonstrate an understanding of angles by: <ul style="list-style-type: none"> <li>• identifying examples of angles in the environment</li> <li>• classifying angles according to their measure</li> <li>• estimating the measure of angles using <math>45^\circ</math>, <math>90^\circ</math> and <math>180^\circ</math> as reference angles</li> <li>• determining angle measures in degrees</li> <li>• drawing and labelling angles when the measure is specified.</li> </ul> [C, CN, ME, V]	Unit 3, Lessons 1 and 2 Concept Capsule: 1. Drawing Angles Notepad Tutor Lessons: 1. 45, 90, and 180 degree angles
2. Demonstrate that the sum of interior angles is: <ul style="list-style-type: none"> <li>• <math>180^\circ</math> in a triangle</li> <li>• <math>360^\circ</math> in a quadrilateral.</li> </ul> [C, R]	Unit 3, Lesson 5 Concept Capsule: 1. Interior Angles of Triangles and Quadrilaterals
3. Develop and apply a formula for determining the: <ul style="list-style-type: none"> <li>• perimeter of polygons</li> <li>• area of rectangles</li> <li>• volume of right rectangular prisms.</li> </ul> [C, CN, PS, R, V]	Unit 3, Lessons 11 – 13 Concept Capsule: 1. Area of Rectangles vs. Area of Parallelograms Notepad Tutor Lessons: 1. Problem Solving Using the Perimeter of a Rectangle 2. Determining Volume Using a Formula

## Strand: Shape and Space (3-D Objects and 2-D Shapes)

WNCP Common Curriculum Framework (Specific Outcomes) It is expected the student will:	Pilot Math 6
4. Construct and compare triangles, including: <ul style="list-style-type: none"> <li>• scalene</li> <li>• isosceles</li> <li>• equilateral</li> <li>• right</li> <li>• obtuse</li> <li>• acute in different orientations.</li> </ul> [C, PS, R, V]	Unit 3, Lesson 4
5. Describe and compare the sides and angles of regular and irregular polygons. [C, PS, R, V]	Unit 3, Lessons 3 and 6 Concept Capsule: 1. Congruence of a Regular Polygon Notepad Tutor Lessons: 1. Corresponding Parts of Congruent Shapes

## Strand: Shape and Space (Transformations)

WNCP Common Curriculum Framework (Specific Outcomes) It is expected the student will:	Pilot Math 6
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]	Unit 3, Lessons 8 and 9
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]	Unit 3, Lesson 10 Concept Capsule: 1. Analyzing Tessellations
8. Identify and plot points in the first quadrant of a Cartesian plane using whole number ordered pairs. [C, CN, V]	Unit 2, Lessons 10 and 12 Concept Capsule: 1. The Basics of Plotting Points on a Cartesian Plane Notepad Tutor Lessons: 1. Distances Between Points in First Quadrant of a Cartesian Plane  Unit 3, Lesson 7 Notepad Tutor Lessons: 1. Reflections in First Quadrant of a Cartesian Plane 2. Translations in First Quadrant of a Cartesian Plane

<b>WNCP Common Curriculum Framework (Specific Outcomes)</b> <b>It is expected the student will:</b>	<b>Pilot Math 6</b>
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]	Unit 3, Lesson 7 Notepad Tutor Lessons: 1. Describing Rotations around a Fixed Point

## Strand: Statistics and Probability (Data Analysis)

<b>WNCP Common Curriculum Framework (Specific Outcomes)</b> <b>It is expected the student will:</b>	<b>Pilot Math 6</b>
1. Create, label and interpret line graphs to draw conclusions. [C, CN, PS, R, V]	Unit 2, Lessons 11, 14, and 15
2. Select, justify and use appropriate methods of collecting data, including: <ul style="list-style-type: none"> <li>• questionnaires</li> <li>• experiments</li> <li>• databases</li> <li>• electronic media.</li> </ul>	Unit 2, Lessons 13 and 15 Notepad Tutor Lessons: 1. First-hand and Second-hand Data 2. Interpreting Line Graphs 3. Using or not using Outliers
3. Graph collected data and analyze the graph to solve problems. [C, CN, PS]	Unit 2, Lesson 15 Unit 4, Lesson 5

## Strand: Statistics and Probability (Chance and Uncertainty)

<b>WNCP Common Curriculum Framework (Specific Outcomes)</b> <b>It is expected the student will:</b>	<b>Pilot Math 6</b>
4. Demonstrate an understanding of probability by: <ul style="list-style-type: none"> <li>• identifying all possible outcomes of a probability experiment</li> <li>• differentiating between experimental and theoretical probability</li> <li>• determining the theoretical probability of outcomes in a probability experiment</li> <li>• determining the experimental probability of outcomes in a probability experiment</li> <li>• comparing experimental results with the theoretical probability for an experiment.</li> </ul> [C, ME, PS, T]	Unit 4, Lessons 6 – 8 Notepad Tutor Lessons: 1. Solving Probability Problems Involving Two Independent Events 2. Theoretical vs. Experimental Probability