

Aligning *Equals Math* with the Alberta Program of Studies



Knowledge and Employability 9

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Number	
Estimating	
<p>N1. Use estimation strategies to estimate quantities and read and write numerals in the millions. [C, CN, E, V]</p>	<p><i>Emerging:</i></p> <p>7.D.9 estimate number to represent familiar sets with 1- and 2-digit numbers (R)</p> <p>8.A.1 demonstrate understanding of place value to 100 (R)</p> <p>8.A.2 identify 3-digit numbers (R)</p> <p>8.B.1 estimate number to represent familiar sets up to 3-digit numbers (R)</p> <p>8.C.1 demonstrate understanding of place value to 1000 (R)</p> <p>8.C.2 identify 4-digit numerals (R)</p> <p>8.C.6 identify 5- and 6-digit numerals (R)</p> <p><i>Introductory:</i></p> <p>8.C.4 estimate number to represent familiar sets up to 4-digit numbers (R)</p> <p>8.C.8 compare large numbers up to 6 digits (R)</p> <p><i>Basic:</i></p> <p>No related activities identified.</p> <p><i>Activities that are beyond the scope of the Alberta Program of Studies, but can be used to support the related outcome:</i></p> <p>8.A.3 write 3-digit numbers</p> <p>8.C.7 write 5- and 6-digit numerals</p>
<p>N2. Round numbers to the nearest unit, tenth and hundredth. [E, R]</p>	<p><i>Emerging:</i></p> <p>7.D.9 estimate number to represent familiar sets with 1- and 2-digit numbers (R)</p> <p>8.A.1 demonstrate understanding of place value to 100 (R)</p> <p>8.A.2 identify 3-digit numbers (R)</p> <p>8.B.1 estimate number to represent familiar sets up to 3-digit numbers (R)</p> <p>8.C.1 demonstrate understanding of place value to 1000 (R)</p> <p>8.C.2 identify 4-digit numerals (R)</p> <p>8.C.6 identify 5- and 6-digit numerals (R)</p>

(R) = Repeated activity at one or more grade level alignments.

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Number (continued)	
Estimating (continued)	
<p>N2. Round numbers to the nearest unit, tenth and hundredth. [E, R] (continued)</p>	<p><i>Introductory:</i> 8.C.4 estimate number to represent familiar sets up to 4-digit numbers (R) 8.C.8 compare large numbers up to 6 digits (R)</p> <p><i>Basic:</i> No related activities identified.</p> <p><i>Activities that are beyond the scope of the Alberta Program of Studies, but can be used to support the related outcome:</i> 8.A.3 write 3-digit numbers 8.C.7 write 5- and 6-digit numerals</p>
Representing	
<p>N3. Recognize, model and describe concretely, pictorially and symbolically:</p> <ul style="list-style-type: none"> • Multiples; e.g., lowest common multiple for pairs of numbers less than 10 • Factors; e.g., greatest common factor for pairs of numbers less than 25 • Composites • Prime factorizations. [C, PS, R, T, V] 	<p><i>Emerging:</i> 8.B.1 estimate number to represent familiar sets up to 3-digit numbers (R) 8.C.1 demonstrate understanding of place value to 1000 (R)</p> <p><i>Introductory:</i> 12.D.3 read decimals to tenths place (R) 12.D.4 read decimals in money terms (R)</p> <p><i>Basic:</i> No related activities identified.</p>
<p>N4. Write a whole number as:</p> <ul style="list-style-type: none"> • an expanded numeral, using powers of 10 • scientific notation. [C, CN, V] 	<p><i>Emerging:</i> 8.B.1 estimate number to represent familiar sets up to 3-digit numbers (R) 8.C.1 demonstrate understanding of place value to 1000 (R) 8.C.2 identify 4-digit numerals (R) 8.C.6 identify 5- and 6-digit numerals (R)</p> <p><i>Introductory:</i> 8.C.4 estimate number to represent familiar sets up to 4-digit numbers (R) 8.C.8 compare large numbers up to 6 digits (R)</p> <p><i>Basic:</i> No related activities identified</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Number (continued)	
Fractions, Decimals and Percents	
<p>N8. Convert among fractions, decimals and percents concretely, pictorially and symbolically. [CN, PS]</p>	<p><i>Emerging:</i></p> <ul style="list-style-type: none"> 12.A.1 sort equal fraction pieces 12.A.2 show half of object and array 12.A.3 assemble and name matching fraction pieces 12.A.4 identify 2 ways to make a square into fourths 12.A.5 define meaning of numerator and denominator (R) 12.A.6 write fraction name (R) 12.B.1 identify fractions with numerator greater than 1 (R) 12.B.2 match equivalent fractions with models (R) 12.C.1 identify fractions with common denominator (R) <p><i>Introductory:</i></p> <ul style="list-style-type: none"> 12.B.3 identify fractions of a set 12.B.4 order common fractions 12.B.5 compare common fractions 12.B.6 identify fractions of linear measurement <p><i>Basic:</i></p> <ul style="list-style-type: none"> 12.C.4 identify mixed numbers in recipe
<p>N10. Represent and explain the meaning of rates concretely, pictorially and symbolically. [C, CN, R, V]</p>	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
<p>N11. Estimate and calculate mean (average) in relation to everyday contexts. [C, CN, E, PS, R, V]</p>	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Number (continued)	
Fractions, Decimals and Percents (continued)	
<p>N12. Estimate and calculate percents to solve everyday problems. [C, CN, E, PS, R, V]</p>	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> 12.B.3 identify fractions of a set (R) 12.B.4 order common fractions (R) 12.B.5 compare common fractions (R) 12.B.6 identify fractions of linear measurement (R) 12.D.7 match fractions to percentages</p> <p><i>Basic:</i> No related activities identified.</p>
<p>N13. Use rates to estimate, calculate and compare prices. [C, CN, E, R]</p>	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
Addition, Subtraction, Multiplication and Division	
<p>N5. Estimate and apply arithmetic operations to whole numbers and decimals; e.g., 2-digit whole number multipliers and divisors, in everyday contexts. [E, R, PS, T]</p>	<p><i>Emerging:</i> 4.C.2 write addition and subtraction equations (R) 7.B.5 choose correct operation to solve simple word problem (R) 8.A.7 use a calculator to add and subtract 2- and 3-digit numbers (R) 8.A.9 add and subtract 3-digit numbers, no regrouping (R) 8.B.7 add and subtract 3-digit numbers, with regrouping (R)</p> <p><i>Introductory:</i> 8.C.5 use a calculator to add and subtract 4-digit numbers (R) 11.A.1 demonstrate multiplication with repeated sets (R) 11.A.2 use manipulatives to solve multiplication problems (R) 11.A.3 use 10:1 or 2:1 relationships to solve a multiplication problem (R) 11.A.4 skip count to solve multiplication problems</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Number (continued)	
Addition, Subtraction, Multiplication and Division (continued)	
<p>N5. Estimate and apply arithmetic operations to whole numbers and decimals; e.g., 2-digit whole number multipliers and divisors, in everyday contexts. [E, R, PS, T] (continued)</p>	<p>11.B.4 use multiplication to solve word problem with repeated addition problem (R) 11.B.5 solve 2-digit multiplication problem with calculator (R) 11.B.6 demonstrate commutative property of multiplication (R) 11.C.1 identify sets that can be divided into equal groups (R) 11.C.2 demonstrate division with array and grouping (R) 11.C.3 use manipulatives to solve division problems (R) 11.C.5 use inverse relationship to solve division problems (R) 11.D.3 use division to solve word problem with equal sets (R)</p> <p><i>Basic:</i> 11.D.6 choose multiplication and division to solve word problem v 12.D.5 add and subtract decimals in money terms (R)</p>
<p>N6. Estimate and apply arithmetic operations to proper fractions and mixed numbers with like denominators concretely, pictorially and symbolically. [CN, E, PS, T]</p>	<p><i>Emerging:</i> 4.C.2 write addition and subtraction equations (R) 7.B.5 choose correct operation to solve simple word problem (R) 8.A.7 use a calculator to add and subtract 2- and 3-digit numbers (R) 8.A.9 add and subtract 3-digit numbers, no regrouping (R) 8.B.7 add and subtract 3-digit numbers, with regrouping (R) 8.C.5 use a calculator to add and subtract 4-digit numbers (R)</p> <p><i>Introductory:</i> 12.B.3 identify fractions of a set (R) 12.B.4 order common fractions (R) 12.B.5 compare common fractions (R) 12.B.6 identify fractions of linear measurement (R) 12.C.1 identify fractions with common denominator 12.C.4 identify mixed numbers in a recipe 12.D.7 match fractions to percentages (R)</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Number (continued)	
Addition, Subtraction, Multiplication and Division (continued)	
<p>N6. Estimate and apply arithmetic operations to proper fractions and mixed numbers with like denominators concretely, pictorially and symbolically. [CN, E, PS, T] (continued)</p>	<p><i>Basic:</i> 12.C.2 add and subtract fractions with common denominators (R) 12.C.3 add fractions to a total of 1 (R) 12.C.5 solve addition problem with models that result in mixed number (R)</p>
<p>N7. Generate and verify equivalent fractions to solve problems that involve adding and subtracting fractions with unlike denominators. [PS, R, T, V]</p>	<p><i>Emerging:</i> 4.C.2 write addition and subtraction equations (R) 7.B.5 choose correct operation to solve simple word problem (R) 8.A.7 use a calculator to add and subtract 2- and 3-digit numbers (R) 8.A.9 add and subtract 3-digit numbers, no regrouping (R) 8.B.7 add and subtract 3-digit numbers, with regrouping (R) 8.C.5 use a calculator to add and subtract 4-digit numbers (R)</p> <p><i>Introductory:</i> 12.B.3 identify fractions of a set (R) 12.B.4 order common fractions (R) 12.B.5 compare common fractions (R) 12.B.6 identify fractions of linear measurement (R) 12.C.1 identify fractions with common denominator 12.C.4 identify mixed numbers in a recipe 12.D.7 match fractions to percentages (R)</p> <p><i>Basic:</i> 12.C.2 add and subtract fractions with common denominators (R) 12.C.3 add fractions to a total of 1 (R) 12.C.5 solve addition problem with models that result in mixed number (R)</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Number (continued)	
Addition, Subtraction, Multiplication and Division (continued)	
<p>N9. Assess the reasonableness of calculations and problem-solving strategies, using a variety of tools and/or strategies; e.g., estimation, mental mathematics, tables, graphs, calculators and/or computers. [CN, E, PS, R, T]</p>	<p><i>Emerging:</i></p> <p>4.C.2 write addition and subtraction equations (R)</p> <p>7.B.5 choose correct operation to solve simple word problem (R)</p> <p>8.A.7 use a calculator to add and subtract 2- and 3-digit numbers (R)</p> <p>8.A.9 add and subtract 3-digit numbers, no regrouping (R)</p> <p>8.B.7 add and subtract 3-digit numbers, with regrouping (R)</p> <p><i>Introductory:</i></p> <p>8.C.5 use a calculator to add and subtract 4-digit numbers (R)</p> <p>11.A.1 demonstrate multiplication with repeated sets (R)</p> <p>11.A.2 use manipulatives to solve multiplication problems (R)</p> <p>11.A.3 use 10:1 or 2:1 relationships to solve a multiplication problem (R)</p> <p>11.A.4 skip count to solve multiplication problems</p> <p>11.B.4 use multiplication to solve word problem with repeated addition problem (R)</p> <p>11.B.5 solve 2-digit multiplication problem with calculator (R)</p> <p>11.B.6 demonstrate commutative property of multiplication (R)</p> <p>11.C.1 identify sets that can be divided into equal groups (R)</p> <p>11.C.2 demonstrate division with array and grouping (R)</p> <p>11.C.3 use manipulatives to solve division problems (R)</p> <p>11.C.5 use inverse relationship to solve division problems (R)</p> <p>11.D.3 use division to solve word problem with equal sets (R)</p> <p><i>Basic:</i></p> <p>11.D.6 choose multiplication and division to solve word problem (R)</p> <p>12.D.5 add and subtract decimals in money terms (R)</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Number (continued)	
Integers	
<p>N14. Compare and order positive and negative numbers, using appropriate tools; e.g., a number line or thermometer. [R, T, V]</p>	<p><i>Emerging:</i> 7.D.1 count 1–100</p> <p><i>Introductory:</i> 6.B.6 demonstrate understanding of place value to 50 7.D.3 demonstrate understanding of place value from 51–99 8.A.1 demonstrate understanding of place value to 100 (R) 8.C.1 demonstrate understanding of place value to 1000</p> <p><i>Basic:</i> No related activities identified.</p>

Knowledge and Employability 9

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Patterns and Relations	
Pattern Rule	
<p>PR1. Identify, describe and summarize patterns and relationships in spoken or written form. [C, CN, R, V]</p>	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> 10.C.5 extend number pattern with constant increment 10.C.6 use a table representing constant rate of change 10.C.7 describe number pattern in table with constant rate of change</p> <p><i>Basic:</i> No related activities identified.</p>
<p>PR2. Make predictions based on everyday patterns and use patterns to draw conclusions. [CN, E, R]</p>	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> 10.C.5 extend number pattern with constant increment 10.C.6 use a table representing constant rate of change 10.C.7 describe number pattern in table with constant rate of change</p> <p><i>Basic:</i> No related activities identified.</p>
<p>PR3. Create expressions and rules to describe, complete and extend patterns and relationships. [C, CN, PS, R]</p>	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> 10.C.5 extend number pattern with constant increment 10.C.6 use a table representing constant rate of change 10.C.7 describe number pattern in table with constant rate of change</p> <p><i>Basic:</i> No related activities identified.</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Patterns and Relations (continued)	
Equations	
<p>PR4. Demonstrate and explain how to solve simple problems, using informal algebraic methods. [C, CN, PS, R, V]</p>	<p><i>Emerging:</i> 10.C.1 use notation for equivalent expression (R) 10.C.2 complete problem solving with missing addend (R) 10.C.3 solve addition equation with a variable (R) 10.C.4 identify equal and equivalent sets (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
<p>PR5. Read and graph relationships and draw conclusions in everyday contexts. [CN, R, V]</p>	<p><i>Emerging:</i> 10.C.1 use notation for equivalent expression (R) 10.C.2 complete problem solving with missing addend (R) 10.C.3 solve addition equation with a variable (R) 10.C.4 identify equal and equivalent sets (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>

Knowledge and Employability 9

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Shape and Space	
Metric and Imperial	
<p>SS1. Use common metric (SI) units and instruments to take accurate measurements of:</p> <ul style="list-style-type: none"> • length • mass (weight) • volume (capacity). <p>[CN, PS, R, T]</p>	<p><i>Emerging:</i></p> <p>9.A.5 measure line in centimeters (R) 9.A.7 measure line in meters (R) 11.E.1 measure perimeter (R)</p> <p><i>Introductory:</i></p> <p>9.D.4 count sides and vertices on two-dimensional net 11.E.2 measure area (R) 11.E.4 determine the volume of a box (R) 11.E.5 identify dry and liquid measured amounts (R) 11.E.6 identify measuring spoon amounts (R) 11.E.7 measure dry ingredients (R) 11.E.8 measure liquid ingredients (R) 11.E.9 measure dry and liquid ingredients with spoons (R)</p> <p><i>Basic:</i> No related activities identified.</p> <p><i>Activities that are beyond the scope of the Alberta Program of Studies, but can be used to support the related outcome:</i></p> <p>9.A.6 measure line in decimeters (R)</p>
<p>SS2. Use conversion charts, calculators and/or other tools to compare and convert a variety of metric (SI) units. [CN, T]</p>	<p><i>Emerging:</i></p> <p>6.C.1 identify common elements between measurement tools (R) 6.C.2 identify measurement tools (R) 6.C.3 match measurement attributes to tools (R) 6.C.4 match measurement tools to everyday situations (R) 6.C.5 compare measurement attributes (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Shape and Space(continued)	
Metric and Imperial (continued)	
<p>SS3. Use common Imperial units and instruments to take accurate measurements of:</p> <ul style="list-style-type: none"> • length • mass (weight) • volume (capacity) [CN, PS, R, T] 	<p><i>Emerging:</i></p> <p>9.A.5 measure line in centimeters (R) 9.A.7 measure line in meters (R) 11.E.1 measure perimeter (R)</p> <p><i>Introductory:</i></p> <p>9.D.4 count sides and vertices on two-dimensional net 11.E.2 measure area (R) 11.E.4 determine the volume of a box (R) 11.E.5 identify dry and liquid measured amounts (R) 11.E.6 identify measuring spoon amounts (R) 11.E.7 measure dry ingredients (R) 11.E.8 measure liquid ingredients (R) 11.E.9 measure dry and liquid ingredients with spoons (R)</p> <p><i>Basic:</i> No related activities identified.</p>
<p>SS4. Use conversion charts, calculators and/or other tools to compare and convert a variety of Imperial units of measure. [CN, T]</p>	<p><i>Emerging:</i></p> <p>6.C.1 identify common elements between measurement tools (R) 6.C.2 identify measurement tools (R) 6.C.3 match measurement attributes to tools (R) 6.C.4 match measurement tools to everyday situations (R) 6.C.5 compare measurement attributes (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Shape and Space(continued)	
Perimeter and Area	
<p>SS5. Develop, verify and apply rules or expressions for the area of rectangles; e.g., mm², cm², m², km². [CN, PS, R]</p>	<p><i>Emerging:</i> 9.A.5 measure line in centimeters (R) 9.A.7 measure line in meters (R) 11.E.1 measure perimeter (R)</p> <p><i>Introductory:</i> 5.D.3 place two-dimensional shapes to fill an area (R) 9.D.4 count sides and vertices on two-dimensional net (R) 11.E.2 measure area (R)</p> <p><i>Basic:</i> No related activities identified.</p> <p><i>Activities that are beyond the scope of the Alberta Program of Studies, but can be used to support the related outcome:</i> 9.A.6 measure line in decimeters (R)</p>
<p>SS6. Estimate, measure and calculate areas of quadrilaterals and triangles to solve problems in everyday contexts. [CN, PS, E, R]</p>	<p><i>Emerging:</i> 9.A.5 measure line in centimeters (R) 9.A.7 measure line in meters (R) 11.E.1 measure perimeter (R)</p> <p><i>Introductory:</i> 5.D.3 place two-dimensional shapes to fill an area 9.D.4 count sides and vertices on two-dimensional net 11.E.2 measure area (R)</p> <p><i>Basic:</i> No related activities identified.</p> <p><i>Activities that are beyond the scope of the Alberta Program of Studies, but can be used to support the related outcome:</i> 9.A.6 measure line in decimeters (R)</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Shape and Space(continued)	
Perimeter and Area (continued)	
<p>SS7. Design and construct rectangles when given perimeter or area, or both, using a variety of tools; e.g., grid. [PS, R, T]</p>	<p><i>Emerging:</i> 9.A.5 measure line in centimeters (R) 9.A.7 measure line in meters (R) 11.E.1 measure perimeter (R)</p> <p><i>Introductory:</i> 5.D.3 place two-dimensional shapes to fill an area 9.D.4 count sides and vertices on two-dimensional net 11.E.2 measure area (R)</p> <p><i>Basic:</i> No related activities identified.</p> <p><i>Activities that are beyond the scope of the Alberta Program of Studies, but can be used to support the related outcome:</i> 9.A.6 measure line in decimeters (R)</p>
Circles	
<p>SS8. Estimate, measure and calculate the circumference, radius and diameter of circles to solve problems in everyday contexts. [CN, E, R, V]</p>	<p><i>Emerging:</i> 9.C.1 identify right angle (R) 11.E.1 measure perimeter (R)</p> <p><i>Introductory:</i> 11.E.2 measure area (R) 11.E.4 determine the volume of a box (R)</p> <p><i>Basic:</i> No related activities identified.</p>
Angles	
<p>SS9. Identify, discuss and classify examples of angles in the environment; e.g., right, acute, obtuse, straight or reflex. [C, CN, R, V]</p>	<p><i>Emerging:</i> 9.C.1 identify right angle (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
<p>SS10. Estimate, measure and draw angles up to 180°, using a protractor or other tools. [CN, E, T]</p>	<p><i>Emerging:</i> 9.C.1 identify right angle (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Shape and Space(continued)	
Angles (continued)	
SS16. Draw and classify triangles according to the measurements of their angles; e.g., acute, obtuse, scalene. [C, CN, V]	<p><i>Emerging:</i> 9.C.1 identify right angle (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
Time	
SS11. Add and subtract hours and minutes in everyday applications. [CN, T]	<p><i>Emerging:</i> 3.C.1 name days of the week (R) 3.C.2 find days of the week on calendar (R) 3.C.3 name months (R) 3.C.4 find a given date on a calendar (R) 3.C.5 use calendar to count days to event (R)</p> <p><i>Introductory:</i> 5.B.1 tell time to the hour 5.B.2 tell time to 1/2 hour 5.B.2 tell time to 1/4 hour</p> <p><i>Basic:</i> 5.B.4 match analog and digital time 5.B.5 use common language to tell time 8.E.1 tell time to 5 minutes 8.E.2 use common language to tell time at 5-minute intervals</p> <p><i>Activities that are beyond the scope of the Alberta Program of Studies, but can be used to support the related outcome:</i> 3.C.6 identify 4 seasons given name of month (R)</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Shape and Space(continued)	
2-D Shapes and 3-D Objects	
<p>SS12. Classify and construct 3-D objects; using a variety of tools and strategies. [C, R, T, V]</p>	<p><i>Emerging:</i></p> <p>5.D.5 find and match three-dimensional shapes in the environment</p> <p>5.D.6 identify three-dimensional shapes</p> <p>9.A.4 identify length with lines and pictured ruler (R)</p> <p>9.A.5 measure line in centimeters (R)</p> <p>9.A.7 measure line in meters (R)</p> <p>9.B.1 match two-dimensional shape to three-dimensional face</p> <p>9.C.1 identify right angle (R)</p> <p>9.D.1 identify three-dimensional faces, vertices, and edges (R)</p> <p>9.D.2 count three-dimensional faces, vertices, and angles (R)</p> <p>9.D.3 use a table to organize three-dimensional shapes (R)</p> <p><i>Introductory:</i></p> <p>9.D.6 sort polyhedral shapes from other shapes (R)</p> <p><i>Basic:</i></p> <p>No related activities identified.</p>
<p>SS13. Sketch 3-D objects and skeletons with and without grids. [PS, T, V]</p>	<p><i>Emerging:</i></p> <p>5.D.5 find and match three-dimensional shapes in the environment (R)</p> <p>5.D.6 identify three-dimensional shapes (R)</p> <p>9.D.1 identify three-dimensional faces, vertices, and edges (R)</p> <p>9.D.2 count three-dimensional faces, vertices, and angles (R)</p> <p>9.D.3 use a table to organize three-dimensional shapes (R)</p> <p><i>Introductory:</i></p> <p>9.D.6 sort polyhedral shapes from other shapes (R)</p> <p><i>Basic:</i></p> <p>No related activities identified.</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Shape and Space(continued)	
2-D Shapes and 3-D Objects (continued)	
SS15. Relate reflections to lines and planes of symmetry. [CN, V]	<p><i>Emerging:</i> 9.A.4 identify length with lines and pictured ruler (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> 9.B.2 identify congruent shapes 9.B.5 identify symmetrical shapes 9.B.6 locate line of symmetry</p>
SS17. Use scale to reproduce a 2-D shape. [R, V]	<p><i>Emerging:</i> 9.A.4 identify length with lines and pictured ruler (R)</p> <p><i>Introductory:</i> 9.B.3 predict and confirm results of transformations (R) 9.B.4 describe motion (s) to prove congruency (R)</p> <p><i>Basic:</i> No related activities identified.</p>
Lines	
SS14. Sort quadrilaterals and regular polygons according to the number of lines and symmetry. [V]	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> 5.D.5 find and match three-dimensional shapes in the environment 5.D.6 identify three-dimensional shapes 9.D.1 identify three-dimensional faces, vertices, and edges 9.D.2 count three-dimensional faces, vertices, and angles 9.D.3 use a table to organize three-dimensional shapes</p> <p><i>Basic:</i> 9.B.2 identify congruent shapes 9.B.5 identify symmetrical shapes 9.B.6 locate line of symmetry</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Shape and Space(continued)	
Transformations	
SS18. Create, examine and describe designs, using translations (slides), reflections (flips) and rotations (turns). [C, T, V]	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> 9.B.3 predict and confirm results of transformations (R) 9.B.4 describe motion (s) to prove congruency (R)</p> <p><i>Basic:</i> No related activities identified.</p>
SS19. Trace a path, given in oral or written instructions, and write or describe instructions for a given path. [C, CN, PS, R, V]	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
SS20. Draw designs and determine locations in the first and second quadrants of a coordinate grid, using ordered pairs. [C, PS, R, V]	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i> 9.B.3 predict and confirm results of transformations (R) 9.B.4 describe motion (s) to prove congruency (R)</p> <p><i>Basic:</i> No related activities identified.</p>

Knowledge and Employability 9

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Statistics and Probability	
Collecting and Organizing Data	
<p>SP1. Read, interpret and communicate information represented in graphs, charts and other collection tools. [C, CN, R]</p>	<p><i>Emerging:</i> 6.A.1 choose a survey question 6.A.2 make a prediction about opinion-based data</p> <p><i>Introductory:</i> 3.E.2 tally data amounts in a set 6.A.3 tally categorical data from opinion survey 6.A.4 use categorical data to organize answers 10.A.1 collect data on hand size to nearest centimeter 10.A.2 order numerical data 10.A.3 plot data on line plot graph</p> <p><i>Basic:</i> No related activities identified.</p>
<p>SP2. Collect, organize and display data and information, by hand and/or using technology, in a variety of ways; e.g., tables, charts, bar or line graphs, frequency diagrams, broken-line graphs. [C, CN, T, V]</p>	<p><i>Emerging:</i> 3.D.6 interpret a bar graph by comparison (R) 3.E.3 place data in simple bar graph with symbolic (R) representation 3.E.4 compare amounts on bar graph with symbolic representation (R) 3.E.5 use data from bar graph to solve simple problem (R) 6.A.5 make a bar graph with categorical data (R) 6.A.6 communicate conclusions drawn from bar graph (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Statistics and Probability (continued)	
Examining, Predicting and Making Conclusions	
<p>SP3. Make conclusions and predictions based on data and information analysis. [CN, R]</p>	<p><i>Emerging:</i> 3.D.6 interpret a bar graph by comparison (R) 3.E.3 place data in simple bar graph with symbolic (R) representation 3.E.4 compare amounts on bar graph with symbolic representation (R) 3.E.5 use data from bar graph to solve simple problem (R) 6.A.5 make a bar graph with categorical data (R) 6.A.6 communicate conclusions drawn from bar graph (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
<p>SP4. Examine sets of data, draw conclusions and make comparisons. [C, CN, R]</p>	<p><i>Emerging:</i> 3.D.6 interpret a bar graph by comparison (R) 3.E.3 place data in simple bar graph with symbolic representation (R) 3.E.4 compare amounts on bar graph with symbolic representation (R) 3.E.5 use data from bar graph to solve simple problem (R) 6.A.5 make a bar graph with categorical data (R) 6.A.6 communicate conclusions drawn from bar graph (R)</p> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
<p>SP5. Determine trends by identifying and examining extremes, gaps or clusters in a set of data. [R]</p>	<p><i>Emerging:</i> 3.D.6 interpret a bar graph by comparison (R) 3.E.3 place data in simple bar graph with symbolic (R) representation 3.E.4 compare amounts on bar graph with symbolic representation (R) 3.E.5 use data from bar graph to solve simple problem (R) 6.A.5 make a bar graph with categorical data (R) 6.A.6 communicate conclusions drawn from bar graph (R)</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
Statistics and Probability (continued)	
Examining, Predicting and Making Conclusions (continued)	
SP5. Determine trends by identifying and examining extremes, gaps or clusters in a set of data. [R] (continued)	<i>Introductory:</i> No related activities identified. <i>Basic:</i> No related activities identified.
SP6. Examine the distribution of a set of data, using smallest and largest value, frequency, value in the middle and patterns. [CN, PS, R, T]	<i>Emerging:</i> 6.A.4 use categorical data to organize answers (R) <i>Introductory:</i> 10.A.2 order numerical data (R) <i>Basic:</i> 10.A.4 determine range (R) 10.A.5 determine median (R) 10.A.6 compare median of 2 data sets (R) 10.A.7 describe graph shape, including mode and least values (R)
SP8. Manipulate data in everyday applications, at home or in the workplace, by selecting appropriate tools such as spreadsheets. [C, CN, T]	<i>Emerging:</i> 3.D.6 interpret a bar graph by comparison (R) 3.E.3 place data in simple bar graph with symbolic (R) representation 3.E.4 compare amounts on bar graph with symbolic representation (R) 3.E.5 use data from bar graph to solve simple problem (R) 6.A.5 make a bar graph with categorical data (R) 6.A.6 communicate conclusions drawn from bar graph (R) <i>Introductory:</i> No related activities identified. <i>Basic:</i> No related activities identified.
Probability	
SP7. Use appropriate vocabulary, related to the home or workplace, to discuss and examine data; e.g., probable / improbable, equal likely / less likely, likely / more likely, best / worst. [C, CN]	<i>Emerging:</i> No related activities identified. <i>Introductory:</i> 10.B.3 describe variable and result (R) <i>Basic:</i> 10.B.6 predict probability regarding change over time (R) 10.B.7 collect data from experiment (R)