

# Aligning *Equals Math* with the Alberta Program of Studies

## Knowledge and Employability 8



Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Number</b>	
<b>Representing</b>	
<p>N1. Use estimation strategies to estimate quantities and read and write numerals and number words to 1 000 000. [C, CN, E, V]</p>	<p><i>Emerging:</i>                      8.A.2 identify 3-digit numbers (R)                      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> <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>
<p>N2. Compare and order whole numbers. [C, CN, R, V]</p>	<p><i>Emerging:</i>                      7.D.9 estimate number to represent familiar sets with 1- and 2-digit numbers                      8.A.1 demonstrate understanding of place value to 100 (R)                      8.C.1 demonstrate understanding of place value to 1000 (R)</p> <p><i>Introductory:</i>                      8.B.1 estimate number to represent familiar sets up to 3-digit numbers                      8.C.2 identify 4-digit numerals (R)                      8.C.6 identify 5- and 6-digit numerals (R)</p> <p><i>Basic:</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>

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

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Number (continued)</b>	
<b>Representing (continued)</b>	
<p>N3. Represent an understanding of place value to the hundredths concretely, pictorially and symbolically. [C, CN, R, V]</p>	<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. Recognize, model and describe multiples, factors, composites and primes to 100 concretely, pictorially and symbolically. [C, CN, R, V]</p>	<p><i>Emerging:</i>  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 (R)</p> <p><i>Introductory:</i>  11.B.2 solve multiplication problems with factor of 10  11.B.4 use multiplication to solve word problem with repeated addition problem</p> <p><i>Basic:</i>  11.D.7 identify multiples and factors</p>
<b>Fractions, Decimals and Percents</b>	
<p>N5. Represent and describe proper fractions, mixed numbers and equivalent fractions concretely, pictorially and symbolically. [C, R, V]</p>	<p><i>Emerging:</i>  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>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Number (continued)</b>	
<b>Fractions, Decimals and Percents (continued)</b>	
<p>N5. Represent and describe proper fractions, mixed numbers and equivalent fractions concretely, pictorially and symbolically. [C, R, V] (continued)</p>	<p><i>Introductory:</i>  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> <p><i>Basic:</i>  12.C.4 identify mixed numbers in recipe</p>
<p>N6. Compare and order proper fractions and decimals to the hundredths. [C, R, V]</p>	<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)  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> <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>N9. Identify decimal equivalents for commonly used fractions, such as halves, quarters and tenths. [C, CN, R, V]</p>	<p><i>Emerging:</i>  12.A.1 sort equal fraction pieces (R)  12.A.2 show half of object and array (R)  12.A.3 assemble and name matching fraction pieces (R)  12.A.4 identify 2 ways to make a square into fourths (R)  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>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Number (continued)</b>	
<b>Fractions, Decimals and Percents (continued)</b>	
<p>N9. Identify decimal equivalents for commonly used fractions, such as halves, quarters and tenths. [C, CN, R, V] (continued)</p>	<p><i>Introductory:</i>  12.D.3 read decimals to tenths place (R)  12.D.4 read decimals in money terms (R)  12.D.6 match decimals and fractions and relate time and money</p> <p><i>Basic:</i>  12.D.1 use models to identify fractions in tenths  12.D.2 convert fractions to decimals (R)</p>
<p>N11. Represent and explain the meaning of percentage and the relationship between percentage and decimals concretely, pictorially and symbolically. [C, CN, R, V]</p>	<p><i>Emerging:</i>  12.A.3 assemble and name matching fraction pieces (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)</p> <p>12.D.2 convert fractions to decimals (R)  12.D.3 read decimals to tenths place (R)  12.D.4 read decimals in money terms (R)</p> <p><i>Basic:</i>  12.D.7 match fractions to percentages</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Number (continued)</b>	
<b>Addition, Subtraction, Multiplication and Division</b>	
<p>N7. Estimate and apply arithmetic operations to whole numbers and decimals to the hundredths in everyday contexts. [CN, E, PS, R]</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 v</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
<b>Number (continued)</b>	
<b>Addition, Subtraction, Multiplication and Division (continued)</b>	
<p>N10. Estimate and apply arithmetic operations to decimals to the hundredths concretely, pictorially and symbolically to solve problems in everyday contexts. [C, CN, E, PS, R, T, V]</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
<b>Number (continued)</b>	
<b>Addition, Subtraction, Multiplication and Division (continued)</b>	
<p>N8. Estimate and apply arithmetic operations to proper fractions with like denominators concretely, pictorially and symbolically. [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>8.C.5 use a calculator to add and subtract 4-digit numbers (R)</p> <p><i>Introductory:</i></p> <p>12.B.3 identify fractions of a set (R)</p> <p>12.B.4 order common fractions (R)</p> <p>12.B.5 compare common fractions (R)</p> <p>12.B.6 identify fractions of linear measurement (R)</p> <p>12.C.1 identify fractions with common denominator</p> <p>12.C.4 identify mixed numbers in a recipe</p> <p>12.D.7 match fractions to percentages (R)</p> <p><i>Basic:</i></p> <p>12.C.2 add and subtract fractions with common denominators</p> <p>12.C.3 add fractions to a total of 1</p> <p>12.C.5 solve addition problem with models that result in mixed number</p>
<p>N12. 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>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Number (continued)</b>	
<b>Addition, Subtraction, Multiplication and Division (continued)</b>	
<p>N12. 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] (continued)</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>
<b>Integers</b>	
<p>N13. Estimate and measure temperature and use conversion charts and other tools to compare Celsius and Fahrenheit, as appropriate in everyday experiences. [CN, E, PS, R, T]</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
<b>Number (continued)</b>	
<b>Integers (continued)</b>	
<p>N14. Identify common uses of positive and negative numbers, including above/below sea level and temperatures. [C, CN, R, 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 8

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Patterns and Relations</b>	
<b>Pattern Rule</b>	
PR1. Identify and describe patterns and relationships in nature and everyday contexts in spoken or written form. [C, CN, R, V]	<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>
PR2. Represent a rule for a pattern, make predictions using the rule and extend the rule. [C, CN, E, R, V]	<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>
<b>Equations</b>	
PR3. Describe everyday situations using variables. [C, CN, R]	<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>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Patterns and Relations</b>	
<b>Equations (continued)</b>	
<p>PR4. Represent and explain the meaning of preservation of equality by balancing or using models and diagrams. [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. Use pre-algebra strategies to solve equations with one unknown and with whole numbers. [PS, R]</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 8

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Shape and Space</b>	
<b>Metric and Imperial</b>	
<p>SS2. Estimate and use everyday metric (SI) tools and units to take accurate linear measurements; e.g., millimetre, centimetre, metre, kilometre. [E, PS, T]</p>	<p><i>Emerging:</i></p> <p>6.C.1 identify common elements between measurement tools (R)</p> <p>6.C.2 identify measurement tools (R)</p> <p>6.C.3 match measurement attributes to tools (R)</p> <p>6.C.4 match measurement tools to everyday situations (R)</p> <p>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>
<p>SS3. Estimate and use everyday Imperial tools and units to take accurate linear measurements; e.g., inches, feet, yards, miles. [E, PS, T]</p>	<p><i>Emerging:</i></p> <p>6.C.1 identify common elements between measurement tools (R)</p> <p>6.C.2 identify measurement tools (R)</p> <p>6.C.3 match measurement attributes to tools (R)</p> <p>6.C.4 match measurement tools to everyday situations (R)</p> <p>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>
<p>SS9. Use conversion charts, calculators and/or other tools to compare and convert common metric (SI) and Imperial linear units, as required in everyday contexts. [CN, PS, T]</p>	<p><i>Emerging:</i></p> <p>6.C.1 identify common elements between measurement tools (R)</p> <p>6.C.2 identify measurement tools (R)</p> <p>6.C.3 match measurement attributes to tools (R)</p> <p>6.C.4 match measurement tools to everyday situations (R)</p> <p>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
<b>Shape and Space (continued)</b>	
<b>Length, Mass and Volume</b>	
<p>SS1. Recognize and explain the meaning of length, width, height, depth, thickness, perimeter and circumference. [C, CN, 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>            No related activities identified.</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>SS4. Estimate, measure and calculate perimeters of quadrilaterals and triangles to solve problems in everyday contexts. [CN, E, PS, 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>
<p>SS5. Estimate, measure and calculate the perimeter and area of irregular shapes by dividing them into parts; e.g., area, using manipulatives and diagrams. [CN, E, 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>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Shape and Space (continued)</b>	
<b>Length, Mass and Volume (continued)</b>	
SS5. Estimate, measure and calculate the perimeter and area of irregular shapes by dividing them into parts; e.g., area, using manipulatives and diagrams. [CN, E, PS, R, T] (continued)	<i>Basic:</i> No related activities identified.  <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)
SS7. Calculate and solve everyday problems that involve mass (weight) and volume (capacity), using metric and Imperial units. [CN, PS]	<i>Emerging:</i> 11.E.1 measure perimeter (R)  <i>Introductory:</i> 11.E.2 measure area (R)  <i>Basic:</i> 11.E.4 determine the volume of a box 11.E.5 identify dry and liquid measured amounts 11.E.6 identify measuring spoon amounts 11.E.7 measure dry ingredients 11.E.8 measure liquid ingredients 11.E.9 measure dry and liquid ingredients with spoons
SS8. Use concrete objects to relate $\text{cm}^3$ to mL. [CN, R, V]	<i>Emerging:</i> 9.C.1 identify right angle (R) 11.E.1 measure perimeter (R)  <i>Introductory:</i> 11.E.2 measure area (R)  <i>Basic:</i> 11.E.4 determine the volume of a box (R) 11.E.5 identify dry and liquid measured amounts 11.E.6 identify measuring spoon amounts 11.E.7 measure dry ingredients 11.E.8 measure liquid ingredients 11.E.9 measure dry and liquid ingredients with spoons
<b>Circles</b>	
SS6. Demonstrate the relationship among the circumference, radius and diameter of circles. [CN, R, V]	<i>Emerging:</i> 9.C.1 identify right angle (R) 11.E.1 measure perimeter (R)  <i>Introductory:</i> 11.E.2 measure area (R)  <i>Basic:</i> No related activities identified.

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Shape and Space (continued)</b>	
<b>Time</b>	
<p>SS10. Recognize the relationships among seconds, minutes, hours, days, weeks, months, years, centuries and millennia, using a variety of tools; e.g., calendars and technology. [CN, R, T]</p>	<p><i>Emerging:</i></p> <p>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></p> <p>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></p> <p>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></p> <p>3.C.6 identify 4 seasons given name of month (R)</p>
<p>SS11. Estimate and measure time on 12-hour and 24-hour clocks, using digital and analog timepieces. [CN, E, T]</p>	<p><i>Emerging:</i></p> <p>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></p> <p>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></p> <p>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></p> <p>3.C.6 identify 4 seasons given name of month (R)</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Shape and Space (continued)</b>	
<b>Time (continued)</b>	
<p>SS12. Convert between hours and minutes and between minutes and seconds, as required in everyday contexts. [CN, R]</p>	<p><i>Emerging:</i></p> <p>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></p> <p>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></p> <p>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></p> <p>3.C.6 identify 4 seasons given name of month (R)</p>
<b>2-D Shapes and 3-D Objects</b>	
<p>SS13. Identify, classify, describe and construct models of 3-D objects; e.g., rectangular prisms, cubes, cylinders, cones and spheres. [C, R, T, V]</p>	<p><i>Emerging:</i></p> <p>5.D.5 find and match three-dimensional shapes in the environment (R)  5.D.6 identify three-dimensional shapes (R)  9.D.1 identify three-dimensional faces, vertices, and edges (R)  9.D.2 count three-dimensional faces, vertices, and angles (R)  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>9.D.5 build, identify, and compare three-dimensional shape to net (R)</p>



Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Shape and Space (continued)</b>	
<b>2-D Shapes and 3-D Objects (continued)</b>	
SS14. Design and construct nets for 3-D objects. [CN, V]	<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>9.D.5 build, identify, and compare three-dimensional shape to net (R)</p>
SS17. Recognize and label the quadrants on a grid. [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>
SS18. Identify and plot points in the first quadrant of a coordinate grid, using ordered pairs. [C, 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>
SS19. Reproduce a given geometric drawing on grid paper. [R, V]	<p><i>Emerging:</i> No related activities identified.</p> <p><i>Introductory:</i></p> <p>9.B.3 predict and confirm results of transformations (R)</p> <p>9.B.4 describe motion(s) to prove congruency (R)</p> <p><i>Basic:</i> No related activities identified.</p>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Shape and Space (continued)</b>	
<b>Lines</b>	
SS15. Recognize and identify, from everyday observations and experiences, points, lines, perpendicular lines, vertical lines, horizontal lines and line segments. [CN, 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> No related activities identified.</p>
SS16. Identify and illustrate lines of symmetry on quadrilaterals and triangles. [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>
<b>Transformations</b>	
SS20. Recognize and describe motion as a slide (translation), a turn (rotation) or a flip (reflection). [C, 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>

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Shape and Space (continued)</b>	
<b>Transformations (continued)</b>	
SS21. Identify and describe tessellations found in the environment that are created with regular and irregular shapes. [C, CN, 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>
SS22. Create tessellations using regular and irregular shapes. [CN, 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>

## Knowledge and Employability 8

Alberta Program of Studies	Related activities from <i>Equals Math</i> resources
<b>Statistics and Probability</b>	
<b>First Hand and Second Hand Data</b>	
<p>SP1. Identify appropriate information/data sources; i.e., first-hand, second-hand and combinations. [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. Use a variety of strategies to interpret information from prepared graphs and/or charts; e.g.,</p> <ul style="list-style-type: none"> <li>• read axis and column subheadings and text under, beside or above</li> <li>• compare and examine pictures, bars, lines, symbols or markers</li> <li>• find trends or patterns</li> <li>• discuss information with classmates or others for clarification</li> <li>• reread to connect information in graphs and charts to surrounding and/or other information. [C, CN, E, PS, R, V]</li> </ul>	<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
<b>Statistics and Probability (continued)</b>	
<b>First Hand and Second Hand Data (continued)</b>	
SP3. Make predictions based on information and data. [R]	<p><i>Emerging:</i></p> <ul style="list-style-type: none"> <li>3.D.6 interpret a bar graph by comparison (R)</li> <li>3.E.3 place data in simple bar graph with symbolic (R) representation</li> <li>3.E.4 compare amounts on bar graph with symbolic representation (R)</li> <li>3.E.5 use data from bar graph to solve simple problem (R)</li> <li>6.A.5 make a bar graph with categorical data (R)</li> <li>6.A.6 communicate conclusions drawn from bar graph (R)</li> </ul> <p><i>Introductory:</i> No related activities identified.</p> <p><i>Basic:</i> No related activities identified.</p>
SP4. Develop and communicate appropriate conclusions and discuss the reasonableness of data and results. [C. R]	<p><i>Emerging:</i></p> <ul style="list-style-type: none"> <li>3.D.6 interpret a bar graph by comparison (R)</li> <li>3.E.3 place data in simple bar graph with symbolic (R) representation</li> <li>3.E.4 compare amounts on bar graph with symbolic representation (R)</li> <li>3.E.5 use data from bar graph to solve simple problem (R)</li> <li>6.A.5 make a bar graph with categorical data (R)</li> <li>6.A.6 communicate conclusions drawn from bar graph (R)</li> </ul> <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
<b>Statistics and Probability (continued)</b>	
<b>Gather, Organize and Display Data</b>	
<p>SP5. Gather, organize, and display information and data, using a variety of organizers/methods; e.g., journals, diagrams, charts, lists, graphs, spreadsheets, rank ordering and/or frequency charts. [C, 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>
<b>Probability</b>	
<p>SP6. Examine and discuss the results of simple probability experiments/experiences. [C, E, PS, R]</p>	<p><i>Emerging:</i>  No related activities identified.</p> <p><i>Introductory:</i>  10.B.3 describe variable and result (R)</p> <p><i>Basic:</i>  10.B.6 predict probability regarding change over time (R)  10.B.7 collect data from experiment (R)</p>
<p>SP7. Demonstrate and/or discuss that different outcomes may occur when repeating the same experiment and/or every day activity. [C, PS, T]</p>	<p><i>Emerging:</i>  No related activities identified.</p> <p><i>Introductory:</i>  10.B.3 describe variable and result (R)</p> <p><i>Basic:</i>  10.B.6 predict probability regarding change over time (R)  10.B.7 collect data from experiment (R)</p>