Mathletics

Saskatchewan Outcomes

Alignment with Mathletics

Supported by independent evidence-based research and practice.

Mathletics

Saskatchewan Outcomes
Alignment with Mathletics

Table of Contents

Saskatchewan Outcomes

Alignment with Mathletics

Mathletics and the Saskatchewan Outcomes

The education team at Mathletics is committed to providing a resource that is powerful, targeted, and, most importantly, relevant to all students.

Mathletics includes well over 1200 individual adaptive practice activities and eBooks available for all grades. Our team of educational publishers has created a course that specifically follows the Saskatchewan outcomes. You can be assured that students have access to relevant and targeted content.

Strands, sub-strands, and learning outcomes of the outcomes are supported with activities, each with pre and post assessment. What's more, Mathletics contains an extensive library of eBooks—for use on screen or as a printable resource—that are also mapped to the requirements of the Saskatchewan Outcomes.

This document outlines this mapping and acts as a useful guide when using Mathletics in your school.

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Kindergarten

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.NK.1	Say the whole number sequence by 1s starting anywhere from 0 to 10 and from 10 to 0.	How Many? Count to 5 Order Numbers to 10	Kindergarten Numbers and Patterns
Number	SK.NK.2	Recognize, at a glance, and name familiar arrangements of 1 to 5 objects, dots, or pictures.	How Many? Count to 5 How many dots?	Kindergarten Numbers and Patterns
Number	SK.NK.3	Relate a numeral, 0 to 10, to its respective quantity.	Matching Numbers to 10 Ordinal Numbers	Kindergarten Numbers and Patterns
Number	SK.NK.4	Represent the partitioning of whole numbers (1 to 10) concretely and pictorially.	Balance Numbers to 10	Kindergarten Operations with Number
Number	SK.NK.5	Compare quantities, 0 to 10, using one-to-one correspondence.	More, Less or the Same to 10 More or Less?	Kindergarten Numbers and Patterns
Patterns and Relations	SK.PK.1	Demonstrate an understanding of repeating patterns (two or three elements).	Simple Patterns Colour Patterns Missing it! Complete the Pattern	Kindergarten Numbers and Patterns
Shape and Space	SK.SSK.1	Use direct comparison to compare two objects based on a single attribute.	Compare Length Everyday Length Which Holds More? Balancing Act	Kindergarten Measurement
Shape and Space	SK.SSK.2	Sort 3-D objects using a single attribute.	Sort It Collect the Shapes Match the Object Same and Different	Kindergarten Space and Shape
Shape and Space	SK.SSK.3	Build and describe 3-D objects.	Match the Solid 1	Kindergarten Space and Shape

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 1

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N1.1	Say the number sequence, 0 to 100.	Counting Forward Counting Backward	Grade 1 Numbers
Number	SK.N1.2	Recognize, at a glance, and name familiar arrangements of 1 to 10 objects, dots, and pictures.	Comparing Groups of Objects	Grade 1 Numbers
Number	SK.N1.3	Demonstrate an understanding of counting.	1 to 30 Order Numbers to 20 Make Numbers Count	Grade 1 Numbers
Number	SK.N1.4	Represent and describe whole numbers to 20 concretely, pictorially, and symbolically.	Before, After and Between to 20 Making Teen Numbers	Grade 1 Numbers
Number	SK.N1.5	Compare sets containing up to 20 elements to solve problems.	Before, After and Between to 20 Compare Numbers to 20 Arranging Numbers	Grade 1 Numbers
Number	SK.N1.6	Estimate quantities to 20 by using referents.	Before, After and Between to 20	Grade 1 Numbers
Number	SK.N1.7	Demonstrate, concretely, physically, and pictorially, how whole numbers can be represented by a variety of equal groupings with and without singles.	Divide Into Equal Groups	Grade 1 Operations with Number
Number	SK.N1.8	Identify the number, up to 20, that is one more, two more, one less, and two less than a given number.	1 More, 2 Less	Grade 1 Operations with Number
Number	SK.N1.9	Demonstrate an understanding of addition of numbers with answers to 20 and the corresponding subtraction facts, concretely, pictorially, physically, and symbolically.	Model Addition Adding to 5 Model Subtraction Adding to make 5 and 10 Adding to Ten All about Ten All about Twenty Addition Facts Subtracting from 5 Subtracting from Ten Subtraction Facts to 18 Related Facts 1 Addictive Addition Addition Adding to 10 word problems	Grade 1 Operations with Number
Number	SK.N1.10	Describe and use mental mathematics strategies to determine basic addition facts to 18 and related subtraction facts.	Doubles and Halves to 10 Doubles and Halves to 20 Doubles and Near Doubles Balance Numbers to 10 Balance Numbers to 20 Related Facts 1 Balance Additions to 20	Grade 1 Operations with Number

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 1

Strand	Outcome	Outcome Description	Activities	eBooks
Patterns and Relations	SK.P1.1	Demonstrate an understanding of repeating patterns (two to four elements).	Simple Patterns Colour Patterns Missing it! Pattern Error	Grade 1 Patterns and Relationships
Patterns and Relations	SK.P1.2	Translate repeating patterns from one form of representation to another.	Simple Patterns Colour Patterns Missing it! Pattern Error	Grade 1 Patterns and Relationships
Patterns and Relations	SK.P1.3	Describe equality as a balance and inequality as an imbalance, concretely, physically, and pictorially (0 to 20).	Balancing Act	Grade 1 Patterns and Relationships
Patterns and Relations	SK.P1.4	Record equalities using the equal symbol.	Balance Numbers to 10 Balance Numbers to 20	Grade 1 Patterns and Relationships
Shape and Space	SK.SS1.1	Demonstrate an understanding of measurement as a process of comparing.	Everyday Length Measuring Length with Blocks Everyday Mass Filling Fast! Match the Solid 1 Collect Simple Shapes Collect the Shapes Collect the Objects Collect the Objects 1 How Full? Compare Length Comparing Length Comparing Volume	Grade 1 Space and Shape
Shape and Space	SK.SS1.2	Sort 3-D objects and 2-D shapes using one attribute, and explain the sorting rule.	Sort It Same and Different Collect the Shapes Collect the Objects Collect the Objects 1 Collect More Shapes	Grade 1 Space and Shape
Shape and Space	SK.SS1.3	Replicate composite 2-D shapes and 3-D objects.	Sort It Same and Different Collect the Shapes Collect Simple Shapes Collect the Objects Collect the Objects 1 Collect More Shapes	Grade 1 Space and Shape
Shape and Space	SK.SS1.4	Compare 2-D shapes to parts of 3-D objects in the environment.	Match the Object Match the Solid 1 Match the Solid 2 Relate Shapes and Solids	Grade 1 Space and Shape

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 2

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N2.1	Demonstrate understanding of whole numbers to 100.	Count by Twos Count by Fives Count by Tens Count by 2s, 5s and 10s Counting on a 100 grid Skip Counting with Coins Odd and Even Numbers 1 Odd or Even Arranging Numbers Number Line Order Making Big Numbers Count Number Lines Counting Forward Counting Backward Going Up Going Down Concept of zero Place Value 1 Compare Numbers to 100	Grade 2 Numbers
Number	SK.N2.2	Demonstrate understanding of addition (limited to 1 and 2-digit numerals) with answers to 100 and the corresponding subtraction.	Repartition two digit numbers Simple Subtraction Complements to 50 and 100 Complements to 10, 20, 50 Subtract Numbers Columns that Add Columns that Subtract Related Facts 1 Adding In Any Order Add Numbers: Regroup a Ten Subtract Numbers: Regroup Fact Families: Add and Subtract Add and Subtract Using Graphs Doubles and Halves to 10 Doubles and Halves to 20 Doubles and Near Doubles Adding to 2-digit numbers Subtract tens Bar Model Problems 1 Add and Subtract Problems Composing Numbers to 20 Addictive Addition	Grade 2 Operations with Number

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 2

Strand	Outcome	Outcome Description	Activities	eBooks
Patterns and Relations	SK.P2.1	Demonstrate understanding of repeating patterns (three to five elements).	Missing it! Pattern Error Balancing Act	Grade 2 Patterns and Relationships
Patterns and Relations	SK.P2.2	Demonstrate understanding of increasing patterns.	Increasing Patterns	Grade 2 Patterns and Relationships
Patterns and Relations	SK.P2.3	Demonstrate understanding of equality and inequality concretely and pictorially (0 to 100).	Composing Numbers to 20 Balancing Act	Grade 2 Patterns and Relationships
Shape and Space	SK.SS2.1	Demonstrate understanding of non-standard units for linear measurement.	Measuring Length with Blocks Comparing Length	Grade 2 Measurement
Shape and Space	SK.SS2.2	Demonstrate understanding of non-standard units for measurement of mass.	Everyday Mass	Grade 2 Measurement
Shape and Space	SK.SS2.3	Describe, compare, and construct 3-D objects.	Collect the Objects	Grade 2 Space and Shape
Shape and Space	SK.SS2.4	Describe, compare, and construct 2-D shapes.	Collect the Shapes Collect More Shapes	Grade 2 Space and Shape
Shape and Space	SK.SS2.5	Demonstrate understanding of the relationship between 2-D shapes and 3-D objects.	Relate Shapes and Solids	Grade 2 Space and Shape
Statistics and Probability	SK.SP2.1	Demonstrate understanding of concrete graphs and pictographs.	Pictographs Comparing Groups of Objects Making Graphs Tallies Analyzing Data	Grade 2 Chance and Data

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 3

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N3.1	Demonstrate understanding of whole numbers to 1000 (concretely, pictorially, physically, orally, in writing, and symbolically).	Which is Smaller? Which is Bigger? Model Numbers Ascending Order Descending Order Counting by Twos Counting by Fives Counting by Tens Skip Counting Skip Counting with Coins Place Value 2 Understanding Place Value 1 Place Value Partitioning Greater or less to 100	Grade 3 Reading and Understanding Whole Numbers
Number	SK.N3.2	Demonstrate understanding of addition of whole numbers with answers to 1000 and their corresponding subtractions (limited to 1, 2, and 3-digit numerals).	Magic Mental Addition Magic Mental Subtraction Complements to 50 and 100 Commutative Property of Addition Columns that Add Subtract Numbers: Regroup Column Addition Column Subtraction Strategies for Column Addition Add Numbers: Regroup a Ten Add Multi-Digit Numbers 1 Fact Families: Add and Subtract Problems: Add and Subtract Add Two 2-Digit Numbers Compensation - Add Compensation - Subtract Bar Model Problems 2 Add 3 numbers using bonds to 10 Decompose Numbers to Subtract	Grade 3 Addition and Subtraction
Number	SK.N3.3	Demonstrate understanding of multiplication to 5 x 5 and the corresponding division statements.	Fill the Jars Making Equal Groups Multiplication Arrays Multiplication to 5 x 5 Multiplication Problems 1 Groups of Two Groups of Three Groups of Four Groups of Five Dividing Twos Dividing Threes Dividing Fours Dividing Fives Frog Jump Multiplication	Grade 3 Multiplication and Division

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 3

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N3.4	Demonstrate understanding of fractions.	Halves and Quarters Fractions of a Collection Fraction Fruit Sets 1 Shape Fractions What Fraction is Shaded? Thirds and Sixths What Fraction is Shaded? Comparing Fractions 1 Model Fractions Counting with Fractions on a Number Line Identifying Fractions on a Number Line	Grade 3 Fractions
Patterns and Relations	SK.P3.1	Demonstrate understanding of increasing and decreasing patterns.	Count Forward Patterns Count Backward Patterns Increasing Patterns Decreasing Patterns	Grade 2 Patterns and Relationships
Shape and Space	SK.P3.2	Demonstrate understanding of equality by solving one-step addition and subtraction equations involving symbols representing an unknown quantity.	Find the Missing Number 1 Missing Numbers Missing Numbers: Variables Missing Values	Grade 2 Patterns and Relationships
Shape and Space	SK.SS3.1	Demonstrate understanding of the passage of time.	Days of the Week Months of the Year Using a Calendar Hour Times Half Hour Times Tell Time to the Half Hour	Under review
Shape and Space	SK.SS3.2	Demonstrate understanding of measuring mass in g and kg.	Everyday Mass How Heavy?	Grade 3 Measurement
Shape and Space	SK.SS3.3	Demonstrate understanding of linear measurement (cm and m).	How Long is That? Measuring Length Centimetres and Metres Perimeter of Shapes Perimeter	Grade 3 Measurement
Shape and Space	SK.SS3.4	Demonstrate understanding of 3-D objects by analyzing characteristics including faces, edges, and vertices.	Faces, Edges and Vertices Count Sides and Corners Collect the Objects Relate Shapes and Solids Prisms and Pyramids	Grade 3 Space, Shape and Position

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 3

Strand	Outcome	Outcome Description	Activities	eBooks
Statistics and Probability	SK.SS3.5	Demonstrate understanding of 2-D shapes (regular and irregular) including triangles, quadrilaterals, pentagons, hexagons, and octagons.	Collect More Shapes Collect the Shapes 2 Collect the Polygons How many Faces? How many Edges? How many Corners? Faces, Edges and Vertices	Grade 3 Space, Shape and Position
Statistics and Probability	SK.SP3.1	Demonstrate understanding of first-hand data using tally marks, charts, lists, bar graphs, and line plots (abstract pictographs).	Tally Charts Column Graphs Reading from a Column Graph Analyzing Data Making Graphs Bar Graphs 1 Pictographs	Grade 3 Chance and Data

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 4

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N4.1	Demonstrate an understanding of whole numbers to 10 000 (pictorially, physically, orally, in writing, and symbolically).	Place value 2 Place value 3 Understanding Place Value 2 Place Value to Thousands Expanding Numbers Ascending Order Descending Order Pick the Next Number	Grade 4 Reading and Understanding Whole Numbers
Number	SK.N4.2	Demonstrate an understanding of addition of whole numbers with answers to 10 000 and their corresponding subtractions (limited to 3 and 4-digit numerals).	Complements to 50 and 100 Adding Colossal Columns Subtracting Colossal Columns Strategies for Column Addition Estimation: Add and Subtract Problems: Add and Subtract Estimate Sums Estimate Differences Add 3-Digit Numbers Add 3-Digit Numbers: Regroup Add Three 3-Digit Numbers: Regroup Add Three 2-Digit Numbers: Regroup Add Three 2-Digit Numbers 2-Digit Differences 2-Digit Differences: Regroup Add Two 2-Digit Numbers: Regroup Add Two 2-Digit Numbers	Grade 4 Addition and Subtraction
Number	SK.N4.3	Demonstrate an understanding of multiplication of whole numbers (limited to numbers less than or equal to 10) by: • applying mental mathematics strategies • explaining the results of multiplying by 0 and 1.	Under review	Under review

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 4

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N4.4	Demonstrate an understanding of multiplication (2- or 3-digit by 1-digit).	Multiply: 1-Digit Number Multiplication Arrays Arrays 1 Missing Numbers: x and ÷ facts Equivalent Facts: Multiply Multiplication Grids Multiplication Facts Multiply: 1-Digit Number, Regroup Multiplication Properties Multiply Multiples of 10 Multiply: 2-Digit by 1-Digit	Grade 4 Multiplication and Division
Number	SK.N4.5	Demonstrate an understanding of division (1-digit divisor and up to 2-digit dividend) to solve problems.	Divide: 1-Digit Divisor, Remainder Remainders by Tables Related Facts 2 Division Facts Divide: 1-Digit Divisor 1 Divide: 2-Digit Divisor, Remainder Halve it! Problems: Multiply and Divide Multiply and Divide Problems 1 Remainders by Arrays	Grade 4 Multiplication and Division
Number	SK.N4.6	Demonstrate an understanding of fractions less than or equal to one by using concrete and pictorial representations.	Comparing Fractions 1a Comparing Fractions 1b Equivalent Fractions on a Number Line 1 Model Fractions Comparing Fractions 1 Ordering Fractions Shading Equivalent Fractions Shape Fractions Equivalent Fractions Fraction Fruit Sets 2 Equivalent Fractions on a Number Line Simplifying Fractions Part-Whole Rods 1 Part-Whole Rods 2 Equivalent Fraction Wall 1 Equivalent Fraction Wall 2 Equivalent fractions on a Number Line 1 Fractions of a Collection	Grade 4 Fractions

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 4

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SKN4.7	Demonstrate an understanding of decimal numbers in tenths and hundredths (pictorially, orally, in writing, and symbolically).	Decimals on the Number Line Decimal Order 1 Comparing Decimals 1 Decimal Place Value Decimals from Words to Digits 1	Grade 4 Fractions
Number	SK.N4.8	Demonstrate an understanding of addition and subtraction of decimals limited to hundredths (concretely, pictorially, and symbolically).	Nearest Whole Number Add Decimals 1 Subtract Decimals 1 Decimal Complements Rounding Decimals 1	Grade 4 Fractions
Patterns and Relations	SK.P4.1	Demonstrate an understanding of patterns and relations.	Pick the Next Number Venn Diagrams Caroll Diagram	Grade 4 Patterns and Algebra
Patterns and Relations	SK.P4.2	Demonstrate an understanding of equations involving symbols to represent an unknown value.	Find the Missing Number 1 I am Thinking of a Number! Missing Numbers Missing Values Write an Equation: Word Problems	Grade 4 Patterns and Algebra
Shape and Space	SK.SS4.1	Demonstrate an understanding of time.	Five Minute Times Quarter to and Quarter past 24 Hour Time What is the Time? using a Calendar	Grade 4 Time
Shape and Space	SK.SS4.2	Demonstrate an understanding of area of regular and irregular 2-D shapes.	Area of Shapes Equal Areas Area: Squares and Rectangles	Grade 4 Space, Shape and Position
Shape and Space	SK.SS4.3	Demonstrate an understanding of rectangular and triangular prisms.	What Prism am I? Prisms and Pyramids How Many Faces? How Many Edges? How Many Corners? Faces, Edges, and Vertices 1	Grade 4 Space, Shape and Position
Shape and Space	SK.SS4.4	Demonstrate an understanding of line symmetry.	Symmetry	Grade 4 Space, Shape and Position
Statistics and Probability	SK.SP4.1	Demonstrate an understanding of many-to-one correspondence.	Making Graphs Column Graphs Interpreting Tables Line Graphs: Interpretation	Under review

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 5

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N5.1	Represent, compare, and describe whole numbers to 1 000 000 within the contexts of place value and the base ten system, and quantity.	Numbers from Words to Digits 1 Expanded Notation Multiplying by 10, 100, 1000 Dividing by 10, 100, 1000 Place value 3 Understanding Place value 3 Place Value 1 (x 10 ÷ 10) Place Value 2(x 10 ÷ 10) Place Value to Thousands	Grade 5 Reading and Understanding Whole Numbers
Number	SK.N5.2	Analyze models of, develop strategies for, and carry out multiplication of whole numbers.	Multiplication Properties Multiply More Multiples of 10 Multiply: 2-Digit Area Model Double and Halve to Multiply Multiply 3 single-digit numbers Multiply: 2-Digit Number, Regroup Multiply: 2-Digit by 1-Digit Mental Methods Multiplication 2 Mental Methods Multiplication 3	Grade 5 Multiplication and Division
Number	SK.N5.3	Demonstrate, with and without concrete materials, an understanding of division (3-digit by 1-digit) and interpret remainders to solve problems.	Remainders by Arrays Remainders by Tables Divide: 2-Digit Divisor, Remainder Short Division Divide: 1-Digit Divisor 1 Divide: 1-Digit Divisor 2 Divide: 1-Digit Divisor, Remainder	Grade 5 Multiplication and Division
Number	SK.N5.4	Develop and apply personal strategies for estimation and computation.	Rounding Numbers Estimation: Add and Subtract Estimation: Multiply and Divide Rounding Numbers for Division Compensation - Add Compensation - Subtract Estimate Sums Estimate Differences Estimate Products Estimate Quotients	Grade 5 Reading and Understanding Whole Numbers
Number	SK.N5.5	Demonstrate an understanding of fractions by using concrete and pictorial representations.	Comparing Fractions 1 Comparing Fractions 2 Equivalent Fractions on a Number Line 2 Fraction Fruit Sets 2 Fractions of a Collection What Fraction is Shaded? Shading Equivalent Fractions The Equivalent Fraction Simplifying Fractions Equivalent Fractions Fraction Wall Labelling 1 Fraction Wall Labelling 2	Grade 5 Fractions, Decimals and Percentages

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 5

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N5.6	Demonstrate understanding of decimals to thousandths.	Decimal Place Value Decimals from Words to Digits 2 Comparing Decimals Decimals on a Number Line	Grade 5 Fractions, Decimals and Percentages
Number	SK.N5.7	Demonstrate an understanding of addition and subtraction of decimals (limited to thousandths).	Adding Decimals Subtracting Decimals Estimate Decimal Sums 1 Estimate Decimal Differences 1 Estimate Decimal Operations Decimal Complements Adding and Subtracting Decimals	Grade 5 Fractions, Decimals and Percentages
Patterns and Relations	SK.P5.1	Represent, analyse, and apply patterns using mathematical language and notation.	Describing Patterns	Grade 5 Patterns and Algebra
Patterns and Relations	SK.P5.2	Write, solve, and verify solutions of single-variable, one-step equations with whole number coefficients and whole number solutions.	Find the Missing Number 2 I am Thinking of a Number! Missing Numbers: Variables Missing Values	Grade 5 Patterns and Algebra
Shape and Space	SK.SS5.1	Design and construct different rectangles given either perimeter or area, or both (whole numbers), and draw conclusions.	Perimeter of Shapes Equal Areas Area of Shapes Perimeter Detectives 1 Perimeter: Squares and Rectangles Perimeter Calculate Perimeter of Squares and Rectangles	Grade 5 Length, Perimeter and Area
Shape and Space	SK.SS5.2	Demonstrate understanding of measuring length (mm).	Centimetres and Metres Converting cm and mm Converting Units of Length Which unit of Measurement?	Grade 5 Length, Perimeter and Area
Shape and Space	SK.SS5.3	Demonstrate an understanding of volume.	How many Blocks? Comparing Volume	Grade 5 Volume, Capacity and Mass
Shape and Space	SK.SS5.4	Demonstrate understanding of capacity.	Using a Litre Litre Conversions Comparing Volume Millilitres and Litres	Grade 5 Volume, Capacity and Mass

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 5

Strand	Outcome	Outcome Description	Activities	eBooks
Shape and Space	SK.SS5.5	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.	What Line am I? Faces, Edges and Vertices	Grade 5 Geometry
Shape and Space	SK.SS5.6	Identify and sort quadrilaterals, including rectangles, squares, trapezoids, parallelograms, rhombuses according to their attributes.	Collect the Objects 2	Grade 5 Geometry
Shape and Space	SK.SS5.7	Identify, create, and analyze single transformations of 2-D shapes (with and without the use of technology).	Transformations	Grade 5 Geometry
Statistics and Probability	SK.SP5.1	Differentiate between first-hand and second-hand data.	Data Types	Under review
Statistics and Probability	SK.SP5.2	Construct and interpret double bar graphs to draw conclusions.	Divided Bar Graphs Reading from a Column Graph	Grade 5 Data Representation
Statistics and Probability	SK.SP5.3	Describe, compare, predict, and test the likelihood of outcomes in probability situations.	What are the Chances? Probability Scale Most Likely and Least Likely Fair Games Possible Outcomes Counting Techniques 1	Grade 4 Chance and Data

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 6

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N6.1	Demonstrate understanding of place value including: • greater than one million • less than one thousandth with and without technology.	Numbers from Words to Digits 2 Numbers from Words to Digits 3 Place Value to Millions Place Value to Billions Decimal Place Value Decimals from Words to Digits 2 Multiply Decimals: 10, 100, 1000 Divide Decimals: 10, 100, 1000	Grade 6 Reading and Understanding Whole Numbers
Number	SK.N6.2	Demonstrate understanding of factors and multiples (concretely, pictorially, and symbolically) including: • determining factors and multiples of numbers less than 100 • relating factors and multiples to multiplication and division • determining and relating prime and composite numbers.	Prime or Composite? Factors Find the Factor Multiples Product of Prime Factors Greatest Common Factor Least Common Multiple	Grade 6 Reading and Understanding Whole Numbers
Number	SK.N6.3	Demonstrate understanding of the order of operations on whole numbers (excluding exponents) with and without technology.	Order of Operations 1 (BEDMAS) Integers: Order of Operations (BEDMAS) Ordering Integers Comparing Integers Integers on a Number Line	Grade 6 Reading and Understanding Whole Numbers
Number	SK.N6.4	Extend understanding of multiplication and division to decimals (1-digit whole number multipliers and 1-digit natural number divisors).	Decimal by Whole Number Divide Decimal by Whole Number Multiply Decimals and Powers of 10 Money Problems: Four Operations Divide by Powers of 10	Grade 6 Reading and Understanding Whole Numbers
Number	SK.N6.5	Demonstrate understanding of percent (limited to whole numbers to 100) concretely, pictorially, and symbolically.	Fractions to Decimals Percents and Decimals Percent of a Number Decimal to Percentage Percents to Fractions Modelling Percentages	Grade 6 Fractions, Decimals and Percentage
Number	SK.N6.6	Demonstrate understanding of integers concretely, pictorially, and symbolically.	Comparing Integers Integers on a Number Line Order of Operations 1 (BEDMAS) Integers Order of Operations (BEDMAS) Ordering Integers	Grade 7 Directed Numbers

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 6

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N6.7	Extend understanding of fractions to improper fractions and mixed numbers.	What Mixed Number Is Shaded? Improper to Mixed Mixed and Improper Fractions on a Number Line Identifying fractions beyond 1 Mixed to Improper	Grade 6 Fractions, Decimals and Percentage
Number	SK.N6.8	Demonstrate an understanding of ratio concretely, pictorially, and symbolically.	Simplify Ratios: 2 Whole Numbers Ratios Ratio Word Problems	Under review
Patterns and Relationships	SK.P6.1	Extend understanding of patterns and relationships in tables of values and graphs.	Table of Values Graphing from a Table of Values Venn Diagrams Venn Diagram 1	Grade 6 Patterns and Algebra
Patterns and Relationships	SK.P6.2	Extend understanding of preservation of equality concretely, pictorially, physically, and symbolically.	Find the Missing Number 2	Grade 6 Patterns and Algebra
Patterns and Relationships	SK.P6.3	Extend understanding of patterns and relationships by using expressions and equations involving variables.	Missing Values: Decimals Writing Algebraic Expressions Write an Equation: Word Problems	Grade 6 Fractions, Decimals and Percentage Patterns and Algebra
Shape and Space	SK.SS6.1	Demonstrate understanding of angles including: identifying examples, classifying angles, estimating the measure, determining angle measures in degrees, drawing angles, applying angle relationships in triangles and quadrilaterals.	Equal Angles Classifying Angles Measuring Angles Labelling Angles Angle Sum of a Triangle Angle Measures in a Triangle Angle Sum of a Quadrilateral	Grade 6 Geometry
Shape and Space	SK.SS6.2	Extend and apply understanding of perimeter of polygons, area of rectangles, and volume of right rectangular prisms (concretely, pictorially, and symbolically)	Perimeter Detectives 1 Perimeter Detectives 2 Perimeter: Triangles Perimeter: Squares and Rectangles Perimeter: Composite Shapes Area: Squares and Rectangles Volume: Rectangular Prisms 1	Grade 6 Length, Perimeter and Area Grade 6 Volume, Capacity and Mass

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 6

Strand	Outcome	Outcome Description	Activities	eBooks
Shape and Space	SK.SS6.3	Demonstrate understanding of regular and irregular polygons including: classifying types of triangles, comparing side lengths, comparing angle measures, differentiating between regular and irregular polygons and analyzing for congruence.	Triangle Tasters Triangles: Acute, Right, Obtuse Congruent Figures	Grade 6 Geometry
Shape and Space	SK.SS6.4	Demonstrate understanding of the first quadrant of the Cartesian plane and ordered pairs with whole number coordinates.	Coordinate Graphs: 1st Quadrant Ordered Pairs Coordinate Graphs	Grade 6 Position
Shape and Space	SK.SS6.5	Demonstrate understanding of single, and combinations of, transformations of 2-D shapes (with and without the use of technology).	Transformations Rotations: Coordinate Plane Flip, Slide, Turn Transformations: Coordinate Plane	Grade 6 Position
Statistics and Probability	SK.SP6.1	Extend understanding of data analysis to include line graphs and graphs of discrete data.	Line Graphs: Interpretation Dot Plots Travel Graphs Step Graphs	Grade 6 Data Representation
Statistics and Probability	SK.SP6.2	Demonstrate understanding of probability.	Probability Scale Simple Probability Complementary Events How many Combinations? Find the Probability	Grade 5 Chance and Probability

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 7

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N7.1	Demonstrate an understanding of division through the development and application of divisibility strategies for 2, 3, 4, 5, 6, 8, 9, and 10, and through an analysis of division involving zero.	Divisibility Tests (2, 5, 10) Divisibility Tests (3, 4, 9) Divisibility Tests Tests of Divisibility 1 Venn Diagram 1 Caroll Diagram Factors Product of Prime Factors Prime or Composite? Prime Factoring	Grade 7 Whole Numbers
Number	SK.N7.2	Expand and demonstrate understanding of the addition, subtraction, multiplication, and division of decimals to greater numbers of decimal places, and the order of operations.	Adding and Subtracting Decimals Add Decimals 2 Subtract Decimals 2 Estimate Decimal Sums 1 Estimate Decimal Sums 2 Estimate Decimal Differences 1 Estimate Decimal Differences 2 Decimal by Whole Number Divide Decimal by Whole Number Multiply Decimals: Area Model Decimal by Decimal Divide Decimal by Decimal Estimate Decimal Operations Recurring Decimals Decimal Order 1	Grade 7 Whole Numbers
Number	SK.N7.3	Demonstrate an understanding of the relationships between positive decimals, positive fractions (including mixed numbers, proper fractions and improper fractions), and whole numbers.	Decimals to Fractions 1 Decimals to Fractions 2 Factions to Decimals Fractions to Decimals 1 Fractions to Decimals 2 Fraction to Terminating Decimal	Grade 7 Whole Numbers
Number	SK.N7.4	Expand and demonstrate an understanding of percent to include fractional percents between 1% and 100%.	Percent of a Number Modelling Percentages Percentage of a Quantity Percentage Increase and Decrease Percentage Composition Percentage Word Problems Solve Percent Equations Percents to Fractions Percentage to Fraction Percents and Decimals Simple Interest	Grade 8 Percentage Calculation

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 7

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N7.5	Develop and demonstrate an understanding of adding and subtracting positive fractions and mixed numbers, with like and unlike denominators, concretely, pictorially, and symbolically (limited to positive sums and differences).	Ordering Fractions Simplifying Fractions Add Like Fractions Add: Common Denominator Add subtract fractions 1 Add Unlike Fractions Fractions of a collection 1 Add: No Common Denominator Subtract Like Fractions Subtract: No Common Denominator Mixed Numerals Improper to Mixed Mixed to Improper Add Like Mixed Numbers Add Unlike Mixed Numbers Subtract Like Mixed Numbers Subtract Unlike Mixed Numbers Common Denominator No Common Denominator Subtract: Common Denominator Subtract Unlike Fraction	Grade 7 Fractions
Number	SK.N7.6	Demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and symbolically.	Directed Numbers Integers on a Number Line Ordering Integers Integers: Add and Subtract More with Integers Negative or Positive?	Grade 7 Directed Numbers
Patterns and Relations	SK.P7.1	Demonstrate an understanding of the relationships between oral and written patterns, graphs and linear relations.	Pattern Rules and Tables Find the Pattern Rule Are they Parallel? Are they Perpendicular?	Grade 7 Algebra Basics

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 7

Strand	Outcome	Outcome Description	Activities	eBooks
Patterns and Relations	SK.P7.2	Demonstrate an understanding of equations and expressions by: • distinguishing between equations and expressions • evaluating expressions • verifying solutions to equations.	Algebra Tiles Writing Algebraic Expressions Simple Substitution 1 Simple Substitution 2 Solving Simple Equations Solve Equations: Add, Subtract 1 Solve Equations: Add, Subtract 2 Solve Equations: Multiply, Divide 1 Solving More Equations Equations: Variables, Both Sides Equations with Grouping Symbols Checking Solutions Solve Two-Step Equations Solve Multi-Step Equations Equations to Solve Problems Writing Equations	Grade 7 Algebra Basics Grade 8 Equations
Patterns and Relations	SK.P7.3	Demonstrate an understanding of one- and two-step linear equations of the form $ax/b + c = d$ (where a, b, c, and d are whole numbers, $c \leq d$ and $b \neq 0$) by modeling the solution of the equations concretely, pictorially, physically, and symbolically and explaining the solution in terms of the preservation of equality.	Reading Values from a Line Which Straight Line? Checking Solutions Find the Mistake	Grade 8 Equations
Patterns and Relations	SK.P7.4	Demonstrate an understanding of linear equations of the form (where a and b are integers) by modeling problems as a linear equation and solving the problems concretely, pictorially, and symbolically.	Graphing from a Table of Values Graphing from a Table of Values 2 Intercepts Conversion Graphs Equations with Decimals Equations with Fractions	Grade 7 Algebra Basics Grade 8 Equations
Shape and Space	SK.SS7.1	Demonstrate an understanding of circles including circumference and central angles.	Labelling Circles Circle Terms Circumference: Circles	Grade 7 Solids
Shape and Space	SK.SS7.2	Develop and apply formulas for determining the area of: • triangles • parallelograms • circles.	Area: Squares and Rectangles Area: Triangles Area: Right Triangles Area: Circles Area: Quadrilaterals Area: Parallelograms Perimeter: Squares and Rectangles Perimeter: Triangles Perimeter: Triangles 1	Grade 7 Area and Perimeter

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 7

Strand	Outcome	Outcome Description	Activities	eBooks
Shape and Space	SK.SS7.3	Demonstrate an understanding of 2-D relationships involving lines and angles.	Angles and Parallel Lines Equal, Complement or Supplement? Parallel Lines Angles in a Revolution	Grade 7 Angles
Shape and Space	SK.SS7.4	Demonstrate an understanding of the Cartesian plane and ordered pairs with integral coordinates.	Coordinate Graphs Coordinate Graphs: 1st Quadrant Ordered Pairs Vertical and horizontal shift	Grade 7 The Number Plane Grade 9 Coordinate Geometry
Shape and Space	SK.SS7.5	Expand and demonstrate an understanding of transformations (translations, rotations, and reflections) of 2-D shapes in all four quadrants of the Cartesian plane.	Flip, Slide, Turn Symmetry or Not? Transformations Rotations: Coordinate Plain Transformations: Coordinate Plain	Grade 7 Solids
Statistics and Probability	SK.SP7.1	Demonstrate an understanding of the measures of central tendency and range for sets of data.	Mean Mean from Frequency Table Median Median from Frequency Table Grouped Frequency Difference and Deviation from Mean Mode Mode from Frequency Table	Grade 6 Data Representation Grade 9 Data
Statistics and Probability	SK.SP7.2	Demonstrate an understanding of circle graphs.	Circle Graphs Sector Graph Calculations Creating a Sector Graph Sector Graph Angles	Grade 6 Data Representation Grade 9 Data
Statistics and Probability	SK.SP7.3	Demonstrate an understanding of theoretical and experimental probabilities for two independent events where the combined sample space has 36 or fewer elements.	Line Graphs: Interpretation Probability Scale Find the Probability Simple Probability Dice and Coins Venn Diagrams Tree Diagrams Probability With Replacement Probability Without Replacement Probability – "And" and "Or" Scatter Plots	Grade 8 Probability

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 8

Strand	Outcome	Outcome Description	Activities	eBooks
Number	SK.N8.1	Demonstrate understanding of the square and principle square root of whole numbers concretely or pictorially and symbolically.	Square Roots Estimate Square Roots Expanded Notation Expanding Numbers Prime or Composite? Prime Factoring Least Common Multiple Greatest Common Factor	Grade 8 Expanding and Factoring Grade 7 Whole Numbers
Number	SK.N8.2	Expand and demonstrate understanding of percents greater than or equal to 0% (including fractional and decimal percents) concretely, pictorially, and symbolically.	Percents and Decimals Percents to Fractions Percentage of a Quantity Percentage Word Problems Percentage Composition Percent Increase and Decrease Successive Discounts	Grade 8 Percentage Calculation
Number	SK.N8.3	Demonstrate understanding of rates, ratios, and proportional reasoning concretely, pictorially, and symbolically.	Ratios Equivalent Ratios Simplify Ratios: 2 Whole Numbers Dividing a Quantity in a Ratio Ratio Word Problems Rates Rates Calculations Rates Word Problems Unitary Method Best Buy Solve Proportions	Under review
Number	SK.N8.4	Demonstrate understanding of multiplying and dividing positive fractions and mixed numbers, concretely, pictorially, and symbolically.	Multiply Two Fractions 1 Multiply Two Fractions 2 Fractions of a collection 2 Divide Fractions Visual Model Divide Fractions by Fractions 1 Divide Fractions by Fractions 2 Dividing Fractions Divide by a unit fraction Multiplying Fractions Operations with Fractions Estimate Products with Fractions Multiply Mixed Numbers Divide Mixed Numbers Equations with Fractions	Grade 6 Decimals, Fractions and Percentages Grade 7 Fractions
Number	SK.N8.5	Demonstrate understanding of multiplication and division of integers concretely, pictorially, and symbolically.	Integers: Multiply and Divide Multiplying and Dividing Integers More with Integers Integers: Order of Operations (BEDMAS) Order of Operations 1 (BEDMAS)	Grade 7 Directed Numbers

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 8

Strand	Outcome	Outcome Description	Activities	eBooks
Patterns and Relations	SK.P8.1	Demonstrate understanding of linear relations concretely, pictorially (including graphs), physically, and symbolically.	Pattern Rules and Tables Find the Pattern Rule Graphing from a Table of Values Graphing from a Table of Values 2 Reading Values from a Line $y = ax$ Which Straight Line? Equation of a Line 1 Determining a Rule for a Line Conversion Graphs Modelling Linear Relationships Solve Systems by Graphing Ordered Pairs Table of Values	Grade 8 Linear Relationships Grade 8 Straight Lines
Patterns and Relations	SK.P8.2	Model and solve problems using linear equations of the form: • $ax = b$ • $x/a = b$, $a \neq 0$ • $ax + b = c$ • $x/a + b = c$, $a \neq 0$ • $a(x + b) = c$ concretely, pictorially, and symbolically, where a, b, and c are integers.	Algebra Tiles Recognizing Like Terms Like Terms: Add, Subtract Algebraic Multiplication Dividing Expressions Using the Distributive Property Complex Substitution Simple Substitution Simple Substitution 1 Simple Substitution 2 Expanding with Negatives Expand then Simplify Solving More Equations Solve Multi-Step Equations Equations with Grouping Symbols Equations to Solve Problems Checking Solutions Find the Mistake Equations: Variables, Both Sides Solve Equations: Add, Subtract 2 Solve Equations: Multiply, Divide 2	Grade 8 Simplifying Algebra Grade 8 Equations
Shape and Space	SK.SS8.1	Demonstrate understanding of the Pythagorean Theorem concretely or pictorially and symbolically and by solving problems.	Pythagorean Theorem Pythagorean Triads Find Slant Height Pythagoras and Perimeter	Grade 8 Pythagoras' Theorem

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 8

Strand	Outcome	Outcome Description	Activities	eBooks
Shape and Space	SK.SS8.2	Demonstrate understanding of the surface area of 3-D objects limited to right prisms and cylinders (concretely, pictorially, and symbolically) by: • analyzing views • sketching and constructing 3-D objects, nets, and top, side, and front views. • generalizing strategies and formulae • analyzing the effect of orientation • solving problems.	Nets Surface Area: Rectangular Prisms Surface Area: Triangular Prisms Surface Area: Cylinders	Grade 9 Measuring Solids
Shape and Space	SK.SS8.3	Demonstrate understanding of volume limited to right prisms and cylinders (concretely, pictorially, or symbolically) by: • relating area to volume • generalizing strategies and formulae • analyzing the effect of orientation • solving problems.	Volume: Rectangular Prisms 2 Volume: Triangular Prisms Volume: Cylinders Similar Areas and Volumes	Grade 9 Measuring Solids
Shape and Space	SK.SS8.4	Demonstrate an understanding of tessellation by: • explaining the properties of shapes that make tessellating possible • creating tessellations • identifying tessellations in the environment.	Under Review	Grade 6 Geometry
Statistics and Probability	SK.P8.1	Analyze the modes of displaying data and the reasonableness of conclusions.	Line Plots Negative or Positive? Compound Bar Chart Circle Graphs Sector Graphs Pie Charts Histograms Frequency Histograms Line Graphs: Interpretation Divided Bar Graphs	Grade 6 Data Representation Grade 9 Data
Statistics and Probability	SK.P8.2	Demonstrate understanding of the probability of independent events concretely, pictorially, orally, and symbolically.	Simple Probability Probability With Replacement Probability Without Replacement Probability Scale Dice and Coins Two-way Table Probability Fair Games Complementary Events Venn Diagrams	Grade 8 Probability

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 9

Strand	Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
Number	N9.1	Demonstrate (concretely, pictorially, and symbolically) understanding of powers with integral bases (excluding base 0) and whole number exponents including: • representing using powers • evaluating powers • powers with an exponent of zero • solving situational questions.	Exponents	Exponents Exponent Notation Exponent Form to Numbers The Zero Exponent Properties of Exponents Simplifying with Exponent Laws 1	Exponents
			Exponents and Algebra	Exponent Notation and Algebra Exponent Laws and Algebra Exponent Laws with Brackets Zero Exponent and Algebra Multiplication with Exponents Multiplication and Division with Exponents Simplifying with Exponent Laws 2	Exponents
Number	N9.2	Demonstrate understanding of rational numbers including: • comparing and ordering • relating to other types of numbers • solving situational questions.	Rational and Irrational Numbers	Decimals on a Number Line Identifying Fractions on a Number Line Equivalent Fractions on a Number Line 1 Equivalent Fractions on a Number Line 2 Mixed and Improper Fractions on a Number Line Decimal Order 1 Decimal Order 2 Decimal Order Ordering Fractions Fractions to Decimals Fractions to Decimals 2 Decimals to Fractions 1 Decimals to Fractions 2	Directed Numbers
			Rational - Add and Subtract Decimals	Add Decimals 1 Add Decimals 2 Add Decimals: Same Sign Add Decimals: Different Signs Adding Decimals Subtract Decimals 1 Subtract Decimals 2 Adding and Subtracting Decimals Decimal Complements	Decimals
			Rational - Multiply and Divide Decimals	Multiply Decimals and Powers of 10 Decimal by Whole Number Decimal by Decimal Divide Decimals by Powers of 10 100 1000 Divide Decimal by Whole Number Divide Decimal by Decimal Order of Operations 2	Decimals

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 9

Strand	Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
Number	N9.2	Demonstrate understanding of rational numbers including: • comparing and ordering • relating to other types of numbers • solving situational questions.	Rational - Add and Subtract Fractions	Add: Common Denominator Add: No Common Denominator Subtract: Common Denominator Subtract: No Common Denominator Common Denominator No Common Denominator Add Like Fractions Add Unlike Fractions Add Like Mixed Numbers Add Mixed Numbers: Same Sign Add Mixed Numbers: Signs Differ Add Unlike Mixed Numbers Subtract Like Fractions Subtract Unlike Fractions Subtract Like Mixed Numbers Subtract Unlike Mixed Numbers Subtract Mixed Numbers: Renaming Subtract Negative Mixed Numbers Subtract Mixed Numbers: Signs Differ	Fractions
			Rational - Multiply and Divide Fractions	Multiplying Fractions Multiply Two Fractions 1 Multiply Two Fractions 2 Multiply Mixed Numbers Dividing Fractions Divide Mixed Numbers Divide Mixed Numbers with Signs Fraction Word Problems	Fractions
Number	N9.3	Extend understanding of square roots to include the square root of positive rational numbers.	Rational and Irrational Numbers	Square Roots Estimate Square Roots	Under review
Patterns and Relations	P9.1	Demonstrate understanding of linear relations including: • graphing • analyzing • interpolating and extrapolating • solving situational questions.	Graphing Linear Relations	Pattern Rules and Tables Table of Values Intercepts Slope of a Line Graphing from a Table of Values Reading Values from a Line Graphing from a Table of Values 2 $y=ax$ Which Straight Line? Horizontal and Vertical Lines Conversion Graphs Gradients for Real	Linear Relationships

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 9

Strand	Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
Patterns and Relations	P9.2	Model and solve situational questions using linear equations of the form: • $ax=b$ • $x/a=b$, $a\neq0$ • $ax + b=c$ • $x/a + b=c$, $a\neq0$ • $ax=b + cx$ • $a(x + b)=c$ • $ax + b=cx + d$ • $a(bx + c)=d(ex + f)$ • $a/x=b$, $x\neq0$ where a, b, c, d, e, and f are rational numbers.	Solving Linear Equations	Writing Algebraic Expressions Using the Distributive Property Equations to Solve Problems Equations with Decimals Solving Simple Equations Solving More Equations Solve Multi-Step Equations Equations with Grouping Symbols Checking Solutions Find the Mistake Find the Pattern Rule	Algebra Basics Equations
Patterns and Relations	P9.3	Demonstrate understanding of single variable linear inequalities with rational coefficients including: • solving inequalities • verifying • comparing • graphing.	Linear Inequalities	Solve One-Step Inequalities 1 Solve One-Step Inequalities 2 Solve Two-Step Inequalities Solving Inequalities 1 Solving Inequalities 2 Solving Inequalities 3 Graphing Inequalities 1 Graphing Inequalities 2 Graphing Inequalities 3	Inequalities Equations and Inequalities
Patterns and Relations	P9.4	Demonstrate understanding of polynomials (limited to polynomials of degree less than or equal to 2) including: • modeling • generalizing strategies for addition, subtraction, multiplication, and division • analyzing • relating to context • comparing for equivalency.	Polynomials	Recognising Like Terms Like Terms: Add and Subtract Simplifying Expressions Highest Common Algebraic Factor Expand then Simplify Factoring with Negatives Factoring with Exponents Parabolas and Rectangles Constructing Formulae	Algebra Basics Polynomials Straight Lines

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Grade 9

Strand	Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
Shape and Space	SS9.1	Demonstrate understanding of circle properties including: • perpendicular line segments from the centre of a circle to a chord bisect the chord • inscribed angles subtended by the same arc have the same measure • the measure of a central angle is twice the measure of an inscribed angle subtending the same arc • tangents to a circle are perpendicular to the radius ending at the point of tangency.	Circles and Similar Figures	Circle Terms Circle Theorem	Geometry of the Circle: Chords and Angles Constructions
Shape and Space	SS9.2	Extend understanding of area to surface area of right rectangular prisms, right cylinders, right triangular prisms, to composite 3-D objects.	Surface Area	Nets Surface Area: Rectangular Prisms Surface Area: Rectangular Prisms 1 Surface Area: Triangular Prisms Surface Area: Triangular Prisms 1 Surface Area: Cylinders Surface Area: Square Pyramids Surface Area: Rectangular Pyramids Surface Area: Cones Surface Area: Spheres Match the Solid 2	Solids Measuring Solids
Shape and Space	SS9.3	Demonstrate understanding of similarity of 2-D shapes.	Circles and Similar Figures	Scale Factor Scale Measurement Scale Similar Figures Similar Figures 1 Perimeter, Area, Dimension Change Using Similar Triangles Similarity Proofs	Similarity and Congruence

Saskatchewan Outcomes
Alignment with Mathletics

Grade 9

Strand	Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
Shape and Space	SS9.4	Demonstrate understanding of line and rotation symmetry.	Symmetry	Symmetry or Not 1 Symmetry Symmetry or Not? Rotational Symmetry Transformations: Coordinate Plane Rotations: Coordinate Plane	Under review
Statistics and Probability	SP9.1	Demonstrate understanding of the effect of: • bias • use of language • ethics • cost • time and timing • privacy • cultural sensitivity and • population or sample on data collection.	Under review	Under review	Under review
Statistics and Probability	SP9.2	Demonstrate an understanding of the collection, display, and analysis of data through a project.	Data and Probability	Find the Probability Complementary Events Dice and Coins Median from Stem and Leaf Plot Mode Mode from Stem and Leaf Plot Probability Scale Simple Probability Probability With Replacement Two-Way Table Probability	Data
Statistics and Probability	SP9.3	Demonstrate an understanding of the role of probability in society.	Under review	Under review	Under review
Statistics and Probability	SP9.4	Research and present how First Nations and Métis peoples, past and present, envision, represent, and make use of probability and statistics.	Under review	Under review	Under review

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Workplace and Apprenticeship Mathematics 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
WA10.1	Demonstrate understanding of the preservation of equality including solving problems that involve the manipulation and application of formulas related to: • perimeter • area • the Pythagorean Theorem • primary trigonometric ratios • income.	Using Formulas	Substitution in Formulae More Substitution in Formulae Real Formulae Surface Area: Rearrange Formula Volume: Rearrange Formula Perimeter: Composite Shapes Perimeter, Area, Dimensions Change Area: Composite Shapes Pythagorean Theorem Pythagorean Triads Sin A Cos A Tan A Find Unknown Sides Find Unknown Angles Elevation and Depression Compound Interest Compound Interest by Formula Wages and Salaries	Area and Perimeter Pythagoras' Theorem Earning Money Trigonometry
		Preserving Equality	Addition Properties Multiplication Properties Commutative Property of Addition Using the Distributive Property Arithmetic Laws Properties of Exponents Find the Mistake	Algebra Basics Equations Simplifying Algebra
WA10.2	Analyze puzzles and games that involve spatial reasoning using problem solving strategies.	Patterns	Pattern Error Complete the Pattern Find the Pattern Rule Simple Patterns	Under review

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Workplace and Apprenticeship Mathematics 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
WA10.3	Demonstrate using concrete, and pictorial models, and symbolic representations, understanding of measurement systems including: • The Système International (SI) • The British Imperial system • The US customary system.	Using Units of Measurement	Temperature (Celsius) Temperature (Fahrenheit) Inches, Feet, Yards Operations with Length Ounces and Pounds Cups, Pints, Quarts, Gallons Capacity Addition Using a Litre	Under review
		Converting Units of Measurement	Hours and Minutes 24 Hour Time Time Differences Centimetres and Metres Metres and Kilometres Converting Units of Length Customary Units of Length Nautical Mile, Kilometre, Knot Converting Units of Mass Grams and Kilograms Grams and Milligrams Customary Units of Weight 1 Customary Units of Weight 2 Converting Volume Millilitres and Litres Customary Units of Capacity Converting Units of Area Converting Rates	Time Calculations Converting Units
WA10.4	Demonstrate, using concrete and pictorial models, and symbolic representations, understanding of linear measurement, including units in the SI and Imperial systems of measurement.	Using Units of Measurement	Inches, Feet, Yards Operations with Length How Long is That? How Long Is That (Customary)? Measuring Length Measure to the Nearest Half Inch Which Measuring Tool? Which Unit of Measurement? Rates Dividing a Quantity in a Ratio	Decimals Fractions
		Converting Units of Measurement	Centimetres and Metres Metres and Kilometres Converting Units of Length Customary Units of Length Nautical Mile, Kilometre, Knot	Converting Units

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Workplace and Apprenticeship Mathematics 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
WA10.5	Demonstrate using concrete and pictorial models, and symbolic representations, understanding of area of 2-D shapes and surface area of 3-D objects including units in SI and Imperial systems of measurement.	Area and Surface Area	Area: Squares and Rectangles Area of Shapes Area of Shapes (inches, feet, yards) Area: Quadrilaterials Area: Right Triangles Area: Triangles Area: Circles 1 Area: Circles 2 Area: Annulus Area: Composite Shapes Surface Area: Rectangular Prisms Surface Area: Triangular Prisms Surface Area: Rectangular Pyramids Surface Area: Cylinders Surface Area: Cones Surface Area: Rearrange Formula Converting Units of Area Perimeter, Area, Dimension Change	Area and Perimeter Measuring Solids
WA10.6	Apply understanding of the Pythagorean Theorem to solve problems.	Pythagorean Theorem	Pythagorean Theorem Pythagorean Triads Hypotenuse of a Right Triangle	Pythagoras' Theorem
WA10.7	Demonstrate understanding of similarity of convex polygons, including regular and irregular polygons.	Similarity and Congruence	Similar Figures Similar Figures 1 Similarity Proofs Using Similar Triangles Scale Factor Congruent Figures (Dots) Congruent Figures (Grid) Congruent Figures: Find Values Congruent Triangles	Similarity and Congruence Constructions
WA10.8	Demonstrate an understanding of primary trigonometric ratios (sine, cosine, and tangent).	Trigonometry	Hypotenuse, Adjacent, Opposite Sin A Cos A Tan A Exact Trigonometric Ratios Find Unknown Sides Find Unknown Angles Trignometry Problems 2 Elevation and Depression	Trigonometry

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Workplace and Apprenticeship Mathematics 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
WA10.9	Demonstrate understanding of angles including: • drawing and sketching • replicating and constructing • bisecting • relating to parallel, perpendicular, and transversal lines • solving problems.	Angles	Labelling Angles Measuring Angles Classifying Angles What Type of Angle? Estimating Angles Equal, Complement, or Supplement Angles and Parallel Lines Parallel Lines	Angles Constructions
WA10.10	Apply proportional reasoning to solve problems involving unit pricing and currency exchange.	Proportional Reasoning	Solve Proportions Ratio and Proportion Best Buy Proportional Relationships What Percentage? Percent Increase and Decrease	Percentage Basics Percentage Calculations
WA10.11	Demonstrate understanding of income including: • wages • salary • contracts • commissions • piecework • self-employment • gross pay • net pay.	Income	Wages and Salaries Working Overtime Commission Bonuses and Leave Loading Piecework and Royalties GST	Earning Money

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Foundations of Mathematics 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FP10.1	Demonstrate understanding of factors of whole numbers by determining the: • prime factors • greatest common factor • least common multiple • principal square root • cube root.	Factors and Roots	Factors Greatest Common Factor Least Common Multiple Product of Prime Factors Prime Factoring Prime Factoring: Exponents Square Roots Square and Cube Roots Equations with Square Roots Equations with Cube Roots	Whole Numbers
FP10.2	Demonstrate understanding of irrational numbers in both radical (including mixed radical) and exponent forms through: • representing • identifying • simplifying • ordering • relating to rational numbers • applying exponent laws.	Radicals and Exponents	Irrational Numbers Estimating Square Roots Estimating Cube Roots Simplifying Irrational Numbers Negative Exponents Fractional Exponents Irrational Number to Exponent Form Simplifying with Exponent Laws 1 Properties of Exponents	Exponents Radicals and Exponents
FP10.3	Demonstrate understanding of SI and imperial units of measurement including: • linear measurement • surface area of spheres, and right cones, cylinders, prisms, and pyramids • volume of spheres, and right cones, cylinders, prisms, and pyramids • relationships between and within measurement systems.	Linear Measurement	Metres and Kilometres Centimetres and Metres Converting cm and mm Converting Units of Length Operations with Length Inches, Feet, Yards Customary Units of Length Nautical Mile, Kilometre, Knot	Converting Units
		Surface Area	Nets Surface Area: Rectangular Prisms Surface Area: Cylinders Surface Area: Triangular Prisms Cone and Pyramid Dimensions Surface Area: Square Pyramids Surface Area: Rectangular Pyramids Surface Area: Cones Surface Area: Spheres Surface Area: Rearrange Formula Converting Units of Area Perimeter, Area, Dimension Change	Converting Units Measuring Solids

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Foundations of Mathematics 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FP10.3	Demonstrate understanding of SI and imperial units of measurement including: • linear measurement • surface area of spheres, and right cones, cylinders, prisms, and pyramids • volume of spheres, and right cones, cylinders, prisms, and pyramids • relationships between and within measurement systems.	Volume	Volume: Rectangular Prisms 1 Volume: Triangular Prisms Volume: Prisms Volume: Cylinders Volume: Pyramids Volume: Cones Volume: Spheres Volume: Composite Figures Converting Volume Volume: Rectangular Prisms 2 Volume: Rearrange Formula Millilitres and Litres Cups, Pints, Quarts, Gallons Customary Units of Capacity Capacity Addition Capacity Word Problems	Converting Units Solids Measuring Solids
FP10.4	Develop and apply the primary trigonometric ratios (sine, cosine, tangent) to solve problems that involve right triangles.	Trigonometry	Pythagorean Theorem Hypotenuse, Adjacent, Opposite Sin A Cos A Tan A Exact Trigonometric Ratios Find Unknown Sides Find Unknown Angles Trigonometric Problems 2	Pythagoras' Theorem Trigonometry
FP10.5	Demonstrate understanding of the multiplication and factoring of polynomial expressions (concretely, pictorially, and symbolically) including: • multiplying of monomials, binomials, and trinomials • common factors • trinomial factoring • relating multiplication and factoring of polynomials.	Multiplying and Factoring Polynomials	Expanding Brackets Expanding with Negatives Expand then Simplify Expanding Binomial Products Special Binomial Products Factoring Expressions Factoring with Negatives Factoring Quadratics 1 Factoring Quadratics 2 Grouping in Pairs	Algebra Basics Expanding and Factorizing Simplifying Algebra
FP10.6	Expand and apply understanding of relations and functions including: • relating data, graphs, and situations • analyzing and interpreting • distinguishing between relations and functions.	Functions and Relations	Vertical Line Test Function Notation 1 Function Notation 2 Function Notation 3 Domain Domain and Range Write an Equation: Word Problems	Functions

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Foundations of Mathematics 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FP10.7	Demonstrate, with and without the use of technology, understanding of slope (concretely, pictorially, and symbolically) with respect to: • line segments and lines • rate of change • ratio of rise to run • parallel lines • perpendicular lines.	Slope	Slope of a Line Horizontal and Vertical Lines Which Straight Line? Equation of a Line 1 Determining a Rule for a Line Equation from Point and Gradient Equation from Two Points Are they Parallel? Are they Perpendicular? Equation of a Line 3	Straight Lines
		Linear Relations	Which Straight Line? Modelling Linear Relationships	Linear Relationships
FP10.8	Demonstrate understanding of linear relations including: • representing in words, ordered pairs, tables of values, graphs, function notation, and equations • determining characteristics including intercepts, slope, domain, and range • relating different equation forms to each other and to graphs.	Linear Relations	Intercepts Functions Rules and Tables Graphing from a Table of Values Graphing from a Table of Values 2 $y=ax$ Which Straight Line? Modelling Linear Relationships General Form of a Line Equation from Point and Gradient Equation from Two Points	Linear Relationships
		Slope	Slope of a Line Equation of a Line 1 Determining a Rule for a Line Are they Parallel? Are they Perpendicular? Equation of a Line 3	Straight Lines
		Functions and Relations	Function Notation 1 Domain Domain and Range	Functions
FP10.9	Demonstrate understanding of the writing and application of equations of linear relations, given: • a graph of a relation • a point that satisfies a relation and the slope of the relation • two distinct points that satisfy a relation • a point that satisfies the relation and the equation of a line parallel or perpendicular to the relation.	Linear Relations	$y=ax$ Which Straight Line? Modelling Linear Relationships Equation from Point and Gradient Equation from Two Points	Linear Relationships
		Slope	Equation of a Line 1 Equation of a Line 3	Straight Lines

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Foundations of Mathematics 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FP10.10	Solve problems that involve systems of linear equations in two variables, graphically and algebraically.	Systems of Linear Equations	Simultaneous Linear Equations Simultaneous Equations 1 Simultaneous Equations 2 Solve Systems by Graphing Breakeven Point	Linear Relationships

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Foundations of Mathematics 20

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FM20.1	Demonstrate understanding of the mathematics involved in an historical event or an area of interest.	Data and Statistics	Mean Median Mode Mean from Frequency Table Mode from Frequency Table Median from Frequency Table Data Extremes and Range Scatter Plots Calculating Standard Deviation Interpreting Standard Deviation	Data Interpreting Data
FM20.2	Demonstrate understanding of inductive and deductive reasoning including: • analyzing conjectures • analyzing spatial puzzles and • games • providing conjectures • solving problems.	Inductive and Deductive Reasoning	Table of Values Find the Pattern Rule Congruent Triangles Congruent Triangles Proof Similarity Proofs Multiples	Similarity and Congruence
FM20.3	Expand and demonstrate understanding of proportional reasoning related to: • rates • scale diagrams • scale factor • area • surface area • volume.	Proportional Reasoning	Ratios Ratio Equivalent Ratios Ratio and Proportion Ratio Word Problems Dividing a Quantity in a Ratio Rates Rates Word Problems Rates Calculations Converting Rates Solve Proportions Proportional Relationships Time Taken Scale Measurement Scale Factor Using Similar Triangles 1 Floor Plans Perimeter, Area, Dimension Change Similar Areas and Volumes	Similarity and Congruence
FM20.4	Demonstrate understanding of properties of angles and triangles including: • deriving proofs based on theorems and postulates about congruent triangles • solving problems.	Properties of Angles and Triangles	Congruent Figures: Find Values Parallel Lines Angles and Parallel Lines Angle Sum of a Triangle Angle Sum of a Quadrilateral Congruent Triangles Ratio of Intercepts	Constructions Angles and Polygons Angles Polygons and Angles

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Foundations of Mathematics 20

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FM20.5	Demonstrate understanding of the cosine law and sine law (including the ambiguous case).	Trigonometric Laws	Sine Rule 1 Sine Rule 2 Cosine Rule 1 Cosine Rule 2	Non Right Angles Triangles
FM20.6	Demonstrate an understanding of normal distribution, including standard deviation and z-scores.	Data and Statistics	Calculating Standard Deviation Interpreting Standard Deviation Equivalent z-scores Calculating z-scores Comparing z-scores Normal Distribution Normal Distribution Probability	Interpreting Data
FM20.7	Demonstrate understanding of the interpretation of statistical data, including: • confidence intervals • confidence levels • margin of error.	Under review	Under review	Under review
FM20.8	Demonstrate understanding of systems of linear inequalities in two variables.	Linear Inequalities in Two Variables	Linear Regions Intersecting Linear Regions Linear Programming 1	Under review
FM20.9	Demonstrate an understanding of the characteristics of quadratic functions of the form $y=a(x - p)^2 + q$, including: • vertex • intercepts • domain and range • axis of symmetry.	Quadratic Functions	Factoring Quadratics 1 Factoring Quadratics 2 Quadratics Equations 1 Quadratic Equations 2 The Discriminant Quadratic Formula Checking Quadratic Solutions Graphing Parabolas Vertex of a Parabola Parabolas and Marbles Parabolas and Rectangles	Parabolas Quadratic Equations Simple Nonlinear Graphs

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Foundations of Mathematics 30

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FM30.1	Demonstrate understanding of financial decision making including analysis of: • renting, leasing, and buying • credit • compound interest • investment portfolios.	Finance	Simple Interest Compound Interest Compound Interest by Formula Straight Line Depreciation Depreciation Declining Balance Depreciation Effective Interest Rate Future Value of Investments 1 Future Value of Investments 2 Credit Card Repayments	Depreciation Interest Geometric Series in Finance
FM30.2	Demonstrate understanding of inductive and deductive reasoning including: • analysis of conditional statements • analysis of puzzles and games involving numerical and logical reasoning • making and justifying decisions • solving problems.	Set Theory and Probability	Venn Diagrams Venn Diagram 1	Probability
FM30.3	Demonstrate understanding of set theory and its applications.	Set Theory and Probability	Venn Diagrams Venn Diagram 1	Probability
FM30.4	Extend understanding of odds and probability.	Under review	Under review	Under review
FM30.5	Extend understanding of the probability of two events, including events that are: • mutually exclusive • non-mutually exclusive • dependent • independent.	Set Theory and Probability	Complementary Events Probability - 'And' or 'Or' Probability With Replacement Probability Without Replacement Conditional probability Tree Diagrams	Probability
FM30.6	Demonstrate understanding of combinatorics including: • the fundamental counting principle • permutations (excluding circular permutations) • combinations.	Basic Combinatorics	Counting Principle Tree Diagram Counting Techniques 1 Counting Techniques 2 Introduction to Permutations and Combinations Permutations and Probability Combinations and Probability	Probability

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Foundations of Mathematics 30

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FM30.7	Demonstrate understanding of the representation and analysis of data using: • polynomial functions of degree ≤ 3 • logarithmic functions • exponential functions • sinusoidal functions.	Non-Linear Functions	Graphing Cubics Quartic Functions Polynomial Factor Theorem Graphing Exponentials Exponential or Log Graph? Sine and Cosine Curves Trig Graphs in Radians Trigonometric Intercepts Period and Amplitude	Exponential and Power Graphs Polynomials Sketching Polynomials Logarithms Trigonometric Relationships
FM30.8	Research and give a presentation of a current event or an area of interest that requires data collection and analysis.	Presenting Data	Cumulative Frequency Table Mean from Frequency Table Median from Frequency Table Mode from Frequency Table Two-way Table Probability Probability Tables Scatter Plots Correlation Difference and Deviation from Mean Calculating Standard Deviation Interpreting Standard Deviation Normal Distribution Normal Distribution Probability	Interpreting Data

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Pre-Calculus 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FP10.1	Demonstrate understanding of factors of whole numbers by determining the: • prime factors • greatest common factor • least common multiple • principal square root • cube root.	Factors and Roots	Factors Greatest Common Factor Least Common Multiple Product of Prime Factors Prime Factoring Prime Factoring: Exponents Square Roots Square and Cube Roots Equations with Square Roots Equations with Cube Roots	Whole Numbers
FP10.2	Demonstrate understanding of irrational numbers in both radical (including mixed radical) and exponent forms through: • representing • identifying • simplifying • ordering • relating to rational numbers • applying exponent laws.	Radicals and Exponents	Irrational Numbers Estimating Square Roots Estimating Cube Roots Simplifying Irrational Numbers Negative Exponents Fractional Exponents Irrational Number to Exponent Form Simplifying with Exponent Laws 1 Properties of Exponents	Exponents Radicals and Exponents
FP10.3	Demonstrate understanding of SI and imperial units of measurement including: • linear measurement • surface area of spheres, and right cones, cylinders, prisms, and pyramids • volume of spheres, and right cones, cylinders, prisms, and pyramids • relationships between and within measurement systems.	Linear Measurement	Metres and Kilometres Centimetres and Metres Converting cm and mm Converting Units of Length Operations with Length Inches, Feet, Yards Customary Units of Length Nautical Mile, Kilometre, Knot	Converting Units
		Surface Area	Nets Surface Area: Rectangular Prisms Surface Area: Cylinders Surface Area: Triangular Prisms Cone and Pyramid Dimensions Surface Area: Square Pyramids Surface Area: Rectangular Pyramids Surface Area: Cones Surface Area: Spheres Surface Area: Rearrange Formula Converting Units of Area Perimeter, Area, Dimension Change	Converting Units Measuring Solids

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Pre-Calculus 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FP10.3	Demonstrate understanding of SI and imperial units of measurement including: • linear measurement • surface area of spheres, and right cones, cylinders, prisms, and pyramids • volume of spheres, and right cones, cylinders, prisms, and pyramids • relationships between and within measurement systems.	Volume	Volume: Rectangular Prisms 1 Volume: Triangular Prisms Volume: Prisms Volume: Cylinders Volume: Pyramids Volume: Cones Volume: Spheres Volume: Composite Figures Converting Volume Volume: Rectangular Prisms 2 Volume: Rearrange Formula Millilitres and Litres Cups, Pints, Quarts, Gallons Customary Units of Capacity Capacity Addition Capacity Word Problems	Converting Units Solids Measuring Solids
FP10.4	Develop and apply the primary trigonometric ratios (sine, cosine, tangent) to solve problems that involve right triangles.	Trigonometry	Pythagorean Theorem Hypotenuse, Adjacent, Opposite Sin A Cos A Tan A Exact Trigonometric Ratios Find Unknown Sides Find Unknown Angles Trigonometric Problems 2	Pythagoras' Theorem Trigonometry
FP10.5	Demonstrate understanding of the multiplication and factoring of polynomial expressions (concretely, pictorially, and symbolically) including: • multiplying of monomials, binomials, and trinomials • common factors • trinomial factoring • relating multiplication and factoring of polynomials.	Multiplying and Factoring Polynomials	Expanding Brackets Expanding with Negatives Expand then Simplify Expanding Binomial Products Special Binomial Products Factoring Expressions Factoring with Negatives Factoring Quadratics 1 Factoring Quadratics 2 Grouping in Pairs	Algebra Basics Expanding and Factorizing Simplifying Algebra
FP10.6	Expand and apply understanding of relations and functions including: • relating data, graphs, and situations • analyzing and interpreting • distinguishing between relations and functions.	Functions and Relations	Vertical Line Test Function Notation 1 Function Notation 2 Function Notation 3 Domain Domain and Range Write an Equation: Word Problems	Functions

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Pre-Calculus 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FP10.7	Demonstrate, with and without the use of technology, understanding of slope (concretely, pictorially, and symbolically) with respect to: • line segments and lines • rate of change • ratio of rise to run • parallel lines • perpendicular lines.	Slope	Slope of a Line Horizontal and Vertical Lines Which Straight Line? Equation of a Line 1 Determining a Rule for a Line Equation from Point and Gradient Equation from Two Points Are they Parallel? Are they Perpendicular? Equation of a Line 3	Straight Lines
		Linear Relations	Which Straight Line? Modelling Linear Relationships	Linear Relationships
FP10.8	Demonstrate understanding of linear relations including: • representing in words, ordered pairs, tables of values, graphs, function notation, and equations • determining characteristics including intercepts, slope, domain, and range • relating different equation forms to each other and to graphs.	Linear Relations	Intercepts Functions Rules and Tables Graphing from a Table of Values Graphing from a Table of Values 2 $y=ax$ Which Straight Line? Modelling Linear Relationships General Form of a Line Equation from Point and Gradient Equation from Two Points	Linear Relationships
		Slope	Slope of a Line Equation of a Line 1 Determining a Rule for a Line Are they Parallel? Are they Perpendicular? Equation of a Line 3	Straight Lines
		Functions and Relations	Function Notation 1 Domain Domain and Range	Functions
FP10.9	Demonstrate understanding of the writing and application of equations of linear relations, given: • a graph of a relation • a point that satisfies a relation and the slope of the relation • two distinct points that satisfy a relation • a point that satisfies the relation and the equation of a line parallel or perpendicular to the relation.	Linear Relations	$y=ax$ Which Straight Line? Modelling Linear Relationships Equation from Point and Gradient Equation from Two Points	Linear Relationships
		Slope	Equation of a Line 1 Equation of a Line 3	Straight Lines

© 3P Learning

Saskatchewan Outcomes
Alignment with Mathletics

Pre-Calculus 10

Outcome	Outcome Description	Mathletics Topic	Activities	eBooks
FP10.10	Solve problems that involve systems of linear equations in two variables, graphically and algebraically.	Systems of Linear Equations	Simultaneous Linear Equations Simultaneous Equations 1 Simultaneous Equations 2 Solve Systems by Graphing Breakeven Point	Linear Relationships

© 3P Learning

Mathletics

For more information about Mathletics,
contact our friendly team.

www.mathletics.com/contact

A 3P Learning Product