British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Numbers can be represented in many forms and reflect different relationships.

- **BrainPOP Mixed Numbers**
- **BrainPOP Fractions**
- **BrainPOP Standard and Scientific Notation**
- **BrainPOP Converting Fractions to Decimals**
- **GameUp Battleship Numberline**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Numeracy helps us to see patterns, communicate ideas, and solve problems.

- **BrainPOP Word Problems**
- **GameUp Lure of the Labyrinth: Employee Lounge**
- **GameUp Lure of the Labyrinth: Mine Shaft**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Patterns allow us to see relationships and develop generalizations.

- **BrainPOP Fibonacci Sequence**
- **BrainPOP Problem Solving Using Tables**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Geometry and measurement empower us to make meaning of the world.

- **BrainPOP Geometry**
- **BrainPOP Metric Units**
- **BrainPOP Polyhedrons**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

We can apply mathematics to inquiry questions and use it to communicate information and data.

- **BrainPOP Game Theory**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Reasoning and analyzing

Inductively and deductively reason and use logic to explore, make connections, predict, analyze, generalize, and make conclusions

- **BrainPOP Using a Calculator**
- **BrainPOP Logic Gates**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Reasoning and analyzing

Develop and apply mental math strategies and estimate amounts and outcomes

- **BrainPOP Estimating**
- **BrainPOP Binary**
- **GameUp Dig It**
- **GameUp Battleship Numberline**
- **GameUp Gate**

- **GameUp Multiplication Blocks**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Reasoning and analyzing

Use tools or technology to explore and create patterns and relationships, and test conjectures

- **BrainPOP Using a Calculator**
- **BrainPOP Problem Solving Using Tables**
- **BrainPOP Fibonacci Sequence**
- **GameUp Tynker: Sketch Racer**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Understanding and solving

Implement multiple strategies to solve problems in both abstract and real-life situations using different cultural perspectives

- **BrainPOP Game Theory**
- **BrainPOP Word Problems**
- **BrainPOP Problem Solving Using Tables**
- **BrainPOP Using a Calculator**
- **GameUp Lure of the Labyrinth: Employee Lounge**
- **GameUp Lure of the Labyrinth: Mine Shaft**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Understanding and solving

Develop, construct, and apply mathematical understanding through play, inquiry, and problem solving

- **BrainPOP Game Theory**
- **BrainPOP Word Problems**
- **BrainPOP Problem Solving Using Tables**
- **BrainPOP Using a Calculator**
- **GameUp Lure of the Labyrinth: Employee Lounge**
- **GameUp Lure of the Labyrinth: Mine Shaft**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Understanding and solving

Engage in problem-solving experiences that are connected to place, story, and cultural practices relevant to the local community

- **BrainPOP Game Theory**
- **BrainPOP Word Problems**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

Communicating and representing

Use mathematical vocabulary and language to contribute to mathematical discussions

- **BrainPOP Game Theory**
- **BrainPOP Inequalities**
- **GameUp Game Over Gopher**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- Communicating and representing
  - *Communicate in a variety of ways to explain, clarify, and justify mathematical ideas*
    - **BrainPOP Game Theory**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- Communicating and representing
  - *Develop mathematical understanding through concrete, pictorial, and symbolic representations*
    - **BrainPOP Inequalities**
    - **BrainPOP Using a Calculator**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- Communicating and representing
  - *Use technology appropriately to record, communicate, and represent thinking*
    - **BrainPOP Game Theory**
    - **BrainPOP Using a Calculator**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- Connecting and reflecting
  - *Explore, apply, and connect concepts to each other, to other disciplines, and to the real world*
    - **BrainPOP Game Theory**
    - **BrainPOP Word Problems**
    - **GameUp Budget Hero**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- Connecting and reflecting
  - *Apply cultural perspectives of First Peoples to the concepts of locating, measuring, and numbering*
    - **BrainPOP Game Theory**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *logic and patterns to solve games and puzzles*
  - **BrainPOP Problem Solving Using Tables**
  - **BrainPOP Logic Gates**
  - **BrainPOP Word Problems**
  - **GameUp Tynker: Sketch Racer**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *operations with integers (addition, subtraction, multiplication, division, and order of operations)*
  - **BrainPOP Adding and Subtracting Integers**
  - **BrainPOP Order of Operations**
  - **BrainPOP Absolute Value**
  - **BrainPOP Factoring**
  - **GameUp Gate**

- **GameUp Lure of the Labyrinth: Employee Lounge**
- **GameUp Lure of the Labyrinth: Employee Cafeteria**
- **GameUp Monster School Bus**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7 *multiplication and division facts to 100 (extending computational fluency)*

- **BrainPOP Multiplication**
- **BrainPOP Factoring**
- **BrainPOP Division**

- **GameUp Gate**
- **GameUp Multiplication Blocks**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7 *relationship between decimals, fractions, and percents*

- **BrainPOP Percents**
- **BrainPOP Converting Fractions to Decimals**
- **BrainPOP Decimals**
- **BrainPOP Compound Events**
- **BrainPOP Multiplying and Dividing Fractions**
- **BrainPOP Interest**
- **BrainPOP Adding and Subtracting Fractions**
- **BrainPOP Rational and Irrational Numbers**
- **BrainPOP Fractions**

- **GameUp Battleship Numberline**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7 *classification of numbers as prime and composite*

- **BrainPOP Factoring**
- **BrainPOP Prime Numbers**

- **GameUp Sortify: Factoring**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7 *discrete linear relations, using expressions, tables, and graphs*

- **BrainPOP Graphing Linear Equations**
- **BrainPOP Equations with Variables**
- **BrainPOP Coordinate Plane**
- **BrainPOP Two-Step Equations**
- **BrainPOP Polynomials**
- **BrainPOP Graphs**
- **BrainPOP Problem Solving Using Tables**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7 *two-step equations with whole number coefficients, constants, and solutions*

- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *circumference and area of circles*
  - **BrainPOP Circles**
  - **BrainPOP Pi**
  - **BrainPOP Volume of Cylinders**
  - **GameUp Pyramid Panic**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *volume of cylinders*
  - **BrainPOP Volume of Cylinders**
  - **BrainPOP Volume of Prisms**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *Cartesian coordinates and graphing*
  - **BrainPOP Coordinate Plane**
  - **BrainPOP Graphing Linear Equations**
  - **BrainPOP Slope and Intercept**
  - **GameUp Game Over Gopher**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *combinations of transformations, including points in four quadrants*
  - **BrainPOP Transformation**
  - **GameUp Dublox**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *circle graphs*
  - **BrainPOP Graphs**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *experimental probability with two independent events*
  - **BrainPOP Basic Probability**
  - **BrainPOP Independent and Dependent Events**
  - **BrainPOP Compound Events**

British Columbia **British Columbia Learning Standards > Mathematics (2015)**

Grade 7

- *financial literacy - financial percentage calculations (e.g., sales tax, tips, bill splitting, consignment)*
  - **BrainPOP Percents**
  - **BrainPOP Debt**
  - **BrainPOP Mortgages**
  - **BrainPOP Banking**
  - **BrainPOP Interest**
  - **GameUp Budget Hero**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A1** determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9, or 10 and why a number cannot be divided by 0
    - *determine if a given number is divisible by 2, 3, 4, 5, 6, 8, 9, or 10 and explain why*
    - **BrainPOP Factoring**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A1** determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9, or 10 and why a number cannot be divided by 0
    - *determine the factors of a given number using the divisibility rules*
    - **BrainPOP Factoring**
    - **BrainPOP Square Roots**
    - **GameUp Sortify: Factoring**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A2** demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems
    - *solve a given problem involving the addition of two or more decimal numbers*
    - **BrainPOP Comparing Prices**
    - **BrainPOP Decimals**
    - **BrainPOP Budgets**
    - **GameUp Deep Sea Duel**
    - **GameUp Gate**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A2** demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems
    - *solve a given problem involving the subtraction of decimal numbers*
    - **BrainPOP Decimals**
    - **BrainPOP Budgets**
    - **GameUp Gate**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A2** demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems
    - *solve a given problem involving the multiplication of decimal numbers*
    - **BrainPOP Multiplying Decimals**
    - **BrainPOP Comparing Prices**

- **GameUp Gate**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

A2 demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems

solve a given problem involving the multiplication or division of decimal numbers with 2-digit multipliers or 1-digit divisors (whole numbers or decimals) without the use of technology

- **BrainPOP Division**
- **BrainPOP Comparing Prices**
- **GameUp Gate**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

A2 demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems

solve a given problem involving the multiplication or division of decimal numbers with more than a 2-digit multiplier or 1-digit divisor (whole number or decimal), with the use of technology

- **BrainPOP Using a Calculator**
- **BrainPOP Multiplying Decimals**

2 more resources

- **GameUp Gate**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

A2 demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems

check the reasonableness of solutions using estimation

- **BrainPOP Estimating**
- **GameUp Battleship Numberline**
- **GameUp Dig It**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

A2 demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems

solve a given problem that involves operations on decimals (limited to thousandths) taking into consideration the order of operations

- **BrainPOP Decimals**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A3** solve problems involving percents from 1% to 100%
    - *express a given percent as a decimal or fraction*
    - **BrainPOP Percents**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A3** solve problems involving percents from 1% to 100%
    - *solve a given problem that involves finding a percent*
    - **BrainPOP Percents**
    - **BrainPOP Interest**
    - **BrainPOP Mortgages**
    - **GameUp Budget Hero**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A3** solve problems involving percents from 1% to 100%
    - *determine the answer to a given percent problem where the answer requires rounding and explain why an approximate answer is needed (e.g., total cost including taxes)*
    - **BrainPOP Rounding**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A4** demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions
    - *predict the decimal representation of a given fraction using patterns (e.g. 1/11 = 0.09 repeating, 2/11 = 0.18 repeating, 3/11 = ? â€¦)*
    - **BrainPOP Percents**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A4** demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions
    - *match a given set of fractions to their decimal representations*
    - **BrainPOP Converting Fractions to Decimals**
    - **BrainPOP Percents**
    - **BrainPOP Decimals**
    - **GameUp Battleship Numberline**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A4** demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions
    - *sort a given set of fractions as repeating or terminating decimals*
    - **BrainPOP Converting Fractions to Decimals**
    - **BrainPOP Decimals**
    - **BrainPOP Percents**

- **GameUp Battleship Numberline**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A4** demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions
    - *express a given fraction as a terminating or repeating decimal*
    - **BrainPOP Converting Fractions to Decimals**
    - **BrainPOP Decimals**
    - **BrainPOP Percents**
    - **GameUp Battleship Numberline**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A4** demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions
    - *express a given repeating decimal as a fraction*
    - **BrainPOP Converting Fractions to Decimals**
    - **BrainPOP Decimals**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A4** demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions
    - *express a given terminating decimal as a fraction*
    - **BrainPOP Converting Fractions to Decimals**
    - **BrainPOP Decimals**
    - **GameUp Battleship Numberline**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A4** demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions
    - *provide an example where the decimal representation of a fraction is an approximation of its exact value*
    - **BrainPOP Decimals**
    - **BrainPOP Converting Fractions to Decimals**
    - **BrainPOP Percents**
    - **GameUp Battleship Numberline**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A5** 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)

▶ *model addition and subtraction of a given positive fraction or a given mixed number using concrete representations, and record symbolically*

- **BrainPOP Mixed Numbers**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⛔ Develop number sense.

▶ **A5** 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)

▶ *determine the sum of two given positive fractions or mixed numbers with like denominators*

- **BrainPOP Adding and Subtracting Fractions**
- **BrainPOP Mixed Numbers**
- **BrainPOP Compound Events**
- **GameUp Drop Zone**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⛔ Develop number sense.

▶ **A5** 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)

▶ *determine the difference of two given positive fractions or mixed numbers with like denominators*

- **BrainPOP Adding and Subtracting Fractions**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⛔ Develop number sense.

▶ **A5** 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)

▶ *determine a common denominator for a given set of positive fractions or mixed numbers*

- **BrainPOP Adding and Subtracting Fractions**
- **BrainPOP Mixed Numbers**
- **GameUp Drop Zone**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⛔ Develop number sense.

▶ **A5** 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)

▶ *determine the sum of two given positive fractions or mixed numbers with unlike denominators*

- **BrainPOP Adding and Subtracting Fractions**
- **BrainPOP Mixed Numbers**
- **GameUp Drop Zone**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⛔ Develop number sense.

▶

A5 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)

- *determine the difference of two given positive fractions or mixed numbers with unlike denominators*

- **BrainPOP Adding and Subtracting Fractions**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

A5 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)

- *simplify a given positive fraction or mixed number by identifying the common factor between the numerator and denominator*

- **BrainPOP Mixed Numbers**
- **BrainPOP Multiplying and Dividing Fractions**

4 more resources

- **GameUp Dig It**
- **GameUp Battleship Numberline**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

A5 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)

- *simplify the solution to a given problem involving the sum or difference of two positive fractions or mixed numbers*

- **BrainPOP Adding and Subtracting Fractions**
- **BrainPOP Mixed Numbers**

3 more resources

- **GameUp Drop Zone**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

A5 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)

- *solve a given problem involving the addition or subtraction of positive fractions or mixed numbers and determine if the solution is reasonable*

- **BrainPOP Adding and Subtracting Fractions**
- **BrainPOP Mixed Numbers**
- **BrainPOP Compound Events**

- **GameUp Refraction**
- **GameUp Drop Zone**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

A6 demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and

symbolically

- *explain, using concrete materials such as integer tiles and diagrams, that the sum of opposite integers is zero*

- **BrainPOP Adding and Subtracting Integers**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A6** demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and symbolically
    - *illustrate, using a number line, the results of adding or subtracting negative and positive integers (e.g., a move in one direction followed by an equivalent move in the opposite direction results in no net change in position)*

- **BrainPOP Adding and Subtracting Integers**

- **GameUp Pearl Diver**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A6** demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and symbolically
    - *add two given integers using concrete materials or pictorial representations and record the process symbolically*

- **BrainPOP Adding and Subtracting Integers**

- **GameUp Gate**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A6** demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and symbolically
    - *subtract two given integers using concrete materials or pictorial representations and record the process symbolically*

- **BrainPOP Adding and Subtracting Integers**
- **BrainPOP Multiplication**
- **BrainPOP Division**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.
  - **A6** demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and symbolically
    - *solve a given problem involving the addition and subtraction of integers*

- **BrainPOP Adding and Subtracting Integers**
- **BrainPOP Absolute Value**

- **GameUp Gate**
- **GameUp Monster School Bus**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Develop number sense.

▶ **A7** compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using benchmarks, place value, equivalent fractions and/or decimals

▶ *order the numbers of a given set that includes positive fractions, positive decimals and/or whole numbers in ascending or descending order, and verify the result using a variety of strategies*

- **BrainPOP Fractions**
- **BrainPOP Converting Fractions to Decimals**

5 more resources

- **GameUp Battleship Numberline**
- **GameUp Dig It**

2 more resources

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

▶ **A7** compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using benchmarks, place value, equivalent fractions and/or decimals

▶ *identify a number that would be between two given numbers in an ordered sequence or on a number line*

- **BrainPOP Inequalities**

- **GameUp Battleship Numberline**
- **GameUp Dig It**

2 more resources

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

▶ **A7** compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using benchmarks, place value, equivalent fractions and/or decimals

▶ *position fractions with like and unlike denominators from a given set on a number line and explain strategies used to determine order*

- **BrainPOP Fractions**
- **BrainPOP Adding and Subtracting Fractions**

- **GameUp Flower Power**
- **GameUp Battleship Numberline**

2 more resources

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Develop number sense.

▶ **A7** compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using benchmarks, place value, equivalent fractions and/or decimals

▶ *order the numbers of a given set by placing them on a number line that contains benchmarks, such as 0 and 1 or 0 and 5*

- **BrainPOP Fractions**
- **BrainPOP Inequalities**

- **GameUp Flower Power**
- **GameUp Battleship Numberline**
- **GameUp Dig It**

British **British Columbia Achievement Indicators > Mathematics (2007)**

Columbia

Grade 7

- Develop number sense.
  - **A7** compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using benchmarks, place value, equivalent fractions and/or decimals
    - *position a given set of positive fractions, including mixed numbers and improper fractions, on a number line and explain strategies used to determine position*
    - **BrainPOP Mixed Numbers**
    - **BrainPOP Multiplying and Dividing Fractions**
    - **GameUp Dig It**
    - **GameUp Pearl Diver**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use patterns to describe the world and solve problems.
  - **B1** demonstrate an understanding of oral and written patterns and their equivalent linear relations
    - *formulate a linear relation to represent the relationship in a given oral or written pattern*
    - **BrainPOP Equations with Variables**
    - **BrainPOP Fibonacci Sequence**
    - **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use patterns to describe the world and solve problems.
  - **B1** demonstrate an understanding of oral and written patterns and their equivalent linear relations
    - *provide a context for a given linear relation that represents a pattern*
    - **BrainPOP Fibonacci Sequence**
    - **BrainPOP Two-Step Equations**
    - **BrainPOP Equations with Variables**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use patterns to describe the world and solve problems.
  - **B1** demonstrate an understanding of oral and written patterns and their equivalent linear relations
    - *represent a pattern in the environment using a linear relation*
    - **BrainPOP Fibonacci Sequence**
    - **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use patterns to describe the world and solve problems.
  - **B2** create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems
    - *create a table of values for a given linear relation by substituting values for the variable*
    - **BrainPOP Equations with Variables**
    - **BrainPOP Graphing Linear Equations**
    - **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use patterns to describe the world and solve problems.
  - **B2** create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems
    - *create a table of values using a linear relation and graph the table of values (limited to discrete*

elements)

- **BrainPOP Coordinate Plane**
- **BrainPOP Graphing Linear Equations**
- **BrainPOP Slope and Intercept**
- **BrainPOP Problem Solving Using Tables**

2 more resources

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Use patterns to describe the world and solve problems.

B2 create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems

sketch the graph from a table of values created for a given linear relation and describe the patterns found in the graph to draw conclusions (e.g., graph the relationship between n and 2n + 3)

- **BrainPOP Graphing Linear Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Use patterns to describe the world and solve problems.

B2 create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems

describe the relationship shown on a graph using everyday language in spoken or written form to solve problems

- **BrainPOP Graphing Linear Equations**
- **BrainPOP Graphs**
- **BrainPOP Problem Solving Using Tables**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Use patterns to describe the world and solve problems.

B2 create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems

match a given set of linear relations to a given set of graphs

- **BrainPOP Graphing Linear Equations**
- **BrainPOP Equations with Variables**
- **BrainPOP Graphs**
- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Use patterns to describe the world and solve problems.

B2 create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems

match a given set of graphs to a given set of linear relations

- **BrainPOP Graphing Linear Equations**
- **BrainPOP Equations with Variables**
- **BrainPOP Graphs**
- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B3 demonstrate an understanding of preservation of equality by modelling preservation of equality

concretely, pictorially, and symbolically, applying preservation of equality to solve equations

▶ *model the preservation of equality for each of the four operations using concrete materials or using pictorial representations, explain the process orally and record it symbolically*

- **BrainPOP Equations with Variables**

British Columbia | **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Represent algebraic expressions in multiple ways.

▶ **B3** demonstrate an understanding of preservation of equality by modelling preservation of equality concretely, pictorially, and symbolically, applying preservation of equality to solve equations

▶ *solve a given problem by applying preservation of equality*

- **BrainPOP Word Problems**

British Columbia | **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Represent algebraic expressions in multiple ways.

▶ **B4** explain the difference between an expression and an equation

▶ *identify and provide an example of a constant term, a numerical coefficient and a variable in an expression and an equation*

- **BrainPOP Polynomials**
- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**
- **BrainPOP Associative Property**

⊕ 3 more resources

British Columbia | **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Represent algebraic expressions in multiple ways.

▶ **B4** explain the difference between an expression and an equation

▶ *explain what a variable is and how it is used in a given expression*

- **BrainPOP Equations with Variables**
- **BrainPOP Associative Property**
- **BrainPOP Polynomials**
- **BrainPOP Two-Step Equations**

⊕ 2 more resources

British Columbia | **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Represent algebraic expressions in multiple ways.

▶ **B4** explain the difference between an expression and an equation

▶ *provide an example of an expression and an equation, and explain how they are similar and different*

- **BrainPOP Equations with Variables**
- **BrainPOP Polynomials**
- **BrainPOP Two-Step Equations**
- **BrainPOP Word Problems**

British Columbia | **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Represent algebraic expressions in multiple ways.

▶ **B5** evaluate an expression given the value of the variable(s)

▶ *substitute a value for an unknown in a given expression and evaluate the expression*

- **BrainPOP Equations with Variables**

- **BrainPOP Two-Step Equations**
- **BrainPOP Multiplying and Dividing Exponents**
- **BrainPOP Order of Operations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B6 model and solve problems that can be represented by one-step linear equations of the form x + a = b, concretely, pictorially, and symbolically, where a and b are integers

represent a given problem with a linear equation and solve the equation using concrete models (e.g., counters, integer tiles)

- **BrainPOP Equations with Variables**
- **BrainPOP Multiplication**
- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B6 model and solve problems that can be represented by one-step linear equations of the form x + a = b, concretely, pictorially, and symbolically, where a and b are integers

draw a visual representation of the steps required to solve a given linear equation

- **BrainPOP Multiplication**
- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B6 model and solve problems that can be represented by one-step linear equations of the form x + a = b, concretely, pictorially, and symbolically, where a and b are integers

solve a given problem using a linear equation

- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**
- **BrainPOP Word Problems**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B6 model and solve problems that can be represented by one-step linear equations of the form x + a = b, concretely, pictorially, and symbolically, where a and b are integers

verify the solution to a given linear equation using concrete materials and diagrams

- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B6 model and solve problems that can be represented by one-step linear equations of the form x + a = b, concretely, pictorially, and symbolically, where a and b are integers

substitute a possible solution for the variable in a given linear equation into the original linear equation to verify the equality

- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B7 model and solve problems that can be represented by linear equations of the form ax + b = c, ax=b, x/a = b, a â‰ 0 concretely, pictorially, and symbolically, where a, b and c are whole numbers

model a given problem with a linear equation and solve the equation using concrete models (e.g., counters, integer tiles)

- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**
- **BrainPOP Multiplication**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B7 model and solve problems that can be represented by linear equations of the form ax + b = c, ax=b, x/a = b, a â‰ 0 concretely, pictorially, and symbolically, where a, b and c are whole numbers

draw a visual representation of the steps used to solve a given linear equation

- **BrainPOP Word Problems**
- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**
- **BrainPOP Graphing Linear Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B7 model and solve problems that can be represented by linear equations of the form ax + b = c, ax=b, x/a = b, a â‰ 0 concretely, pictorially, and symbolically, where a, b and c are whole numbers

solve a given problem using a linear equation and record the process

- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**
- **BrainPOP Word Problems**

- **GameUp Lure of the Labyrinth: Employee Lounge**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B7 model and solve problems that can be represented by linear equations of the form ax + b = c, ax=b, x/a = b, a â‰ 0 concretely, pictorially, and symbolically, where a, b and c are whole numbers

verify the solution to a given linear equation using concrete materials and diagrams

- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Represent algebraic expressions in multiple ways.

B7 model and solve problems that can be represented by linear equations of the form ax + b = c, ax=b, x/a = b, a â‰ 0 concretely, pictorially, and symbolically, where a, b and c are whole numbers

substitute a possible solution for the variable in a given linear equation into the original linear equation to verify the equality

- **BrainPOP Equations with Variables**
- **BrainPOP Two-Step Equations**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

British Columbia

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C1** demonstrate an understanding of circles by describing the relationships among radius, diameter, and circumference of circles, relating circumference to pi, determining the sum of the central angles, constructing circles with a given radius or diameter, solving problems involving the radii, diameters, and circumferences of circles
    - *illustrate and explain that the diameter is twice the radius in a given circle*
    - **BrainPOP Circles**
    - **BrainPOP Pi**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C1** demonstrate an understanding of circles by describing the relationships among radius, diameter, and circumference of circles, relating circumference to pi, determining the sum of the central angles, constructing circles with a given radius or diameter, solving problems involving the radii, diameters, and circumferences of circles
    - *illustrate and explain that the circumference is approximately three times the diameter in a given circle*
    - **BrainPOP Problem Solving Using Tables**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C1** demonstrate an understanding of circles by describing the relationships among radius, diameter, and circumference of circles, relating circumference to pi, determining the sum of the central angles, constructing circles with a given radius or diameter, solving problems involving the radii, diameters, and circumferences of circles
    - *explain that, for all circles, pi is the ratio of the circumference to the diameter c/d, and its value is approximately 3.14*
    - **BrainPOP Circles**
    - **BrainPOP Pi**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C1** demonstrate an understanding of circles by describing the relationships among radius, diameter, and circumference of circles, relating circumference to pi, determining the sum of the central angles, constructing circles with a given radius or diameter, solving problems involving the radii, diameters, and circumferences of circles
    - *explain, using an illustration, that the sum of the central angles of a circle is 360Â°*
    - **BrainPOP Angles**
    - **BrainPOP Geometry**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C1** demonstrate an understanding of circles by describing the relationships among radius, diameter, and circumference of circles, relating circumference to pi, determining the sum of the central angles, constructing circles with a given radius or diameter, solving problems involving the radii, diameters, and circumferences of circles
    - *draw a circle with a given radius or diameter with and without a compass*
    - **BrainPOP Circles**
    - **BrainPOP Pi**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C2** develop and apply a formula for determining the area of triangles, parallelograms, circles
    - *illustrate and explain how the area of a rectangle can be used to determine the area of a triangle*
    - **BrainPOP Area of Polygons**
    - **BrainPOP Types of Triangles**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C2** develop and apply a formula for determining the area of triangles, parallelograms, circles
    - *generalize a rule to create a formula for determining the area of triangles*
    - **BrainPOP Area of Polygons**
    - **BrainPOP Types of Triangles**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C2** develop and apply a formula for determining the area of triangles, parallelograms, circles
    - *illustrate and explain how the area of a rectangle can be used to determine the area of a parallelogram*
    - **BrainPOP Area of Polygons**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C2** develop and apply a formula for determining the area of triangles, parallelograms, circles
    - *generalize a rule to create a formula for determining the area of parallelograms*
    - **BrainPOP Area of Polygons**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C2** develop and apply a formula for determining the area of triangles, parallelograms, circles
    - *illustrate and explain how to estimate the area of a circle without the use of a formula*
    - **BrainPOP Circles**
    - **BrainPOP Estimating**
    - **BrainPOP Pi**
    - **BrainPOP Volume of Cylinders**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use direct or indirect measurement to solve problems.
  - **C2** develop and apply a formula for determining the area of triangles, parallelograms, circles
    - *apply a formula for determining the area of a given circle*
    - **BrainPOP Circles**
    - **BrainPOP Pi**
    - **GameUp Pyramid Panic**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Use direct or indirect measurement to solve problems.

▶ **C2** develop and apply a formula for determining the area of triangles, parallelograms, circles

▶ *solve a given problem involving the area of triangles, parallelograms, and/or circles*

- **BrainPOP Pi**
- **BrainPOP Area of Polygons**

⊕ 3 more resources

- **GameUp Pyramid Panic**

British Columbia

British Columbia Achievement Indicators > Mathematics (2007)

Grade 7

⊖ Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

▶ **C3** perform geometric constructions, including perpendicular line segments, parallel line segments, perpendicular bisectors, angle bisectors

▶ *describe examples of parallel line segments, perpendicular line segments, perpendicular bisectors and angle bisectors in the environment*

- **BrainPOP Parallel and Perpendicular Lines**
- **BrainPOP Polygons**
- **BrainPOP Angles**

British Columbia

British Columbia Achievement Indicators > Mathematics (2007)

Grade 7

⊖ Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

▶ **C3** perform geometric constructions, including perpendicular line segments, parallel line segments, perpendicular bisectors, angle bisectors

▶ *identify line segments on a given diagram that are parallel or perpendicular*

- **BrainPOP Parallel and Perpendicular Lines**
- **BrainPOP Polygons**
- **BrainPOP Angles**

British Columbia

British Columbia Achievement Indicators > Mathematics (2007)

Grade 7

⊖ Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

▶ **C3** perform geometric constructions, including perpendicular line segments, parallel line segments, perpendicular bisectors, angle bisectors

▶ *draw a line segment perpendicular to another line segment and explain why they are perpendicular*

- **BrainPOP Parallel and Perpendicular Lines**

British Columbia

British Columbia Achievement Indicators > Mathematics (2007)

Grade 7

⊖ Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

▶ **C3** perform geometric constructions, including perpendicular line segments, parallel line segments, perpendicular bisectors, angle bisectors

▶ *draw a line segment parallel to another line segment and explain why they are parallel*

- **BrainPOP Parallel and Perpendicular Lines**

British Columbia

British Columbia Achievement Indicators > Mathematics (2007)

Grade 7

⊖ Describe and analyze position and motion of objects and shapes.

▶ **C4** identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs

▶ *label the axes of a four quadrant Cartesian plane and identify the origin*

- **BrainPOP Coordinate Plane**
- **BrainPOP Graphing Linear Equations**

2 more resources

- **GameUp Game Over Gopher**
- **GameUp Project T.R.I.G.**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Describe and analyze position and motion of objects and shapes.

C4 identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs

identify the location of a given point in any quadrant of a Cartesian plane using an integral ordered pair

- **BrainPOP Coordinate Plane**
- **BrainPOP Graphing Linear Equations**
- **BrainPOP Slope and Intercept**

- **GameUp Game Over Gopher**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Describe and analyze position and motion of objects and shapes.

C4 identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs

plot the point corresponding to a given integral ordered pair on a Cartesian plane with units of 1, 2, 5 or 10 on its axes

- **BrainPOP Coordinate Plane**
- **BrainPOP Graphing Linear Equations**
- **BrainPOP Slope and Intercept**

- **GameUp Game Over Gopher**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Describe and analyze position and motion of objects and shapes.

C4 identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs

draw shapes and designs, using given integral ordered pairs, in a Cartesian plane

- **BrainPOP Coordinate Plane**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Describe and analyze position and motion of objects and shapes.

C4 identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs

create shapes and designs, and identify the points used to produce the shapes and designs in any quadrant of a Cartesian plane

- **BrainPOP Coordinate Plane**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

Describe and analyze position and motion of objects and shapes.

C5 perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices)

identify the coordinates of the vertices of a given 2-D shape on a Cartesian plane

- **BrainPOP Coordinate Plane**
- **BrainPOP Polygons**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Columbia

Grade 7

- Describe and analyze position and motion of objects and shapes.
  - **C5** perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices)
    - *describe the horizontal and vertical movement required to move from a given point to another point on a Cartesian plane*
    - **BrainPOP Transformation**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Describe and analyze position and motion of objects and shapes.
  - **C5** perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices)
    - *describe the positional change of the vertices of a given 2-D shape to the corresponding vertices of its image as a result of a transformation or successive transformations on a Cartesian plane*
    - **BrainPOP Coordinate Plane**
    - **BrainPOP Polygons**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Describe and analyze position and motion of objects and shapes.
  - **C5** perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices)
    - *perform a transformation or consecutive transformations on a given 2-D shape and identify coordinates of the vertices of the image*
    - **BrainPOP Coordinate Plane**
    - **BrainPOP Polygons**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Describe and analyze position and motion of objects and shapes.
  - **C5** perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices)
    - *describe the positional change of the vertices of a 2-D shape to the corresponding vertices of its image as a result of a transformation or a combination of successive transformations*
    - **BrainPOP Coordinate Plane**
    - **BrainPOP Polygons**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Describe and analyze position and motion of objects and shapes.
  - **C5** perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices)
    - *describe the image resulting from the transformation of a given 2-D shape on a Cartesian plane by identifying the coordinates of the vertices of the image*
    - **BrainPOP Coordinate Plane**
    - **BrainPOP Polygons**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Collect, display and analyze data to solve problems.
  - **D1** demonstrate an understanding of central tendency and range by determining the measures of central tendency (mean, median, mode) and range, determining the most appropriate measures of central tendency to report findings
    - *determine mean, median and mode for a given set of data, and explain why these values may be*

the same or different

- **BrainPOP Mean, Median, Mode, and Range**
- **GameUp Sortify: Median, Mode, Mean, and Range**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Collect, display and analyze data to solve problems.
  - **D1** demonstrate an understanding of central tendency and range by determining the measures of central tendency (mean, median, mode) and range, determining the most appropriate measures of central tendency to report findings
    - *determine the range of given sets of data*
  - **BrainPOP Mean, Median, Mode, and Range**
  - **GameUp Sortify: Median, Mode, Mean, and Range**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Collect, display and analyze data to solve problems.
  - **D1** demonstrate an understanding of central tendency and range by determining the measures of central tendency (mean, median, mode) and range, determining the most appropriate measures of central tendency to report findings
    - *solve a given problem involving the measures of central tendency*
  - **BrainPOP Mean, Median, Mode, and Range**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Collect, display and analyze data to solve problems.
  - **D2** determine the effect on the mean, median, and mode when an outlier is included in a data set
    - *explain the effect of outliers on the measures of central tendency for a given data set*
  - **BrainPOP Mean, Median, Mode, and Range**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Collect, display and analyze data to solve problems.
  - **D2** determine the effect on the mean, median, and mode when an outlier is included in a data set
    - *identify outliers in a given set of data and justify whether or not they are to be included in the reporting of the measures of central tendency*
  - **BrainPOP Mean, Median, Mode, and Range**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Collect, display and analyze data to solve problems.
  - **D2** determine the effect on the mean, median, and mode when an outlier is included in a data set
    - *provide examples of situations in which outliers would and would not be used in reporting the measures of central tendency*
  - **BrainPOP Mean, Median, Mode, and Range**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Collect, display and analyze data to solve problems.
  - **D3** construct, label, and interpret circle graphs to solve problems
    - identify common attributes of circle graphs, such as
      - *title, label or legend*

- **BrainPOP Graphs**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Collect, display and analyze data to solve problems.

▶ **D3** construct, label, and interpret circle graphs to solve problems

▶ identify common attributes of circle graphs, such as

▶ *the data is reported as a percent of the total and the sum of the percents is equal to 100%*

- **BrainPOP Graphs**
- **BrainPOP Percents**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Collect, display and analyze data to solve problems.

▶ **D3** construct, label, and interpret circle graphs to solve problems

▶ *create and label a circle graph, with and without technology, to display a given set of data*

- **BrainPOP Graphs**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Collect, display and analyze data to solve problems.

▶ **D3** construct, label, and interpret circle graphs to solve problems

▶ *find and compare circle graphs in a variety of print and electronic media, such as newspapers, magazines and the Internet*

- **BrainPOP Graphs**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Collect, display and analyze data to solve problems.

▶ **D3** construct, label, and interpret circle graphs to solve problems

▶ *translate percentages displayed in a circle graph into quantities to solve a given problem*

- **BrainPOP Percents**
- **BrainPOP Graphs**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Collect, display and analyze data to solve problems.

▶ **D3** construct, label, and interpret circle graphs to solve problems

▶ *interpret a given circle graph to answer questions*

- **BrainPOP Graphs**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

▶ **D4** express probabilities as ratios, fractions, and percents

▶ *determine the probability of a given outcome occurring for a given probability experiment, and express it as a ratio, fraction and percent*

- **BrainPOP Basic Probability**
- **BrainPOP Compound Events**
- **BrainPOP Independent and Dependent Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

⊖ Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

- **D4** express probabilities as ratios, fractions, and percents
  - *provide an example of an event with a probability of 0 or 0% (impossible) and an event with a probability of 1 or 100% (certain)*
- **BrainPOP Basic Probability**
- **BrainPOP Independent and Dependent Events**
- **BrainPOP Compound Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
  - **D5** identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events
    - provide an example of two independent events and explain why they are independent, such as
      - *spinning a four section spinner and an eight-sided die*
- **BrainPOP Basic Probability**
- **BrainPOP Compound Events**
- **BrainPOP Independent and Dependent Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
  - **D5** identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events
    - provide an example of two independent events and explain why they are independent, such as
      - *tossing a coin and rolling a twelve-sided die*
- **BrainPOP Basic Probability**
- **BrainPOP Compound Events**
- **BrainPOP Independent and Dependent Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
  - **D5** identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events
    - provide an example of two independent events and explain why they are independent, such as
      - *tossing two coins*
- **BrainPOP Basic Probability**
- **BrainPOP Compound Events**
- **BrainPOP Independent and Dependent Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
  - **D5** identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events
    - provide an example of two independent events and explain why they are independent, such as
      - *rolling two dice*
- **BrainPOP Basic Probability**
- **BrainPOP Compound Events**
- **BrainPOP Independent and Dependent Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
  - **D5** identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events
    - *identify the sample space (all possible outcomes) for each of two independent events using a tree diagram, table, or another graphic organizer*
    - **BrainPOP Basic Probability**
    - **BrainPOP Compound Events**
    - **BrainPOP Independent and Dependent Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
  - **D6** conduct a probability experiment to compare the theoretical probability (determined using a tree diagram, table or another graphic organizer) and experimental probability of two independent events
    - *determine the theoretical probability of a given outcome involving two independent events*
    - **BrainPOP Basic Probability**
    - **BrainPOP Independent and Dependent Events**
    - **BrainPOP Compound Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
  - **D6** conduct a probability experiment to compare the theoretical probability (determined using a tree diagram, table or another graphic organizer) and experimental probability of two independent events
    - *conduct a probability experiment for an outcome involving two independent events, with and without technology, to compare the experimental probability to the theoretical probability*
    - **BrainPOP Basic Probability**
    - **BrainPOP Independent and Dependent Events**
    - **BrainPOP Compound Events**

British Columbia **British Columbia Achievement Indicators > Mathematics (2007)**

Grade 7

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
  - **D6** conduct a probability experiment to compare the theoretical probability (determined using a tree diagram, table or another graphic organizer) and experimental probability of two independent events
    - *solve a given probability problem involving two independent events*
    - **BrainPOP Basic Probability**
    - **BrainPOP Independent and Dependent Events**
    - **BrainPOP Compound Events**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Number
  - **A1** *determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9, or 10 and why a number cannot be divided by 0*
    - **BrainPOP Factoring**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Number
  - **A2** *demonstrate an understanding of the addition, subtraction, multiplication, and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems*
    - **BrainPOP Comparing Prices**

- **BrainPOP Decimals**

4 more resources

- **GameUp Deep Sea Duel**
- **GameUp Gate**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Number

A3 *solve problems involving percents from 1% to 100%*

- **BrainPOP Percents**
- **BrainPOP Debt**

3 more resources

- **GameUp Budget Hero**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Number

A4 *demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions*

- **BrainPOP Decimals**
- **BrainPOP Rational and Irrational Numbers**
- **BrainPOP Multiplying and Dividing Fractions**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Number

A5 *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)*

- **BrainPOP Adding and Subtracting Fractions**
- **BrainPOP Mixed Numbers**
- **BrainPOP Compound Events**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Number

A6 *demonstrate an understanding of addition and subtraction of integers, concretely, pictorially, and symbolically*

- **BrainPOP Adding and Subtracting Integers**
- **BrainPOP Adding and Subtracting Fractions**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Number

A7 compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using

benchmarks

- **BrainPOP Fractions**
- **BrainPOP Decimals**
- **BrainPOP Inequalities**

- **GameUp Flower Power**

- **GameUp Battleship Numberline**
- **GameUp Dig It**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Number

A7 compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using

place value

- **BrainPOP Decimals**
- **BrainPOP Inequalities**
- **BrainPOP Rounding**

- **GameUp Pearl Diver**
- **GameUp Flower Power**
- **GameUp Gate**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Number

A7 compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using

equivalent fractions and/or decimals

- **BrainPOP Decimals**
- **BrainPOP Converting Fractions to Decimals**

3 more resources

- **GameUp Pearl Diver**
- **GameUp Battleship Numberline**

2 more resources

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Patterns and Relations

B1 *demonstrate an understanding of oral and written patterns and their equivalent linear relations*

- **BrainPOP Fibonacci Sequence**
- **BrainPOP Graphing Linear Equations**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Patterns and Relations

B2 *create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems*

- **BrainPOP Graphing Linear Equations**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Patterns and Relations

B3 demonstrate an understanding of preservation of equality by

modelling preservation of equality concretely, pictorially, and symbolically

- **BrainPOP Word Problems**
- **BrainPOP Adding and Subtracting Fractions**
- **BrainPOP Associative Property**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Patterns and Relations
  - **B3** demonstrate an understanding of preservation of equality by
    - *applying preservation of equality to solve equations*
    - **BrainPOP Equations with Variables**
    - **BrainPOP Two-Step Equations**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Patterns and Relations
  - **B4** *explain the difference between an expression and an equation*
    - **BrainPOP Equations with Variables**
    - **BrainPOP Polynomials**
    - **BrainPOP Two-Step Equations**
    - **BrainPOP Word Problems**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Patterns and Relations
  - **B5** *evaluate an expression given the value of the variable(s)*
    - **BrainPOP Equations with Variables**
    - **BrainPOP Two-Step Equations**
    - **BrainPOP Multiplying and Dividing Exponents**
    - **BrainPOP Order of Operations**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Patterns and Relations
  - **B6** *model and solve problems that can be represented by one-step linear equations of the form $x + a = b$, concretely, pictorially, and symbolically, where a and b are integers*
    - **BrainPOP Adding and Subtracting Integers**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Patterns and Relations
  - **B7** model and solve problems that can be represented by linear equations of the form
    - *$ax = b$*
    - **BrainPOP Equations with Variables**
    - **BrainPOP Two-Step Equations**
    - **BrainPOP Word Problems**
    - **BrainPOP Inequalities**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Patterns and Relations
  - **B7** model and solve problems that can be represented by linear equations of the form
    - *$x / a = b$, a is not equal to 0*
    - **BrainPOP Equations with Variables**
    - **BrainPOP Two-Step Equations**
    - **BrainPOP Word Problems**
    - **BrainPOP Inequalities**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Patterns and Relations
  - **B7** model and solve problems that can be represented by linear equations of the form
    - *concretely, pictorially, and symbolically, where a, b and c are whole numbers*
    - **BrainPOP Adding and Subtracting Integers**
    - **BrainPOP Two-Step Equations**
    - **BrainPOP Inequalities**
    - **BrainPOP Word Problems**
    - **BrainPOP Associative Property**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C1** demonstrate an understanding of circles by
    - *describing the relationships among radius, diameter, and circumference of circles*
    - **BrainPOP Circles**
    - **BrainPOP Pi**
    - **GameUp Pyramid Panic**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C1** demonstrate an understanding of circles by
    - *relating circumference to pi*
    - **BrainPOP Circles**
    - **BrainPOP Pi**
    - **BrainPOP Volume of Cylinders**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C1** demonstrate an understanding of circles by
    - *constructing circles with a given radius or diameter*
    - **BrainPOP Circles**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C1** demonstrate an understanding of circles by
    - *solving problems involving the radii, diameters, and circumferences of circles*
    - **BrainPOP Pi**
    - **BrainPOP Circles**
    - **GameUp Pyramid Panic**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C2** develop and apply a formula for determining the area of
    - *triangles*
    - **BrainPOP Area of Polygons**

- **BrainPOP Types of Triangles**

- **GameUp Pyramid Panic**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C2** develop and apply a formula for determining the area of
    - *parallelograms*
  - **BrainPOP Area of Polygons**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C2** develop and apply a formula for determining the area of
    - *circles*
  - **BrainPOP Area of Polygons**
  - **BrainPOP Circles**

  - **GameUp Pyramid Panic**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C3** perform geometric constructions, including
    - *perpendicular line segments*
  - **BrainPOP Parallel and Perpendicular Lines**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C3** perform geometric constructions, including
    - *parallel line segments*
  - **BrainPOP Parallel and Perpendicular Lines**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C4** *identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs*
  - **BrainPOP Coordinate Plane**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Shape and Space
  - **C5** *perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices)*
  - **BrainPOP Coordinate Plane**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

- Statistics and Probability
  - **D1** *demonstrate an understanding of central tendency and range by determining the measures of central tendency (mean, median, mode) and range determining the most appropriate measures of central tendency to report findings*

- **BrainPOP Mean, Median, Mode, and Range**

- **GameUp Sortify: Median, Mode, Mean, and Range**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Statistics and Probability

D2 *determine the effect on the mean, median, and mode when an outlier is included in a data set*

- **BrainPOP Mean, Median, Mode, and Range**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Statistics and Probability

D3 *construct, label, and interpret circle graphs to solve problems*

- **BrainPOP Graphs**
- **BrainPOP Using a Calculator**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Statistics and Probability

D4 *express probabilities as ratios, fractions, and percents*

- **BrainPOP Basic Probability**
- **BrainPOP Compound Events**
- **BrainPOP Independent and Dependent Events**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Statistics and Probability

D5 *identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events*

- **BrainPOP Basic Probability**
- **BrainPOP Compound Events**

British Columbia **British Columbia Learning Outcomes > Mathematics (2006)**

Grade 7

Statistics and Probability

D6 *conduct a probability experiment to compare the theoretical probability (determined using a tree diagram, table or another graphic organizer) and experimental probability of two independent events*

- **BrainPOP Basic Probability**
- **BrainPOP Independent and Dependent Events**