Correlation of Mathematics Readers Grade 6 to the Alberta Mathematics Program of Studies

Number: Develop number sense.

OUTCOME
6.1.2.
Solve problems involving whole numbers and decimal numbers. [ME, PS, T] [ICT: C6-2.4]

Correlated Lessons:
Watch It Grow, Where Germs Lurk, Land Animals, Sea Creatures, A Sense of Art, Landscape by Design, Package Design, Pack It Up Page Reader: Objective 35 Students add, subtract, multiply, and divide integers, and rational numbers

What Did I Eat?, How Do They Make That? Page 60, 65: Objective 4 Students will apply and extend previous understandings of addition, subtraction, multiplication, and division of rational numbers,

OUTCOME
6.1.4.
Relate improper fractions to mixed numbers and mixed numbers to improper fractions. [CN, ME, R, V]

Correlated Lessons:
What Did I Eat?, How Do They Make That? Page Reader: Objective 32 Students understand the relationships among equivalent number representations and the advantages and disadvantages of each type of representation

OUTCOME
6.1.5.
Demonstrate an understanding of ratio, concretely, pictorially and symbolically. [C, CN, PS, R, V]

Correlated Lessons:
On the Road, Our New Car Page 36, 41: Objective 1 Students will use ratio language to describe relationships and solve real-world problems including rates and percent.

On the Road, Our New Car Page Reader: Objective 27 Students understand the concepts of ratio, proportion, and percent and the relationships among them

On the Road, Our New Car Page Reader: Objective 28 Students use proportional reasoning to solve mathematical and real-world problems (e.g., involving equivalent fractions, equal ratios, constant rate of change, proportions, percents)

OUTCOME

6.1.8.

Demonstrate an understanding of multiplication and division of decimals (1-digit whole number multipliers and 1-digit natural number divisors). [C, CN, ME, PS, R, V]

Correlated Lessons:
Watch It Grow, Where Germs Lurk, Land Animals, Sea Creatures, A Sense of Art, Landscape by Design, Package Design, Pack It Up Page Reader: Objective 35 Students add, subtract, multiply, and divide integers, and rational numbers

What Did I Eat?, How Do They Make That? Page 60, 65: Objective 4 Students will apply and extend previous understandings of addition, subtraction, multiplication, and division of rational numbers,

OUTCOME

6.1.9.

Explain and apply the order of operations, excluding exponents, with and without technology (limited to whole numbers). [C, CN, ME, PS, T] [ICT: C6-2.4, C6-2.7]

Correlated Lessons:
Watch It Grow, Where Germs Lurk Page Reader: Objective 37 Students understand the correct order of operations for performing arithmetic computations

GENERAL OUTCOME / COURSE
AB.6.3.
Patterns and Relations (Variables and Equations): Represent algebraic expressions in multiple ways.

OUTCOME

6.3.3.

Represent generalizations arising from number relationships, using equations with letter variables. [C, CN, PS, R, V]

Correlated Lessons:
Land Animals, Sea Creatures Page 108, 113: Objective 10 Students will write and solve equations and inequalities.

OUTCOME

6.3.4.

Express a given problem as an equation in which a letter variable is used to represent an unknown number. [C, CN, PS, R]

Correlated Lessons:
Land Animals, Sea Creatures Page 108, 113: Objective 10 Students will write and solve equations and inequalities.

OUTCOME

6.3.5.

Demonstrate and explain the meaning of preservation of equality, concretely and pictorially. [C, CN, PS, R, V]

Correlated Lessons:
Land Animals, Sea Creatures Page Reader: Objective 41 Students solve linear equations using concrete, informal, and formal methods

Watch It Grow, Where Germs Lurk Page 84, 89: Objective 7 Students will write, simplify, and evaluate linear and exponential expressions.

Watch It Grow, Where Germs Lurk Page Reader: Objective 40 Students understand basic operations (e.g., combining like terms, expanding, substituting for unknowns) on algebraic expressions

Shape and Space (Measurement): Use direct and indirect measurement to solve problems.

OUTCOME

6.4.3.

Develop and apply a formula for determining the: perimeter of polygons; area of rectangles; volume of right rectangular prisms. [C, CN, PS, R, V]

Correlated Lessons:
A Sense of Art, Landscape by Design Page 132, 137: Objective 13 Students will find the perimeter and area of polygons and circles in mathematical and real-world contexts.

A Sense of Art, Landscape by Design Page Reader: Objective 43 Students solve problems involving perimeter (circumference) and area of various shapes

A Sense of Art, Landscape by Design, Package Design, Pack It Up Page Reader: Objective 44 Students understand formulas for finding measures (e.g., area, volume, surface area)

Package Design, Pack It Up Page 156, 161: Objective 16 Students will find the surface area and volume of rectangular prisms and cylinders.

Statistics and Probability (Data Analysis): Collect, display and analyze data to solve problems.

OUTCOME

6.7.1.

Create, label and interpret line graphs to draw conclusions. [C, CN, PS, R, V]

Correlated Lessons:
Hurricane Hunters, Tornado Chasers, Tonight's Concert, Battle of the Bands Page Reader: Objective 49 Students read and interpret data in charts, tables, and plots

Hurricane Hunters, Tornado Chasers, Tonight's Concert, Battle of the Bands Page Reader: Objective 51

Students organize and display data using tables, graphs (e.g., line, circle, bar), frequency distributions, and plots (e.g., box-and-whiskers)

OUTCOME

6.7.3.

Graph collected data, and analyze the graph to solve problems. [C, CN, PS, R, T] [ICT: C6-2.5, C7-2.1, P2-2.1, P2-2.2]

Correlated Lessons:
Hurricane Hunters, Tornado Chasers, Tonight's Concert, Battle of the Bands Page Reader: Objective 51 Students organize and display data using tables, graphs (e.g., line, circle, bar), frequency distributions, and plots (e.g., box-and-whiskers)

Tonight's Concert, Battle of the Bands Page 204, 209: Objective 21 Students will understand how to read and construct statistical graphs.