# Mathematics Multimedia Interactives

The Alberta Education Multimedia Interactives Web links contain instructional material that may be labelled at a grade level different from the corresponding Knowledge and Employability course level. Please preview the resources (including any links to Web sites), before they are accessed by students, to determine how each might best be used.

### **Math Strategies**

Math 5 Live. Number: Comparing and Ordering Decimals, Topic 2 (video). The Web site contains information about how to use the greater than/less than symbols when working with decimals.

Click on topic buttons around the screen to select activities and resources.

<u>Math 5 Live. Number: Place Value (video)</u>. The Web site shows the importance of placing decimal places in the correct location.

Click on topic buttons around the screen to select activities and resources.

Math 6 Spy Guys. Lesson 9, Rounding Numbers, Scenes 1–9 (audio, video, PDF). The Web site contains lessons on rounding numbers to the nearest tenth and hundredth places. Click on topic buttons around the screen to select activities and resources.

Math 6 Spy Guys. Lesson 20, Problem Solving Bank: No. 2-Handshakes (video). The Web site contains a problem-solving bank with an illustrated solution.

Click on the number of the problem you wish to access. To view the solution, click on Answer in the black menu bar at the bottom of the screen.

Math 6 Spy Guys. Lesson 20, Problem Solving Bank: No. 3—Houses, Draw a Diagram (video). The Web site contains a problem-solving bank with an illustrated solution. Click on the number of the problem you wish to access. To view the solution, click on Answer

Math 6 Spy Guys. Lesson 20, Problem Solving Bank: No. 5—Darts, Guess and Check (video). The Web site contains a problem-solving bank with an illustrated solution. Click on the number of the problem you wish to access. To view the solution, click on Answer in the black menu bar at the bottom of the screen.

Math 6 Spy Guys. Lesson 20, Problem Solving Bank, No. 10–Tables, Make a Chart (video). The Web site contains a problem-solving bank with an illustrated solution. Click on the number of the problem you wish to access. To view the solution, click on Answer in the black menu bar at the bottom of the screen.

Math 5 Live. Estimating: Estimating Quantities, (audio, video, PDF). The Web site has activities on estimating and rounding numbers.

Click on topic buttons around the screen to select activities and resources.

in the black menu bar at the bottom of the screen.

#### Numbers

#### Whole Numbers

Math 6 Spy Guys. Lesson 7, Factors, Multiples, and Prime
Factorization, Scenes 1–11 (audio, video, PDF). The Web site contains
examples of how to create factors and factor trees and how to find
multiples and prime factors.

Click on topic buttons around the screen to select activities and resources.

Math 5 Live. Number: Multiplication of Whole Numbers, Topics 1–10 (audio, video, PDF). The Web site contains activities creating multiplication arrays and demonstrations of how to multiply 1- and 2-digit numbers by 3-digit numbers.

Click on topic buttons around the screen to select activities and resources.

Alberta Education: Patterning the Powers of 10 – Use It (video, audio, PDF, Word document). The Web site contains a power of 10 chart that has pictures to illustrate the various powers of 10.

Click on topic buttons around the screen to select activities and resources.

Math 5 Live. Number: Division of Whole Numbers, Topics 1–7 (audio, video, PDF). The Web site contains exercises on dividing single-digit numbers into 3-digit numbers.

Click on topic buttons around the screen to select activities and resources.

Math Continuum. STATISTICS AND PROBABILITY: Central Tendencies (Sports), Topics 1–4 (audio, video). The Web site defines mean, mode, median and range and has exercises.

Click on the Continue button to advance through the exercises and click on Next Topic to go to a new topic.

Math 5 Live. Estimating: Estimating Quantities (video, PDF). The Web site contains activities on estimating and rounding.

Click on topic buttons around the screen to select activities and resources.

#### **Fractions**

Math 6 Spy Guys. Lesson 2, Improper Fractions and Mixed Numbers (video, PDF). The Web site contains a series of lessons on how to create and add mixed numbers.

Click on topic buttons around the screen to select activities and resources.

Math Continuum. NUMBER: Fractions—Add and Subtract (Home),
Topic 2, Scenes 1—3 (video, audio). The Web site shows how to turn
mixed numbers into improper fractions so that they can be added and
subtracted.

Click on topic buttons around the screen to select activities and resources.

Math Continuum. NUMBER: Fractions and Equivalent Fractions
(Home) (audio, video, PDF). The Web site contains interactive activities that review concepts such as numerators denominators and common fractions.

Click on topic buttons around the screen to select activities and resources.

### Fractions Math Continuum. NUMBER: Fractions-Add and Subtract (Home), (continued) Topic 1, Adding and Subtracting, Scenes 1–6 (audio, video). The Web site shows how to create fractions with common denominators so that they can be added and subtracted. Click on topic buttons around the screen to select activities and resources. Math Continuum. NUMBER: Fractions – Multiply and Divide (Home) Topics 1-4 (audio, video). The Web site contains activities on multiplying and dividing fractions. Click on topic buttons around the screen to select activities and resources. **Decimals** Math 6 Spy Guys. Lesson 1, Decimals, Scenes 1–15 (audio, video, **PDF)**. The Web site contains activities on decimals, including writing tenths, hundredths and thousands, and comparing and ordering decimals. Click on topic buttons around the screen to select activities and resources. Math 5 Live. Number: Comparing and Ordering Decimals, Topic 3 (audio, video, PDF). The Web site contains an exercise on comparing decimals to the tenth place. Click on topic buttons around the screen to select activities and resources. Math 5 Live Number: Comparing and Ordering Decimals, Topics 4, 6, 7 (audio, video, PDF). The Web site contains exercises on decimals in the hundredths place. Click on topic buttons around the screen to select activities and resources. Math 5 Live. Number: Comparing and Ordering Decimals, Topic 5 (audio, video, PDF). The Web site contains an exercise on comparing decimals to the tenth place. Click on topic buttons around the screen to select activities and resources. Math 5 Live. Number: Comparing and Ordering Decimals, Topics 8-10 (audio, video, PDF). The Web site contains exercises on ordering decimals using benchmarks. Click on topic buttons around the screen to select activities and resources. Math 6 Spy Guys. Lesson 9, Rounding Numbers, Scenes 1-9 (audio, video, PDF). The Web site contains exercises on rounding decimals. Click on topic buttons around the screen to select activities and resources. Math 5 Live. Number: Multiplication and Division of Decimals (audio, video, PDF). The Web site contains exercises on multiplying and dividing decimals. Click on topic buttons around the screen to select activities and resources. Integers Math 6 Spy Guys. Lesson 6, Understanding Integers, Scenes 1-7 (audio, video, PDF). The Web site contains a definition of integers and demonstrates how to add and subtract them. Click on topic buttons around the screen to select activities and resources.

# Integers (continued)

Math Continuum. NUMBER: Integers—Add and Subtract (Puzzles), Topics 1–7 (audio, video). The Web site contains interactive activities to express integers and determine rules for adding and subtracting them. Click on topic buttons around the screen to select activities and resources.

Math Continuum. NUMBER: Integers – Multiply and Divide (Puzzles), Scenes 1–9 (audio, video). The Web site contains an interactive lesson that challenges students to determine the rules for multiplying and dividing decimals.

Click on topic buttons around the screen to select activities and resources.

#### Percents, Ratios, Proportions and Unit Rates

Math Continuum. NUMBER: Percent (Food), Topics 1–3 (audio, video). The Web site contains an explanation of the meaning of percent, interactive lessons and a game on percent where students convert fractions to percentages.

Click on topic buttons around the screen to select activities and resources.

Math Continuum. NUMBER: Rates and Ratio (audio, video). The Web site contains a definition of a ratio and an exercise in writing ratios. Click on topic buttons around the screen to select activities and resources.

#### **Patterns and Relations**

Math Continuum: PATTERNS AND RELATIONS: Patterns (Puzzles), Topic 1, Scenes 1–3 (audio, video). The Web site contains pattern exercises where students complete patterns with paints, numbers and designs.

Click on topic buttons around the screen to select activities and resources.

Math Continuum. PATTERNS AND RELATIONS: Graphing Patterns (Puzzles), Topic 2, Scenes 1–10 (audio, video). The Web site contains an illustrated pattern problem that students solve by identifying a pattern in order to determine a formula.

Under Patterns and Relations, click on Graphing Patterns (Puzzles). Next, click on Topics and then choose Number 2, Graphing a Pattern.

Click on the yellow Continue button to advance through the lesson.

Math 6 Spy Guys. Lesson 8, Summarizing/Extending Patterns (audio, video, PDF). The Web site contains exercises that show how equations can be created to describe patterns. Click on topic buttons around the screen to select activities and resources.

## **Shape and Space**

#### Measurement

Applied Mathematics 10. Measurement, Precision and Accuracy in Measurement, Introduction and Topics 1–3 (interactive, audio). The Web site contains information on the imperial and metric measurement systems and how to measure accurately with a ruler.

First login to the LearnAlberta.ca Web site. Next, click on the START button by Precision and Accuracy in Measurement and then on the next screen, click on a topic.

Alberta Education. Exploring Area and Perimeter (audio, video, PDF, Word document). The Web site contains a video that explains the concepts of perimeter and area.

Click on topic buttons around the screen to select activities and resources.

Math 6 Spy Guys. Lesson 12, Area and Perimeter (audio, video, PDF).

The Web site demonstrates how to measure area and perimeter. Click on topic buttons around the screen to select activities and resources.

Alberta Education. Exploring the Diameter and Circumference of Circles (audio, video, PDF, Word document). The Web site contains a video that explains the concepts of circumference and diameter. Click on topic buttons around the screen to select activities and resources.

Math Continuum. SHAPE AND SPACE: Volume and Capacity (Home), Topics 1–5 (audio, video). The Web site contains a series of activities that demonstrate volume and capacity in the home, develop the volume formula and use the formulas.

Click on topic buttons around the screen to select activities and resources.

Alberta Education. *Exploring Integers and Temperature* (audio, video, PDF, Word document). The Web site explains the relationship between temperature and integers.

Click on topic buttons around the screen to select activities and resources.

Math 5 Live. Shape and Space: Time, Topics 1–6 (audio, video, PDF). The Web site contains activities for reading analogue and digital clocks. Click on topic buttons around the screen to select activities and resources.

# Objects and Shapes

Alberta Education. Exploring Angles within a Triangle (audio, video, PDF, Word document). The Web site contains a video that shows angles in real-life situations.

Click on topic buttons around the screen to select activities and resources.

Math 6 Spy Guys. Lesson 16, Working with Angles, Scenes 1–12 (audio, video, PDF). The Web site contains an interactive lesson that teaches students how to label, classify and draw angles.

Click on topic buttons around the screen to select activities and resources.

# Objects and Shapes (continued)

Math 6 Spy Guys. Lesson 14, Surface Area of Prisms, Scenes 1–6 (audio, video, PDF). The Web site contains activities that teach students how to calculate the surface areas of 3-D objects.

Click on topic buttons around the screen to select activities and resources.

Applied Mathematics 10: Line Segments, Distance between Points, Introduction and Lesson 1 (interactive, audio). The Web site contains exercises involving distances between points in the coordinate plane. First login to the LearnAlberta.ca Web site. Next, click on the START button by Distances between Points. Then, on the next screen, click on Introduction and finally, Points and Line Segments.

Alberta Education. *Exploring Transformations* (audio, video, PDF, Word document). The Web site contains a video and exercises about transformations.

Click on topic buttons around the screen to select activities and resources.

Math 5 Live. Shape and Space: Tessellations, Topics 1–5 (audio, video, PDF). The Web site contains activities that define, identify and create tessellations.

Click on topic buttons around the screen to select activities and resources.

## **Statistics and Probability**

Alberta Education. Exploring Election Data – Use It: Data Display and Graphs (audio, video, PDF, Word document). The Web site contains a video with real-world examples of graphing and an interactive activity with different types of graphs, using Alberta election data. Click on topic buttons around the screen to select activities and resources.

Math Continuum. STATISTICS AND PROBABILITY: Understanding Graphs (Entertainment), Topics 1–4 (audio, video). The Web site contains interactive activities on bar and circle graphs, line graphs and histograms.

Click on topic buttons around the screen to select activities and resources.

Math Continuum. STATISTICS AND PROBABILITY: Central Tendencies (Sports), Topic 1, Scenes 1–6 (audio, video). The Web site shows how to determine mean, median, mode and range.

Click on the yellow Continue button to advance through the scenes.

Alberta Education. Exploring Probability and the Monte Carlo Method (audio, video, PDF, Word document). The Web site contains a video explaining the concept of probability and contains an interactive activity.

Click on topic buttons around the screen to select activities and resources.

Math 6 Spy Guys. Lesson 19, Probability, Scenes 1–8 (audio, video, PDF). The Web site contains a definition of theoretical probability and has exercises with a spinner and dice. Click on topic buttons around the screen to select activities and resources.