

# activeBook Reader

## 4<sup>th</sup> – 5<sup>th</sup> Grades

### Problem Solving

#### MathGloss

E307

With PowerPoint

5-11

Build an interactive glossary and use it to assist you in learning and organizing important mathematics terms and concepts.

#### Review IT

E26

With Excel

5-7

Choose a topic you have been learning about. Identify the important ideas, facts and issues and then create a review quiz.

#### A Day at Disneyland

E402

With Excel, Word

4-7

Given information on the rides at Disneyland, plan a day so that you will experience as many rides as possible.

#### Build a Mastermind Game

E403

With Excel

4-8

Use conditional formatting and apply logical thinking when you build and play your own Mastermind game.

#### Latin Squares

E394

With Word

4-6

Learn about Latin Square puzzles and how to use them. Solve 4 by 4 puzzles and then try a 5 by 5 puzzle. Latin Square puzzles are great for solving logic clue problems.

#### Magic Squares

E395

With Excel

4-6

Learn to add borders and enter simple formulas as you build a self-checking magic square.

#### Number Magic

E396

With Excel

4-6

Play a number game and then problem solve to determine how it works. Demonstrate your understanding by extending the game.

#### Reaction Time

E391

With Excel

5-6

Working in groups determine who has the fastest reaction time. Devise a plan and use a spreadsheet to perform and explain your calculations.

## Data and Graphs

### A Nautical Adventure

E64

With Excel, Internet, PowerPoint

4-8

Using live data from the Internet, track a ship crossing a major ocean. During the journey complete Social Studies, Science, Mathematics and Language Arts tasks.

### Car Color Pictograph

E277

With Excel

4-6

Gather data about car colors and make a pictograph to show how they are distributed.

### Conduct an Opinion Survey

E27

With Excel

5-8

Use an opinion survey to collect and organize data. Summarize the data and draw conclusions.

### Create Bar Graphs

E306

With Excel

5-8

Learn how to create bar graphs in Excel. Using data about common languages spoken, create and format bar graphs and copy them into a Word document or a PowerPoint slide.

### Create Pie Charts

E305

With Excel

5-7

Learn how to create pie charts in Excel. Using nutritional data from the United States and Asia, create pie charts and copy them into a Word document and a PowerPoint slide.

### Diving Competition

E278

With Excel

4-6

Learn the spreadsheet functions SUM, MIN, and MAX. Using these functions, create tables to calculate and arrange the scores for an international diving competition.

### Draw Conclusions: Pie Charts

E101

With Excel

5-9

Read and draw conclusions from various pie charts: the school day, popular pets and labor statistics. Try changing the data and making your own charts.

### Letter Probability

E365

With Excel

5-7

Determine the frequency and probability of the occurrence of each letter in English words. This may help you to win certain types of word games.

### M&Ms for Smarties

E291

With Excel, Word

5-8

Learn some basic statistics concepts as you explore the color distribution of M&Ms.

## Geometry

### Explore Areas

With Word

4-7

**E301**

What is the relationship between the area of a triangle and the area of a rectangle? Explore shapes to answer this question.

### Flash Turtle: Symmetry Drawing

With No Software Required

3-6

**E670**

Practice drawing symmetrical shapes using Flash Turtle, a simple turtle graphics program (included).

### Flash Turtle: The Angle Game

With No Software Required

4-6

**E671**

Practice estimating angles using Flash Turtle, a simple turtle graphics program (included).

### Play with Pentominoes

With Word

4-6

**E380**

Work with a partner to create a set of twelve pentominoes. Challenge each other to a strategy game using the shapes you created.

### Slide Tessellations

With Paint

5-9

**E2**

Learn to form shapes that fit together when you slide them. Create appealing designs.

## Measurement

### A Nautical Adventure

E64

With Excel, Internet, PowerPoint

4-8

Using live data from the Internet, track a ship crossing a major ocean. During the journey complete Social Studies, Science, Mathematics and Language Arts tasks.

### A Painting Problem

E314

With Excel

5-7

Calculate surface area and use your problem solving skills to determine how much it would cost paint your bedroom or classroom.

### Are You a Square?

E312

With Excel, Paint

4-6

Compare the ratio of your height to your arm span. Are you a square or a rectangle? Use the AVERAGE function to find the average shape in your class.

### A Spaghetti Problem

E390

With Excel

5-6

How much spaghetti would you need to line-up to reach around the world? Devise your own solution using a spreadsheet to perform calculations and explain your thinking.

### Every Drop Counts

E309

With Excel

4-6

Determine how much water is wasted by a dripping tap over a year.

### Flash Turtle: The Angle Game

E671

With No Software Required

4-6

Practice estimating angles using Flash Turtle, a simple turtle graphics program (included).

### Investigate Stride Length

E313

With Excel

4-6

What is the difference in stride length when running as opposed to walking? Generate data, perform the calculations and present your findings.

### Walking Speed

E316

With Excel

4-6

Measure how far you walk in a minute and use the results to determine your walking speed.

## Number

### Chocolate Chip Cookie Recipe

With Excel

4-7

Subtract and multiply fractions in Excel to adjust a recipe.

**E332**

### Equivalent Fractions

With Excel

4-6

Find equivalent fractions using Excel and its fraction-formatting feature. Describe the rule for each type of equivalent fraction.

**E340**

### Factor Trees

With Excel

4-6

Learn about factors, prime numbers and composite numbers and then build dynamic factor trees.

**E321**

### Greatest Common Factor

With Excel

4-8

Learn about greatest common factors. Apply what you know to make a worksheet that determines the GCF for any two or three numbers.

**E330**

### Know Your Multiplication Tables

With Excel

3-7

Which multiplication facts do you know well? Which should you learn better? Find out and then focus your practice on the 'tricky' facts.

**E347**

### Least Common Multiple

With Excel

4-8

Learn about the least common multiple. Apply what you know to make a worksheet that determines the LCM for any two or three numbers.

**E331**

### Look For Number Patterns

With Excel

5-7

Use a grid to explore number patterns.

**E688**

### Multiplication Turn Around

With Excel

3-4

$2 \times 3$  is 6. Is  $3 \times 2$  also 6? Color models to show that the two numbers in a multiplication equation are reversible. Use a grid to solve multiplication problems.

**E353**

### Numbers and Squares

With Word

3-5

Search for square numbers from 1 to 25 by arranging square tiles into square shapes. For an extra challenge explore square numbers from 26 to 100.

**E327**

### Number Shapes

With Excel

5-6

Represent numbers as shapes to develop your understanding of factors and prime and composite numbers.

**E324**

**Tables Generator****E323**

With Excel

3-6

Learn basic spreadsheet skills while building multiplication tables.

**Three Number Multiplication Game****E348**

With Excel

4-6

Make a calculator that you can use to solve multiplication problems involving three numbers. Use your calculator to play a fun game.

**Operations****Division by Partition****E354**

With Excel

3-4

Show that you can divide numbers by sharing equally.

**Lattice Multiplication Algorithm****E350**

With Excel

4-6

Learn about the Lattice Multiplication Algorithm. Use it to find the products of numbers with two or more digits.

**Visually Represent Percent****E335**

With Excel

5-7

Look at 10 x 10 grids that represent different percentages. Show the fraction of filled cells as percentages, ratios, decimals and reduced fractions.

## Patterns and Algebra

### Circles, Triangles and Squares

**E318**

With Excel, Word

4-8

Investigate a sequence of numbers to see whether you can determine an underlying pattern. Apply your findings to calculate more numbers in the sequence.

### McMathematics

**E399**

With Excel

5-8

McDonald's sells Chicken McNuggets in boxes of 6, 9 and 20. What is the cost per McNugget for each of the different boxes? Is it possible to purchase 53 McNuggets?

### Multiplication Patterns

**E326**

With Excel

3-6

Many number patterns occur in a multiplication table. Find and describe some of those patterns.

### One Thousand Things

**E334**

With PowerPoint

3-4

Students explore the magnitude of numbers in multiplicative patterns.

### Triangle Number Patterns

**E333**

With Word

3-5

Explore a triangle number pattern by using circles to build triangles. Can you find the pattern?