

# Leading Step

*Learning... to have fun!*



## MathChamp!™

**Ciggy the MathChamp! is ready to help students practice and learn their basic math tables** – to add, subtract, multiply and divide whole numbers. Those ready for more of a challenge can move on to working with fractions – identifying equivalent fractions, decimals and percents. The faster they go, the more points they earn! Kids have fun, while at the same time reinforcing their basic math skills that are such a key part of a solid mathematical foundation.

### Strengths of Handheld Solutions from Leading Step:

- Individualized Instruction/Differentiation
- Immediate Feedback
- Safe Practice Environment
- Concentration on Particular Skills
- Unlimited Repetition
- Continual Reinforcement of Correct Answers
- Positive Encouragement
- Progress Monitoring

# MathChamp! Features

## **CONTROLS:**

Choose a game, based on what skill the player would like to practice.

- Addition
- Subtraction
- Multiplication
- Division

Select a number or a range of numbers to work with.

Select whether to include fractions or to just use whole numbers.

More points are awarded for larger numbers, encouraging children to “move on up” the scale.

Choose the number of equations in the game.

## **GAMES:**

In each game, students are asked to provide the answer to a math equation. Ciggy the MathChamp! provides three possible answers. Students must select the right answer as quickly as possible to maximize their score and get to the Bonus Round for even more points.

**Add'em Up** – Addition

**Let's Subtract** - Subtraction

**Multiplying** – Multiplication

**Let's Divide** – Division

**Catch a Number** – Allows youngest children to develop pattern and number matching.

**Fun with Fractions** – Identify the equivalent fraction, percentage, or decimal number to the fraction displayed.

## **SYSTEM REQUIREMENTS:**

Palm OS 3.5 or higher, color devices recommended.

## **MATHCHAMP! STANDARDS SUPPORT**

Research indicates that computer games can be an effective tool to enhance a student's core math skills. Harold Wenglinsky conducted a study based on the performance data of students who took the math section of the 1996 National Assessment of Educational Progress (NAEP). He found that among the 4th graders, students whose teachers used computers mainly for math learning games scored higher than those whose teachers didn't use computers. By comparison, he didn't find any association, positive or negative, between student scores when the computers were used only for drill-and-practice.

MathChamp! can be incorporated in the classroom setting to assist teachers and help students develop core skills. It will help them to:

- Develop fluency in adding, subtracting, multiplying, and dividing whole numbers.
- Focus on math tables with numbers in appropriate ranges based on skill level, from 1 to 10,000.
- Commit addition and subtraction tables to memory.
- Commit multiplication and division tables to memory.
- Focus on math tables specific to a particular number. For example, addition of 5 tables, multiplication by 8 tables, and so on.
- Understand the special properties of 0 and 1 in multiplication and division.
- Develop fluency in adding, subtracting, and multiplying simple fractions.
- Recognize and find the reduced form of fractions.
- Recognize and identify common equivalents between fractions, decimals, and percents.

To help teachers with monitoring student progress, MathChamp! tracks each student's performance in the key areas (addition, subtraction, multiplication, etc). Teachers and students can view their scores, along with the number of answers correct and incorrect, in either a table or graph form.