

#### Math Operations Grade 4

Developed by teachers and mathematics specialists, **Math Operations Grade 4** provides the strategies, skills and practice your students need to develop strong mathematics proficiency. The program teaches the major concepts in grade 4 level operations. Helpful clues and examples, along with exciting audio-visual content, ensure that students of all learning styles can use the software independently. **Math Operations Grade 4** is an effective and engaging way to improve student performance with all four mathematical operations.

## **Targeted Skills**

- Addition: 3-5 digit addition, estimation, missing term problems, word problems
- Subtraction: 3-5 digit subtraction, estimation, missing term problems, word problems
- Multiplication: multiplication facts, three digit by one digit multiplication, estimation, multiples, missing term problems, word problems
- Division: division facts, long division (3-4 digit by one digit), estimation, word problems

#### **Teacher Dashboard**

The Teacher Dashboard tracks student progress throughout each program and records the percentage score for every activity completed. This feature provides an overview of how well a student is progressing and allows the teacher to identify strengths and weaknesses.

- · Records students' results automatically as they work.
- · Prints reports quickly and easily for sharing with parents and staff.
- Provides summary reports by subject or detailed reports by activity.
- Allows teachers to print reports for individual students or an entire class.
- Stores student marks in one central location for all programs.

## **Program Outline**

The program is broken down into 4 main units, which can all be accessed from the main menu. On the following pages, each of these different units are broken down. The main menu units are:

- 1. Addition
- 2. Subtraction
- 3. Multiplication
  - 4. Division

## 1 - Addition

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
Three to Three (two activities)	Add two 3,4,5 digit numbers together. One activity leads the students through the procedure. One activity lets students solve problems on their own with pencil and paper.	3-5 digit addition 2 terms
Four to Four (two activities)		
Five to Five (two activities)		
Addition Challenge	3-5 digit addition problems.	
<b>More Than Two</b> (two activities)	Add more than two 3,4,5 digit numbers together. One activity leads the students through the procedure. One activity lets students solve problems on their own with pencil and paper.	3-5 digit addition 2+ terms
Missing Term	Find the missing term in a missing term equation.	basic addition-based algebra
Estimation I	Round numbers in an addition problem to	round digits to estimate addition solutions
Estimation II	the nearest hundred or thousand to get an estimate.	
Complete the Chart	Complete a chart by adding rows and columns to fill in entries.	3-5 digit addition 2 terms
Addition Word Problems	Solve mathematical word problems requiring 3-5 digit addition solutions.	apply mathematical concepts to real-world applications 3-5 digit addition 2 terms

## 2 - Subtraction

	INSTRUCTION	REQUIRED SKILLS
Three from Three (2 activities)	Subtract one 3,4,5 digit number from another. One activity leads the students through the procedure. One activity lets students solve problems on their own with pencil and paper.	3-5 digit subtraction 2 terms
Four from Four (2 activities)		
Five from Five (2 activities)		
Subtraction Challenge	3-5 digit subtraction problems.	
Missing Term	Find the missing term in a missing term equation.	basic subtraction-based algebra
Estimation I	Round numbers in an addition problem to the nearest hundred or thousand to get an estimate.	round digits to estimate subtraction solutions
Estimation II		
Complete the Chart	Complete a chart by adding rows and columns to fill in entries.	3-5 digit subtraction 2 terms
Subtraction Word Problems	Solve mathematical word problems requiring 3-5 digit subtraction solutions.	apply mathematical concepts to real-world applications 3-5 digit subtraction 2 terms

# 3 - Multiplication

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
Complete the Table (2 activities)	Fill in the missing values in a multiplication table.	
First Five Multiples	Enter the first five multiples of a number.	multiplication foots to 10
Next Three Numbers	Enter the next three numbers in a multiplication pattern.	multiplication facts to 12
Multiplication Facts	Recall multiplication facts	
Two Digits Multiplied by One Digit	Multiply 2 digits by one digit.	
Three Digits Multiplied by One Digit	Multiply 3 digits by one digit.	multiply 2-3 digits by 1 digit
More Than Two Factors	Multiply three numbers together.	
Estimation	Solve a complex multiplication problem by first rounding one figure to the nearest hundred.	round digits to estimate multiplication solutions
Find the Missing Factor	Find the missing term in a missing term equation.	basic multiplication- based algebra
Shortcuts	Use shortcuts to solve complex multiplication problems by factors of 0, 1, 2 and 10.	basic multiplication shortcuts
How Much Greater?	How much greater is the solution to one equation than the solution to another equation.	multiply 2-3 digits by 1 digit
Multiplication Word Problems	Solve mathematical word problems requiring 1 digit x 3 digit solutions.	apply mathematical concepts to real-world applications multiply 2-3 digits by 1 digit

#### 4 - Division

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
Division Facts	Recall division facts.	division facts from 144
Find the Missing Divisor	Find the missing term in a missing term equation.	basic division-based algebra
Remainder Equations	Recall division facts with basic remainders.	division facts from 144 with basic remainders
Long Division 3 Digits by 1 Digit (two activities)	Solve 3-4 digit by 1 digit long division problems with remainders	divide 3-4 digits by 1 digit with and without remainders
Long Division 4 Digits by 1 Digit (two activities)		
Estimation	Solve a complex division problem by first rounding one figure to the nearest hundred.	round digits to estimate division solutions
Shortcuts	Use shortcuts to solve complex division problems by factors of 0, 1, 2 and 10.	basic division shortcuts
Division Word Problems	Solve mathematical word problems requiring 3-4 digits by 1 digit solutions.	apply mathematical concepts to real-world applications
Remainder Word Problems		divide 3-4 digits by 1 digit with and without remainders