

## Math Operations Grade 5

Developed by teachers and mathematics specialists, **Math Operations Grade 5** provides the strategies, skills and practice your students need to develop strong mathematics proficiency. The program teaches the major concepts in grade 5 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 5** is an effective and engaging way to improve student performance with all four mathematical operations.

### **Targeted Skills**

- Addition: 5-6 digit addition, estimation, missing term problems, word problems
- Subtraction: 5-6 digit subtraction, estimation, missing term problems, word problems
- Multiplication: multiplication facts, multi-digit by two digit multiplication, estimation, multiples, missing term problems, word problems
- Division: division facts, long division (multi-digit by one digit), estimation, prime/composite numbers, 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
Five Digit Addition (two activities)	Add two 5-6 digit numbers together. One activity leads the students through the procedure. One activity lets students solve problems on their own with pencil and paper.	5-6 digit addition 2 terms
Six Digit Addition (two activities)		
Addition Challenge	5-6 digit addition problems.	
<b>More Than Two</b> (two activities)	Add more than two 5-6 digit numbers together. One activity leads the students through the procedure. One activity lets students solve problems on their own with pencil and paper.	5-6 digit addition 2+ terms
Missing Term	Find the missing term in a missing term equation.	basic addition-based algebra
Estimation	Round numbers in an addition problem to the nearest hundred or thousand to get an estimate.	round digits to estimate addition solutions
Addition Word Problems	Solve mathematical word problems requiring 3-5 digit addition solutions.	apply mathematical concepts to real-world applications
		5-6 digit addition 2 terms

#### 2 - Subtraction

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
Five Digit Subtraction (2 activities)	Subtract one 5-6 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.	5-6 digit subtraction 2 terms
Six Digit Subtraction (2 activities)		
Subtraction Challenge	5-6 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
Subtraction Word Problems	Solve mathematical word problems requiring 5-6 digit subtraction solutions.	apply mathematical concepts to real-world applications 5-6 digit subtraction 2 terms

# 3 - Multiplication

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
Multiplication Facts	Recall multiplication facts	
First Five Multiples	Enter the first five multiples of a number.	multiplication facts to 12
Next Three Numbers	Enter the next three numbers in a multiplication pattern.	
Click on the Multiples I		
Click on the Multiples II	Click on all of the multiples of a given number.	multiples of numbers up to 144
Click on the Multiples III		
Multiples in Between	Find the multiples of a given number in a given range.	
Multi-Digit by One-Digit	Multiply 2 digits by one digit.	multiply 2-3 digits by 1-2 digits
Multi-Digit by Two-Digit I	Multiply 3 digits by one digit.	
Multi-Digit by Two-Digit II	Multiply three numbers together.	
Multiplying by 10s	Use shortcuts to solve complex multiplication problems by factors of 0, 1, 2 and 10.	basic multiplication shortcuts
More than Two Factors	Multiply more than two factors together.	multiply more than two 1-2 digit factors together
Multiplication Word Problems	Solve mathematical word problems requiring multi-digit by 1-2 digit solutions.	apply mathematical concepts to real-world applications multiply 2-3 digits by
		1-2 digits by

#### 4 - Division

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
Division Facts	Recall division facts.	division facts from 144
Multi-Digit by One- 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
Multi-Digit by Two- Digit (two activities)		
Dividing by Tens	Divide large numbers by tens, hundreds and thousands.	understand unique properties of dividing by 10s, 100s, 1000s, etc
Click on the Factors I	Click on all of the factors of a given number.	identify factors of numbers up to 144
Click on the Factors II		
Prime or Composite I	Identify whether given numbers are prime or composite.	understand difference between composite and prime numbers
Prime or Composite II		
Word Problems I	Solve mathematical word problems requiring 3-4 digits by 1 digit solutions.	apply mathematical concepts to real-world applications
Word Problems II		divide 3-4 digits by 1 digit with and without remainders