## 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.


## Math Operations Grade 4

## 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 <br> 2. Subtraction <br> 3. Multiplication <br> 4. Division 

## Math Operations Grade 4

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. |  |
| More Than Two (two activities) | Add more than two 3,4,5 digit numbers together. <br> 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 the nearest hundred or thousand to get an estimate. | round digits to estimate addition solutions |
| Estimation II |  |  |
| 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 <br> 3-5 digit addition 2 terms |

## Math Operations Grade 4

2 - Subtraction

| ACTIVITY NAME | INSTRUCTION | REQUIRED SKILLS |
| :---: | :---: | :---: |
| Three from Three (2 activities) | Subtract one 3,4,5 digit number from another. <br> 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 <br> 3-5 digit subtraction 2 terms |

## Math Operations Grade 4

3 - Multiplication

| ACTIVITY NAME | INSTRUCTION | REQUIRED SKILLS |
| :---: | :---: | :---: |
| Complete the Table (2 activities) | Fill in the missing values in a multiplication table. | multiplication facts to 12 |
| First Five Multiples | Enter the first five multiples of a number. |  |
| Next Three Numbers | Enter the next three numbers in a multiplication pattern. |  |
| Multiplication Facts | Recall multiplication facts |  |
| Two Digits Multiplied by One Digit | Multiply 2 digits by one digit. | multiply 2-3 digits by 1 digit |
| Three Digits Multiplied by One Digit | Multiply 3 digits by one 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 multiplicationbased 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 $\times 3$ digit solutions. | apply mathematical concepts to real-world applications multiply 2-3 digits by 1 digit |

## Math Operations Grade 4

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 <br> divide 3-4 digits by 1 digit with and without remainders |
| Remainder Word Problems |  |  |

