



### Number Concepts Grade 5

Developed by teachers and mathematics specialists, **Number Concepts 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 numeration. Helpful clues and examples, along with exciting audio-visual content, ensure that students of all learning styles can use the software independently. **Number Concepts Grade 5** is an effective and engaging way to improve student performance with the main concepts of numeracy.

### Targeted Skills

- Number Sense: numbers to 1,000,000 - standard form/expanded forms, greater than/less than, place value, ordering, rounding, skip counting, written forms, word problems
- Fractions: fraction types, converting between types, adding/subtracting with like/unlike denominators, lowest common denominators, reducing fractions, word problems
- Decimals: understand and compare decimals to thousandths, adding decimals to thousandths, converting to fractions, multiplying/dividing decimals to tenths, word problems
- Bringing it All Together: converting fractions to decimals, missing term problems, real-world 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. Number Sense
2. Fractions
3. Decimals
4. Mixed Operations

## 1 - Number Sense

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
<b>Write in Expanded Form I</b>	Write a standard form or written number in expanded form.	understand expanded and standard forms for numbers up to 1,000,000
<b>Write in Expanded Form II</b>		
<b>Write in Standard Form</b>	Write an expanded form number in standard form.	
<b>Place Value</b>	Identify the digit in the given place value.	understand place value for numbers to 1,000,000
<b>Make Biggest and Smallest</b>	Make the biggest and smallest number you can from a given set of digits.	
<b>Greater, Less or Equal?</b>	Compare and order numbers to 1,000,000	order numbers to 1,000,000
<b>Order the Numbers</b>		
<b>Round and Round</b>	Round numbers to various place values up to 1,000,000	round numbers to 1,000,000
<b>Round Three Times</b>		
<b>Skip Counting</b> (two activities)	Count by various increments up to 1,000,000	understand skip counting up to 1,000,000
<b>City Populations</b>	Real-world problems involving written form of numbers to 1,000,000.	apply mathematical concepts to real-world applications understand written form of numbers to 1,000,000

## 2 - Fractions

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
<b>What Fraction Type?</b>	Is the given fraction proper, improper or a mixed number?	understand fraction types
<b>Add &amp; Subtract - Like Denominators</b> (two activities)	Add and subtract fractions with equal denominators.	add and subtract fractions with equal denominators
<b>Improper Fractions</b>	Convert between improper fractions and mixed fractions.	understand relationship between improper and mixed fractions
<b>Mixed Fractions</b>		
<b>Make Equivalent Fractions</b>	Enter a digit to complete a given fraction equivalency.	understand and make equivalent fractions
<b>Are the Fractions Equal?</b>	Are two given fractions equal?	
<b>Reduce Fractions I</b>	Reduce the fraction you see to the lowest terms.	convert fractions to lowest terms
<b>Reduce Fractions II</b>		
<b>Finding Lowest Common Denominator</b>	Find the lowest common denominator and convert a pair of fractions.	convert pairs of fractions to their lowest common denominator
<b>Add &amp; Subtract - Unlike Denominators I</b>	Add and subtract fractions with unlike denominators.	add and subtract fractions with unlike denominators
<b>Add &amp; Subtract - Unlike Denominators II</b>		
<b>Add &amp; Subtract - Grab Bag</b>		
<b>Word Problems</b>	Solve mathematical word problems involving fractions.	apply mathematical concepts to real-world applications  compare the value of various fractions  add and subtract fractions with unlike denominators

## 3 - Decimals

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
<b>Place Value</b>	Identify the digit which occupies a given place value in a decimal.	understand place value for decimals to hundredths
<b>Write the Decimal</b>	Type the written form of the decimal you see.	understand written form of decimals to thousandths
<b>Decimal Counting</b>	Count up or down from a given decimal by tenths or hundredths.	count up or down by tenths or hundredths from a given decimal
<b>Round and Round</b>	Round decimals to various place values up to thousandths.	round decimals up to thousandths
<b>Which Will Round?</b>	Which given decimal, if rounded, would result in another given number?	
<b>Adding Decimals I</b>	Add and subtract decimals to thousandths.	add and subtract decimals to thousandths
<b>Adding Decimals II</b>		
<b>Subtracting Decimals I</b>		
<b>Subtracting Decimals II</b>		
<b>Multiplying Decimals I</b>	Multiply decimals up to tenths.	multiply and divide decimals to tenths
<b>Multiplying Decimals II</b>		
<b>Multiplying Shortcuts</b>	Use shortcuts to multiply decimals by 10, 100, 1000.	
<b>Dividing Decimals I</b>	Divide decimals up to tenths.	
<b>Dividing Decimals II</b>		
<b>Money Word Problems</b> (2 activities)	Solve mathematical word problems involving money and decimals.	
<b>Decimal Word Problems</b>		add and subtract decimals to hundredths

## 4 - Bringing it All Together

ACTIVITY NAME	INSTRUCTION	REQUIRED SKILLS
<b>Fractions and Decimals I</b>	Type the missing number to convert between given fractions and decimals.	understand relationship between fractions and decimals
<b>Fractions and Decimals II</b>		
<b>Order the Numbers I</b>	Order a mix of whole numbers, decimals and fractions.	convert between fractions and decimals
<b>Order the Numbers II</b>		
<b>Find the Missing Factor</b>	Find the missing term in multiplication and division problems.	use algebra to solve missing number problems
<b>Find the Missing Dividend</b>		
<b>Find the Missing Divisor</b>		
<b>Grocery Store Problems I</b>	Use division and decimals to answer real-world word problems.	apply mathematical concepts to real-world applications
<b>Grocery Store Problems II</b>		
<b>Word Problems I</b>	Use four operations and all numeracy concepts to solve various real-world word problems.	
<b>Word Problems II</b>		