Number Concepts Grade 5

In **Number Concepts Grade 5**, students are able to develop and practice their skills with the principal concepts of mathematical numeracy - number sense, fractions, decimals and mixed operations. The program features more than 50 activities and countless number questions and word problems. To allow students to build their skills sequentially, the difficulty of the questions in each unit slowly increases. To capture the student's interest, **Number Concepts Grade 5** uses hundreds of colorful graphics, animations, sound effects and music. These rewards will motivate the students to continue learning with the software.

Targeted Skills

- Number Sense - understanding, comparing and writing numbers to 1,000,000

- Fractions - understanding, converting and reducing fractions, finding lowest common denominators, adding and subtracting fractions with like and unlike denominators

- Decimals - understanding, comparing, writing, adding and subtracting decimals to thousandths, multiplying and dividing decimals to tenths

- Mixed Operations - converting between fractions and decimals to thousandths

Marks Manager

The Marks Manager 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 - 12 activities

2. Fractions - 14 activities

3. Decimals - 19 activities

4. Bringing it All Together - 11 activities

1. Number Sense

ACTIVITY NAME	CONTENT	REQUIRED SKILLS
Write in Standard Form	Type the standard form for a given written number.	Convert between written, standard and expanded forms to 1,000,000.
Write in Expanded Form I	Type the expanded form for a given written form of a number.	
Write in Expanded Form II	Type the expanded form for a given written number.	
Place Value	Which digit is in the given place value.	Understand and apply place value to 1,000,000.
Greater, Less or Equal?	Does the greater than, less than or equals sign belongs between two numbers?	Compare value of two or more numbers to 1,000,000.
Order the Numbers	Click on a series of given numbers in order.	
Round and Round	Round a given number to a set value.	Round numbers to 1,000,000 to various set values.
Round Three Times	Round a given number to 3 different set values.	
Skip Counting (2 activities)	Starting with a given number, count up by a set amount.	Skip count by set amounts from a given number to 1,000,000.
Make Biggest and Smallest	Make the biggest or smallest number you can from a given series of digits.	Understand and apply place value to 1,000,000.
City Populations	Write given written numbers in standard or expanded forms.	Convert between written, standard and expanded forms to 1,000,000.

2. Fractions

ACTIVITY NAME	CONTENT	REQUIRED SKILLS
What Fraction Type?	Identify which type of fraction you see - mixed number, improper fraction, proper fraction.	Understand types of fractions.
Add & Subtract - Like Denominators (2 activities)	Fill in the blanks to solve basic addition and subtraction problems with like denominators.	Add and subtract with like denominators.
Improper Fractions	Change improper fractions into mixed fractions.	Convert between different types of fractions.
Mixed Fractions	Change mixed fractions into improper fractions.	
Make Equivalent Fractions	Fill in the blank to make the two fractions equal.	Understand and apply basic fraction equivalencies.
Are the Fractions Equal?	Various questions which lead students through the concept of equality of fractions.	
Reduce Fractions (2 activities)	Reduce the fraction you see to the lowest terms.	Reduce fractions to lowest terms.
Finding Lowest Common Denominator	Find the lowest common denominator for two fractions and then reduce them.	Understand and apply concept of lowest common denominators.
Add and Subtract - Unlike Denominators I	Fill in the blanks to solve addition and subtraction problems with unlike denominators.	Add and subtract with unlike denominators.
Add and Subtract - Unlike Denominators II		
Add and Subtract - Grab Bag		
Fraction Word Problems	Apply fraction skills in basic real-world fraction word problems.	Add and subtract with like denominators. Add and subtract with unlike denominators.

3. Decimals

ACTIVITY NAME	CONTENT	REQUIRED SKILLS
Place Value	Which digit is in the stated place value for a given decimal.	Understand place value in decimals to thousandths.
Write the Decimal	Type the written form a given decimal.	Understand written forms and standard forms of decimals to thousandths.
Decimal Counting	Count by a set amount going up or down from a given decimal.	Add or subtract a set amount from a given decimal.
Round and Round	Round a given decimal to a stated place value.	Round decimals to thousandths.
Which Will Round?	Which decimal will round to a set number, if rounded to a certain decimal place.	
Adding Decimals (4 activities)	Answer decimal addition problems digit-by-digit with a pre-placed cursor. Answer decimal addition problems without a pre-placed cursor.	Add decimals to thousandths.
Subtracting Decimals (2 activities)	Answer decimal subtraction problems digit-by-digit with a pre-placed cursor. Answer decimal subtraction problems without a pre-placed cursor.	Subtract decimals to thousandths.
Multiplying Decimals (2 activities)	Answer decimal multiplication problems digit-by-digit with a pre-placed cursor. Answer decimal multiplication problems without a pre-placed cursor.	Multiplying with decimals to tenths.
Multiplying Shortcuts	Answer a series of multiplication questions to learn multiplication shortcuts.	Understand unique property of multiplying decimals by 10s.
Dividing Decimals (2 activities)	Answer decimal division problems digit-by-digit with a pre-placed cursor. Answer decimal division problems without a pre-placed cursor.	Dividing with decimals to tenths.
Money Word Problems (2 activities)	Apply decimal skills in basic real-world fraction word problems.	Understand decimals to thousandths. Add and subtract decimals to thousandths.
Decimal Word Problems		Multiplying and dividing with decimals to tenths.

4. Bringing it All Together

ACTIVITY NAME	CONTENT	REQUIRED SKILLS
Fractions and Decimals I	Describe colored portion of a shape as a fraction and as a decimal.	Convert between decimals to hundredths and basic fractions.
Fractions and Decimals II	Click on the decimal that is equal to a given fraction.	
Order the Numbers I	Order a mixture of decimals, fractions and whole numbers from smallest to largest.	
Order the Numbers II		
Find the Missing Factor	Find the missing terms in multiplication and division problems.	Apply basic algebra to find the missing values in multiplication and division problems.
Find the Missing Dividend		
Find the Missing Divisor		
Grocery Store Problems I	Apply decimal and fraction skills in basic real-world mixed operations word problems.	Convert between decimals to hundredths and basic fractions.
Grocery Store Problems II		
Word Problems I		
Word Problems II		