

Unit Descriptions

QUICK USER GUIDE

KINDERGARTEN UNITS



COMPARE 1 TO 10



BUILD 1 TO 10 OPTIMALLY



IDENTIFY MISSING ADDEND

Comparisons and Ordering

- **Compare 1 to 10.** Students compare sets of 1 to 10 objects and identify which is more and/or less.
- **Identify More, Less and Equal.** Students compare flashed sets and numerals of 1 to 10 objects and identify the set that is more, less, and/or equal.
- **Ordering Numbers.** Students order numbers and identify missing numbers in decades from 1 to 100.

Counting

- **Build 1 to 10 Optimally.** Students build and identify numbers from static and flashed sets of 1 to 10 objects using the least number of mouse clicks.
- **Doubles and Near Doubles.** Students build and identify numbers from 1 to 20 that are grouped as doubles and near doubles.

Addition and Subtraction

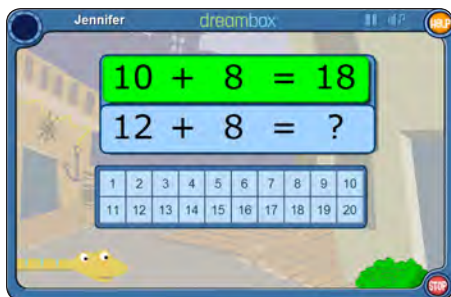
- **Identify Missing Addend.** Students identify a missing part (addend) when given one part (addend) and a whole (sum) from 3 to 10.
- **Beginning Adding and Removing.** Students build and identify amounts that are 0, 1, or 2 more or less than a given quantity of 0 to 10.
- **Identify Number Pairs.** Students identify sets of objects and pairs of numbers that add up to 8, 9 and 10.

Problem Solving

- **Problem Solving (K).** Students develop problem-solving skills with DreamBox math puzzles. Kindergarten puzzles include Forest Maze and The Petting Zoo (levels 1 to 3).



BUILD UP TO 20 OPTIMALLY



DOUBLING AND MAKING 10



IDENTIFY MORE AND LESS UP TO 100



PLACE VALUE TO 100



PROBLEM SOLVING (1)

GRADE 1 UNITS

Counting

- **Build Up to 20 Optimally.** Students build and identify numbers from static and flashed sets of 1 to 20 objects using the least number of mouse clicks.
- **Build Up to 50 Optimally.** Students build and identify numbers from static and flashed sets of 1 to 50 objects using the least number of mouse clicks.
- **Build Up to 100 Optimally.** Students build and identify numbers from static and flashed sets of 1 to 100 objects using the least number of mouse clicks.

Addition and Subtraction

- **Doubling and Making 10.** Students use the strategies of “Doubling” and “Making Ten” to add and subtract single-digit numbers (sums to 40).
- **Doubling to 20.** Students build and identify numbers from 1 to 20 when told to double a number (and at times, add or subtract 1) from 1 to 10.
- **Using 10 as a Landmark.** Students use landmarks of 10 when adding two numbers with sums to 24 ($12 + 12$).
- **Identifying Number Pairs.** Students identify pairs of numbers that add up to 15, 20, 50 and 100 using multiples of 5 and 10.

Comparisons and Ordering

- **Identify More and Less Up to 100.** Students compare sets of 1 to 100 objects and identify which is more or less.
- **Counting Forward and Backward.** Students place numbers in a row of the hundreds chart when given two numbers.
- **Build Columns of a Hundreds Chart.** Students identify vertical patterns of the hundreds chart by placing numbers in one or more columns.
- **Moving on a Hundreds Chart.** Students identify the number on the hundreds chart that is 1, 2, 8, 9, 10 or 11 away from a starting number.
- **Comparison Symbols.** Students compare sets of objects and numbers from 1 to 100 and make true equations using the greater than ($>$), less than ($<$) and equal ($=$) symbols.

Place Value

- **Place Value to 100.** Students use groups of tens and ones to build and pack amounts of objects and determine totals (up to 100).

Problem Solving

- **Problem Solving (1).** Students develop problem-solving skills with DreamBox math puzzles. Grade 1 puzzles include Dunk Tank, The Petting Zoo (levels 4 to 6) and Frog Race (levels 1 to 2).



FINDING EQUAL EXPRESSIONS



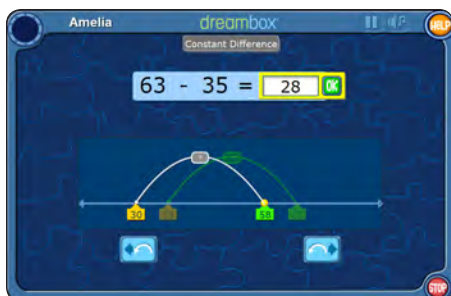
PLACE VALUE TO 500 (OR 1,000)



MAKING JUMPS OF 10 (OR 3 TO 9)



ADDITION: COMPENSATION



SUBTRACTION CONSTANT DIFFERENCE

GRADE 2 UNITS

Comparisons and Ordering

- **Finding Equal Expressions.** Students use numerals to make as many groups of equivalent expressions as possible.
- **Assessing Equality.** Students determine whether a statement is true, false, greater than, less than, equal or not equal.
- **Hundreds Charts to 500.** Students place numbers up to 500 on hundreds charts and number lines.
- **Compare Numbers Up to 500 (or 1,000).** Students compare numbers up to 500 (or 1,000) using the comparison symbols $<$ and $>$, with special attention to the placement of zeros and digit reversals.

Place Value

- **Place Value to 500 (or 1,000).** Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 500 [or 1,000]).

Addition and Subtraction

- **Making Jumps of 10 (or 3 to 9).** Students add and subtract 10 (or 3 to 9) to and from numbers between -200 and 200 .
- **Finding Groups of Tens.** Students group numbers into tens and multiples of 10 when adding up to 12 addends.
- **Addition Compensation.** Students manipulate two addends to create an equivalent but friendlier problem that can be solved mentally ($31 + 26$ becomes $30 + 27$).
- **Adding and Subtracting Groups of Tens.** Students add and subtract multiples of 10 and leftovers between -100 and 200 .
- **Identifying Missing Tens.** Students identify the difference between two addends when that difference is a multiple of 10.
- **Adding and Subtracting Landmark Numbers.** Students add or subtract two numbers by jumping to the nearest multiple of 10, then adding additional tens and leftovers ($45 + 28$ becomes $45 + 5 + 10 + 10 + 3$).
- **Identify Missing Addends to 1,000.** Students identify a missing part (addend) when given one part (addend) and a whole (sum) from 3 to 1,000.
- **Identify Number Pairs Up to 200.** Students identify pairs of numbers that add up to 200 using multiples of 5 and 10.
- **Subtraction Constant Difference.** Students manipulate two addends to create an equivalent but friendlier problem that can be solved mentally ($89 - 36$ becomes $83 - 30$).

GRADE 2 UNITS CONTINUED

Problem Solving

- **Problem Solving (2).** Students develop problem-solving skills with DreamBox math puzzles. Grade 2 puzzles include The Petting Zoo (level 7) and Frog Race (levels 3 to 8).



PROBLEM SOLVING (2)



MULTIPLICATION AND DIVISION SITUATIONS



MAKE AND COMPARE RODS



FRACTIONS ON A NUMBER LINE

GRADE 3 UNITS

Multiplication and Division

- **Multiplication and Division Situations.** Students use various tools and groupings to develop an understanding of multiplication and division.
- **Multiplication: Doubling.** Students double known basic facts to find the product of more challenging basic facts.
- **Multiplication.** Adding or Removing Groups. Students add or remove a group to or from a known basic fact to determine the product of another basic fact.
- **Multiplication: Double and Halve.** Students use known basic facts and double one factor and halve the other to determine the product of a more challenging problem.
- **Multiplication Partial Products.** Students use the sum of two known basic facts to determine the product of a more challenging problem.
- **Partial Products Using Arrays.** Students build arrays and use partial products to “cover” a rectangular area model of multiplication up to 12×12 .
- **Factors and Products.** Students use a table to determine factors and products of common ratios, such as tires on a car.

Fractions

- **Make and Compare Rods.** Students cut rods into equal parts and use those rods to compare fractions with like numerators or like denominators.
- **Fractions: Money and Time.** Students use money and time amounts to build fraction equivalencies.
- **Fractions Choose Context.** Students choose between money and time amounts to build fraction equivalencies.
- **Early Equivalency I.** Students use a table to find equivalent fractions and scaling factors for common fractions.
- **Fractions on a Number Line.** Students use a number line to select and place fractions, improper fractions, and mixed numbers.

GRADE 4 UNITS

Multiplication and Division

- **Multiplication: Mixed Strategies.** Students explore the commutative property ($3 \times 5 = 5 \times 3$) and apply various strategies to solve double-digit multiplication problems.
- **Identifying Common Multiples.** Students find common multiples of two factors (2 – 12).
- **Identifying Factors.** Students identify factors of numbers to 100.

Place Value

- **Place Value to 9,999.** Students use groups of thousands, hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 9,999).

Fractions

- **Fractions in the Real World 1.** Students explore different contexts of money and time to build fraction equivalencies less than 1.
- **Fractions in the Real World 2.** Students explore different contexts of money and time to build fraction equivalencies less than 2.
- **Comparing Fractions 1.** Students use a table to compare Grade 4 fractions with unlike numerators and unlike denominators.
- **Comparing Fractions 2.** Students use a table to compare Grade 5 fractions with unlike numerators and unlike denominators.
- **Early Equivalency II.** Students use a table to find equivalent fractions and scaling factors for all fractions.
- **Decomposing Fractions.** Students use blocks to build fractions in a variety of ways.
- **Fraction Addition.** Students add fractions with like denominators by using blocks as a model.
- **Fraction Subtraction.** Students subtract fractions with like denominators by using blocks as a model for the removal strategy.
- **Fraction Multiplication.** Students multiply fractions by whole numbers using blocks as a model for a strategy based on multiples of unit fractions.



MULTIPLICATION: MIXED STRATEGIES



PLACE VALUE TO 9,999



FRACTIONS IN THE REAL WORLD 1



FRACTION ADDITION

For more information, contact Client Care at 877.451.7845
or email support@dreambox.com.