100 Grid Two-sided Dry Erase Boards

This Really Good Stuff® product includes:
- 6 - 100 Grid Two-sided Dry Erase Boards
- This Really Good Stuff® Instructional Guide

Congratulations on your purchase of these Really Good Stuff® **100 Grid Two-sided Dry Erase Boards**—handy math tools to reinforce counting, number operations, and mental math skills.

Meeting Common Core State Standards

The Really Good Stuff® **100 Grid Two-sided Dry Erase Boards** are aligned with the following Common Core State Standards for Mathematics:

Counting and Cardinality

K.1   Count to 100 by ones and by tens.

K.2   Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

K.3   Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Operations and Algebraic Thinking

2.1   Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknown in all positions, for example, by using drawings and equations with a symbol for the unknown to represent the problem.

Number and Operations in Base Ten

1.1   Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

1.2   Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases.

1.2.a   10 can be thought of as a bundle of then ones—called a "ten."

1.2.b   The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

1.2.c   The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

1.5   Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explaining the reasoning used.

2.2   Count within 1,000; skip count by 5s, 10s, and 100s.

Storing the 100 Grid Two-sided Dry Erase Boards

Before using the **100 Grid Two-sided Dry Erase Boards,** make copies of this Really Good Stuff® Activity Guide, and file the pages for future use. Or, download another copy of it from our Web site atreallygoodstuff.com. Always use a dry erase marker on the Boards in order to preserve their Write Again® wipe-off laminate surface. After each use, wipe off the Boards with an eraser or soft cloth to remove any marks. You may want to store each Board in a large zippered plastic bag along with a dry erase marker and an eraser so that all necessary materials are together.

Introducing the 100 Grid Two-sided Dry Erase Boards

Explain that students will be using the Boards to practice skills utilizing the numbers 1 through 100.

1. Using a dry erase marker, demonstrate how to circle the numbers as you count. Once you reach 100, erase the circles.
2. Model counting by ones, while you point to the numbered squares on a Board, and invite students to count with you.
3. Give students a number to count to. Together, count out loud, circling numbers on the Board as you say them, stopping at that given number.
4. Divide students into groups of two or three, and provide each group with a Board, a dry erase marker, and an eraser to use to reinforce the following counting skills:
   - Instruct a student to name a number between 1 and 100. Have students count forward independently, or as a group, to the given number, circling numbers as they count out loud.
   - Direct a student to choose a beginning number where the group is to start counting and an ending number where the group is to stop. Tell the rest of the group to count forward out loud, circling the numbers on the Board as they say them.
   - Repeat the previous two activities by counting backward.

Extending the Counting Sequence

Have students identify the last number on a **100 Grid Two-sided Dry Erase Board**. Demonstrate how to extend the counting sequence by adding rows to the bottom of the Board with a dry erase marker, while students call out the numbers in each row. When appropriate, use the 120 grid to complete classroom activities.

Skip Counting and Number Patterns

Show students how to use the **100 Grid Two-sided Dry Erase Boards** to skip count and identify number patterns:
- Use a colored marker to circle numbers as students skip count as a class. Have students describe the patterns they see on the circled number grid.

- Without erasing the first set of circles, use a different color marker and circle numbers as students skip count by a different number. Lead a discussion of how the number patterns are related to each other. (For example, you might discuss any numbers that are shared in both skip counts.)

Variation: Have more-advanced students work in small groups and start with a number other than zero. For example, students might skip count by fives starting with the number 2, and circling 2, 7, 12, 17, and so forth.

Finding a Number That Is More or Less
Ask a student to name a number and to use a dry erase marker to circle that number on a **100 Grid Two-sided Dry Erase Board**. Show students how to move one space to the right to find the number that is one more than the given number, and how to move to the left to find the number that is one less than the number. Tell students to use a dry erase marker to write the first number in one color in the space below the grid and to use a different color marker to write the numbers that are one more and one less.

Demonstrate how students can quickly find 10 more or 10 less than a given number. Have a student name a number and use a dry erase marker to circle that number on the grid. Point out that the number that is *10 more* is located directly *below* the number and the number that is *10 less* is located directly *above* it. Have a student circle each number, and direct him or her to prove this method by counting forward 10 and counting backward 10 to the circled numbers. Guide students to notice that the ones place in these numbers is the same and only the numeral in the tens place changes. Practice some more, having students record their work in the space below the grid.

Missing Numbers Puzzles
Make one copy of the *Missing Numbers Puzzles Reproducible*. In the center square of each grid, write one number from 1 to 100. Then, copy and distribute the *Missing Numbers Puzzles Reproducible* to students. Tell students that numbers are missing from each number grid and that they have to use their strategies to figure out the numbers that go in the empty squares. Have students use counting, 1 more/1 less, 10 more/10 less, and other strategies to fill in the eight numbers that surround the given numbers. Provide a **100 Grid Two-sided Dry Erase Board** for students who might

have trouble filling in the missing numbers mentally. Have students share their answers when finished.

Place Value Activities
Have students circle a two-digit number on a **100 Grid Two-sided Dry Erase Board**. Instruct them to write that same number in the space below the grid. Ask students which digit means the number of tens and which digit means the number of ones. Use the following activities to reinforce place value concepts:
- Have students circle numbers with a certain number of tens or ones and to write them in the space below the grid.
- Instruct students to circle all of the numbers in a row. Ask students how these numbers are alike and how they are different, guiding them to talk about the numbers of tens and ones.
- Direct students to circle all of the numbers in a column. Ask students how these numbers are alike and how they are different, guiding them to talk about the numbers of tens and ones.

Using the Blank Grid
Using a dry erase marker, have students write the numbers 1 through 100 or 1 through 120, then differentiate activities in the following ways:
- Have students practice number patterns by filling in the grid. For example, challenge students to fill in the grid vertically to help them visualize counting by tens.
- Have two students work together with different colored markers to fill in the odd numbers and the even numbers.
- Divide the class into pairs: Have students complete the number chart, then one partner erases several numbers or groups of numbers and his or her partner adds the missing numbers. Partners check each other's work.

Creating an Addition Grid
Have students use a dry erase marker to write a plus sign in the upper left corner of a **100 Grid Two-sided Dry Erase Board**. Direct students to write the numerals 1 through 10 along the top of the grid with a numeral above each square. Instruct students to write the numerals 1 through 10 down the left side of the grid with a numeral next to each square. Show students how to fill in the sums of the numbers, using 1 + 1 as an example: Tell students to point one finger above the 1 at the top of the grid, and point another finger next the 1 on the left

side of the grid. Now have them drag their two fingers together and write 2 where their fingers meet. Indicate that students are to practice their addition facts by filling in all of the +1 facts, then the +2 facts, and so on, looking for patterns in the sums as they work. For further practice, encourage students to use the space at the bottom of the *Board* to write equations and to use the addition grid to solve them.

Variation: When students are ready for multiplication, have them create a similar multiplication grid filling in factors and products.
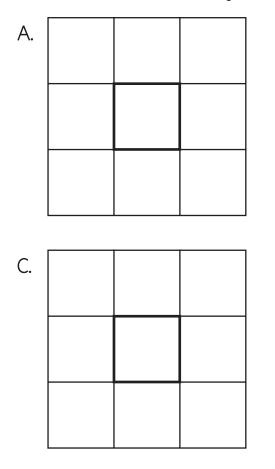
Practice Grid
Make multiple copies of the *Blank Number Grid Reproducible*, and file them for future use. When a student needs to practice a specific skill, program the reproducible in a variety of ways. For instance:
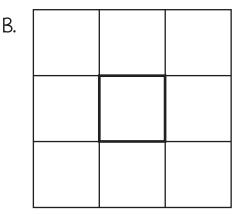
- Fill in random numbers on the grid, leaving many spaces blank. Have students employ counting, 1 more and 1 less, 10 more and 10 less, and other strategies to fill in the missing numbers.
- Fill in the addends across the top and left side of the grid. Have students practice addition by filling in sums in the squares.
- Fill in the factors across the top and left side of the grid. Have students practice multiplication by filling in products in the squares.

Missing Numbers Puzzles Reproducible

Name _____

Fill in the numbers that surround the given number.

A.

B.

C.

D.

Name _____

Blank Number Grid