

1 x 10 Ten-Frame Mats

This Really Good Stuff® product includes:

- 12 Two-sided 1 x 10 Ten-Frame Mats, Write Again® wipe-off laminate
- This Really Good Stuff® Instructional Guide

Congratulations on your purchase of these Really Good Stuff® **1 x 10 Ten-Frame Mats**—developmentally intuitive tools for counting, cardinality, as well as addition and subtraction within 20.

Meeting the Standards

The Really Good Stuff® **1 x 10 Ten-Frame Mats** align with the Common Core State Standards for Mathematics below. For alignment with other state standards, please refer to our website's Standards Match.

Counting and Cardinality

- K.CC.4** Understand the relationship between numbers and quantities; connect counting to cardinality.
- K.CC.5** Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
- K.CC.6** Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

Operations and Algebraic Thinking

- K.OA.2** Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- K.OA.3** Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
- K.OA.4** For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
- K.OA.5** Fluently add and subtract within 5.
- 1.OA.1** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
- 1.OA.2** Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
- 1.OA.3** Apply properties of operations as strategies to add and subtract.
- 1.OA.4** Understand subtraction as an unknown-addend problem.
- 1.OA.5** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2)
- 1.OA.6** Add and subtract within 20, demonstrating fluency for addition and subtraction within 10; Use strategies such as counting on; making ten; decomposing a number leading to a ten; sing the relationship between addition and subtraction; and creating equivalent but easier or known sums.
- 1.OA.7** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.
- 1.OA.8** Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

Number and Operations in Base Ten

- K.NBT.1** Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
- 1.NBT.2b** Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

Preparing and Introducing the 1 x 10 Ten-Frame Mats

Before introducing the Write Again® **1 x 10 Ten-Frame Mats**, make copies of this Really Good Stuff® Instructional Guide, cut apart the reproducibles, and file the pages for future use. Or, download another copy of it from our website at www.reallygoodstuff.com. Separate along the perforations into 12 Mats.

Introduce the *Ten-Frame Mats* to students, and explain that their ten-frames will help them with counting, adding, and subtracting. Distribute the *Mats*, along with a dry erase marker and at least 10 counters, such as chips, beans, and coins, to each student. Show students how to place the single-frame side of the *Mat* vertically, so the spaces are vertical, in a column with the shaded squares at the bottom. Ask students what they notice about the squares on the *Mat*; if necessary, guide them to note the following features:

- The squares are all the same size.
- The squares on the bottom are gray.
- There are as many gray squares as white squares.

Using the 1x10 Ten-Frame Mats for Counting and Subitizing

Starting at the bottom of the **1 x 10 Ten-Frame Mat**, have students place a counter in each square and then add another counter as they say each number. Provide continued practice by having students remove a counter or two, and recounting the number of counters on the *Mat*. Instruct students to use their dry erase markers to record the number on their *Mats* beside the ten-frame.

Call out various numbers to 10, instructing the students to write each number you call on their *Mats* beside the ten-frame and to place that many of counters on their *Mats*. Repeat this practice until students begin to subitize and recognize that they are demonstrating the number 5 when there are enough counters to fill the gray spaces on the *Mat*.

Using the 1 x 10 Ten-Frame Mats for Adding Sums to Five

Starting at the bottom of the **1 x 10 Ten-Frame Mat**, have students practice sums to five by placing counters in the gray area: Have students place two counters on their ten-frames, while you write the numeral 2 on the whiteboard. Tell students to place one more counter on their ten-frame, while you write $+ 1 =$ next to the 2. Ask students how many counters are on their ten-frames in all. Complete the equation by writing 3 on the whiteboard, encouraging students to write the same equation beside their ten-frame. Repeat this process for at least one problem with a sum of five. For additional practice, distribute a copy of the *Sums to Five Reproducible*, and instruct students to work in pairs to solve each addition problem but to record each answer individually. Once students reach fluency with sums to five, use the reproducible for an assessment.

Sums to Ten

Give students problems for practicing sums to ten: Have students place three counters on their ten-frames, while you write the numeral 3 on the whiteboard. Tell students to place four more counters on

All instructional guides can be found online.

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their ten-frames, while you write $+ 4 =$ next to the 3. Ask students how many counters are on their ten-frames in all. Complete the equation on the whiteboard, encouraging students to write the same equation beside their ten-frame. Ask students what they notice about the completed ten-frame. Ask students such questions as:

- How many counters are in the gray area?
- How many counters are in the white area?
- Is there another number sentence besides $3 + 4 = 7$ to represent what the completed ten-frame is showing? ($5 + 2 = 7$)

For additional practice, distribute a copy of the *Sums to Ten Reproducible*, and instruct students to work in pairs to solve each addition problem but to record each answer individually. Once students reach fluency with sums to ten, use the reproducible for an assessment.

Introducing the Double 1 x 10 Ten-Frame Mats

Distribute the double **1 x 10 Ten-Frame Mats**, and show students how to place the Mat vertically, so they are looking at two columns, with the shaded squares at the bottom. Distribute a dry erase marker and at least 20 counters to each student. Write $6 + 8 =$ on the classroom whiteboard. Instruct students to record it on their Mats and to work with their counters to solve it, noting that since they already know one completed ten-frame equals 10, they can count up from 10 to reach the answer. After students have filled in their Mats, ask them how the ten-frames helped them to solve the expression. Have students work through several problems, and share their work.

Sums to Five Reproducible

Name: _____

$1 + 2 = \underline{\quad}$ $3 + 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$ $2 + 1 = \underline{\quad}$

$4 + 1 = \underline{\quad}$ $4 + 0 = \underline{\quad}$

$1 + 3 = \underline{\quad}$ $2 + 3 = \underline{\quad}$

$2 + 2 = \underline{\quad}$ $1 + 4 = \underline{\quad}$

$0 + 2 = \underline{\quad}$ $3 + 2 = \underline{\quad}$

$1 + 1 + 2 = \underline{\quad}$

$2 + 2 + 1 = \underline{\quad}$

Sums to Ten Reproducible

Name: _____

$5 + 1 = \underline{\quad}$ $3 + 4 = \underline{\quad}$

$1 + 9 = \underline{\quad}$ $2 + 8 = \underline{\quad}$

$4 + 4 = \underline{\quad}$ $4 + 3 = \underline{\quad}$

$2 + 4 = \underline{\quad}$ $5 + 3 = \underline{\quad}$

$2 + 6 = \underline{\quad}$ $5 + 4 = \underline{\quad}$

$5 + 5 = \underline{\quad}$ $4 + 6 = \underline{\quad}$

$3 + 7 = \underline{\quad}$ $9 + 1 = \underline{\quad}$

$8 + 2 = \underline{\quad}$ $4 + 5 = \underline{\quad}$

$2 + 6 = \underline{\quad}$ $3 + 3 = \underline{\quad}$

$2 + 5 = \underline{\quad}$ $8 + 0 = \underline{\quad}$

$7 + 2 = \underline{\quad}$ $1 + 8 = \underline{\quad}$

$3 + 5 = \underline{\quad}$ $6 + 3 = \underline{\quad}$

