

# Home Connection 17 ★ Activity



## NOTE TO FAMILIES

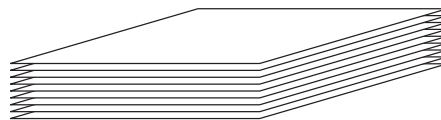
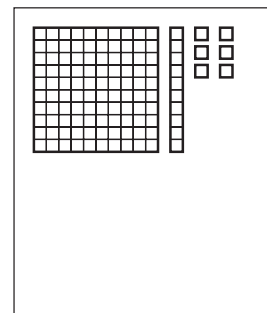
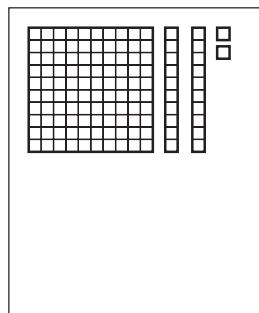
We have just started a new unit on large numbers. Over the next 7 or 8 weeks, children will continue to develop their skills at reading, writing, and understanding numbers to 999. They will develop strategies to add and subtract double-digit numbers, write story problems that involve large numbers, and do some graphing and averaging.

As we head into numbers over 20 and then over 100, it's very helpful to have a visual model—a picture that gives some information about the numbers themselves. We have found that base ten pieces are particularly effective. The children will use these pieces as they learn to count, add and subtract, even multiply and divide 2- and 3-digit numbers. Although these pieces can take on any value we assign them, for now, the little square, or “unit,” stands for 1. The strip stands for 10, and the large square, or “mat,” stands for 100. The game we're asking you to play this week will help your child become more comfortable interpreting and comparing these pieces.

## Place Value War

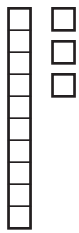
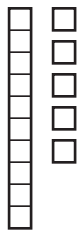
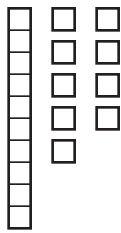
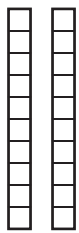
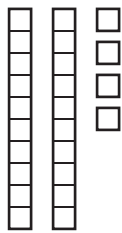
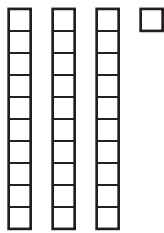
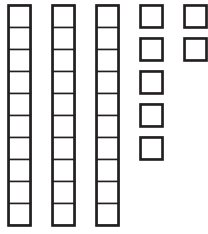
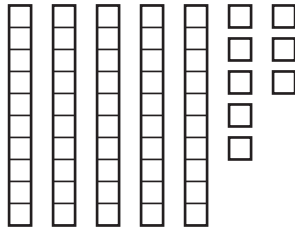
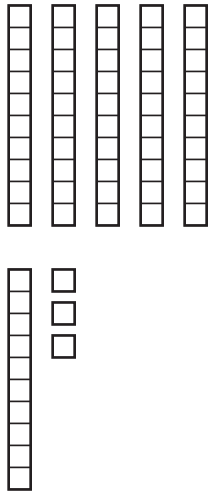
### Game Rules

- 1** Cut out the cards on the 3 attached sheets. Mix them thoroughly and place them in a stack, face down.
- 2** Take turns drawing a card and reporting how many units you see. The person with the card that's worth more gets to take both.
- 3** Continue until there are no cards left. The player with the most cards wins.
- 4** Shuffle the cards and play again.



**Child** I got 122.      **Dad** I only got 116.  
 What did you get,      You get this pair!  
 Dad?

# Place Value War cards, sheet 1

 <p>This card shows 13 units— 1 strip of 10 and three 1's.</p>		
		
		

# Place Value War cards, sheet 2

<p>Five vertical rods (hundreds) and two vertical rods (hundreds).</p>	<p>Four vertical rods (hundreds) and two vertical rods (hundreds).</p>	<p>A large square grid (thousands) and four vertical rods (hundreds).</p>
<p>A large square grid (thousands) and three vertical rods (hundreds).</p>	<p>A large square grid (thousands), one vertical rod (hundreds), and three vertical rods (hundreds).</p>	<p>A large square grid (thousands) and three vertical rods (hundreds).</p>
<p>A large square grid (thousands), four vertical rods (hundreds), and five vertical rods (hundreds).</p>	<p>A large square grid (thousands), four vertical rods (hundreds), and three vertical rods (hundreds).</p>	<p>A large square grid (thousands) and one vertical rod (hundreds).</p>

# Place Value War cards, sheet 3

<p>A place value chart with a 10x10 grid on the left. To its right are four vertical rods, each containing 10 small squares. Below the rods are two columns of unit squares: a column of 10 squares and a column of 2 squares.</p>	<p>A place value chart with a 10x10 grid on the left. To its right are four vertical rods, each containing 10 small squares. Below the rods are two columns of unit squares: a column of 10 squares and a column of 2 squares.</p>	<p>A place value chart with a 10x10 grid on the left. To its right are four vertical rods, each containing 10 small squares. Below the rods are two columns of unit squares: a column of 10 squares and a column of 6 squares.</p>
<p>A place value chart with a 10x10 grid on the left. To its right are two unit squares. Below the grid is another 10x10 grid.</p>	<p>A place value chart with a 10x10 grid on the left. To its right is one vertical rod containing 10 small squares. Below the rod are two columns of unit squares: a column of 5 squares and a column of 1 square.</p>	<p>A place value chart with a 10x10 grid on the left. To its right are two vertical rods, each containing 10 small squares. Below the rods are two columns of unit squares: a column of 5 squares and a column of 1 square.</p>
<p>A place value chart with a 10x10 grid on the left. To its right are two vertical rods, each containing 10 small squares. Below the rods are two columns of unit squares: a column of 5 squares and a column of 1 square.</p>	<p>A place value chart with a 10x10 grid on the left. To its right are three vertical rods, each containing 10 small squares.</p>	<p>A place value chart with a 10x10 grid on the left. To its right are four vertical rods, each containing 10 small squares. Below the rods is one unit square.</p>

NAME \_\_\_\_\_

RETURN BY \_\_\_\_\_

# Home Connection 17 ★ Worksheet

## Thinking About Big Numbers





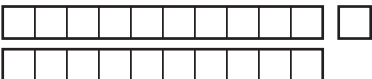



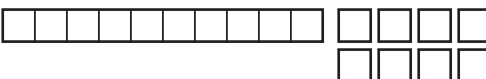



Take all the game cards you just used to play Place Value War and put them in order from the lowest to the highest. Then record the numbers in order on the lines below. The first 3 have been done for you.

13    15    19    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Add.

 $\begin{array}{r} 26 \\ +10 \\ \hline \end{array}$ 	 $\begin{array}{r} 32 \\ +10 \\ \hline \end{array}$ 
 $\begin{array}{r} 21 \\ +10 \\ \hline \end{array}$ 	 $\begin{array}{r} 43 \\ +10 \\ \hline \end{array}$ 
 $\begin{array}{r} 18 \\ +10 \\ \hline \end{array}$ 	 $\begin{array}{r} 47 \\ +10 \\ \hline \end{array}$ 

(Continued on back.)

## Home Connection 17 Worksheet (cont.)

What happens every time you add 10 to a number?

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# Home Connection 18 ★ Activity



## NOTE TO FAMILIES

Counting money can be another wonderful way to learn about place value. This week's Home Connection Activity, *Make a Quarter*, will provide your child with plenty of opportunity to count by 1's, 5's, and 10's, as he or she tries to find combinations of coins that add to 25¢. You may recognize this game as a variation of *Make the Sum*.

## Make a Quarter



### Game Rules

**1** Cut out the cards on the attached 2 sheets. Mix them thoroughly and place them in a stack, face down.

**2** Once your deck is ready, take turns drawing cards and placing them face up beside the deck. The object of the game is to combine cards to make 25¢. If you draw a card that shows a dime and 4 pennies, you'll have to place it face up beside the deck where it will be available to you or your partner. (Once a card is turned face up, it's "community property.") If your partner then draws a card that shows a dime and a penny, she may combine it with your card to make 25¢, and keep both cards.

**3** Play continues back and forth until no more cards can be combined to make 25¢. It's important to note that no one gets extra turns—if you win a set of cards, play still goes back to your

partner. It's also important to know that it will usually take more than 2 cards to make 25¢—it may take as many as 4 or 5 cards sometimes! Each time a new card is drawn, you and your partner will have to work together to count the money. It can be tricky to find combinations of coin cards that total exactly 25¢.

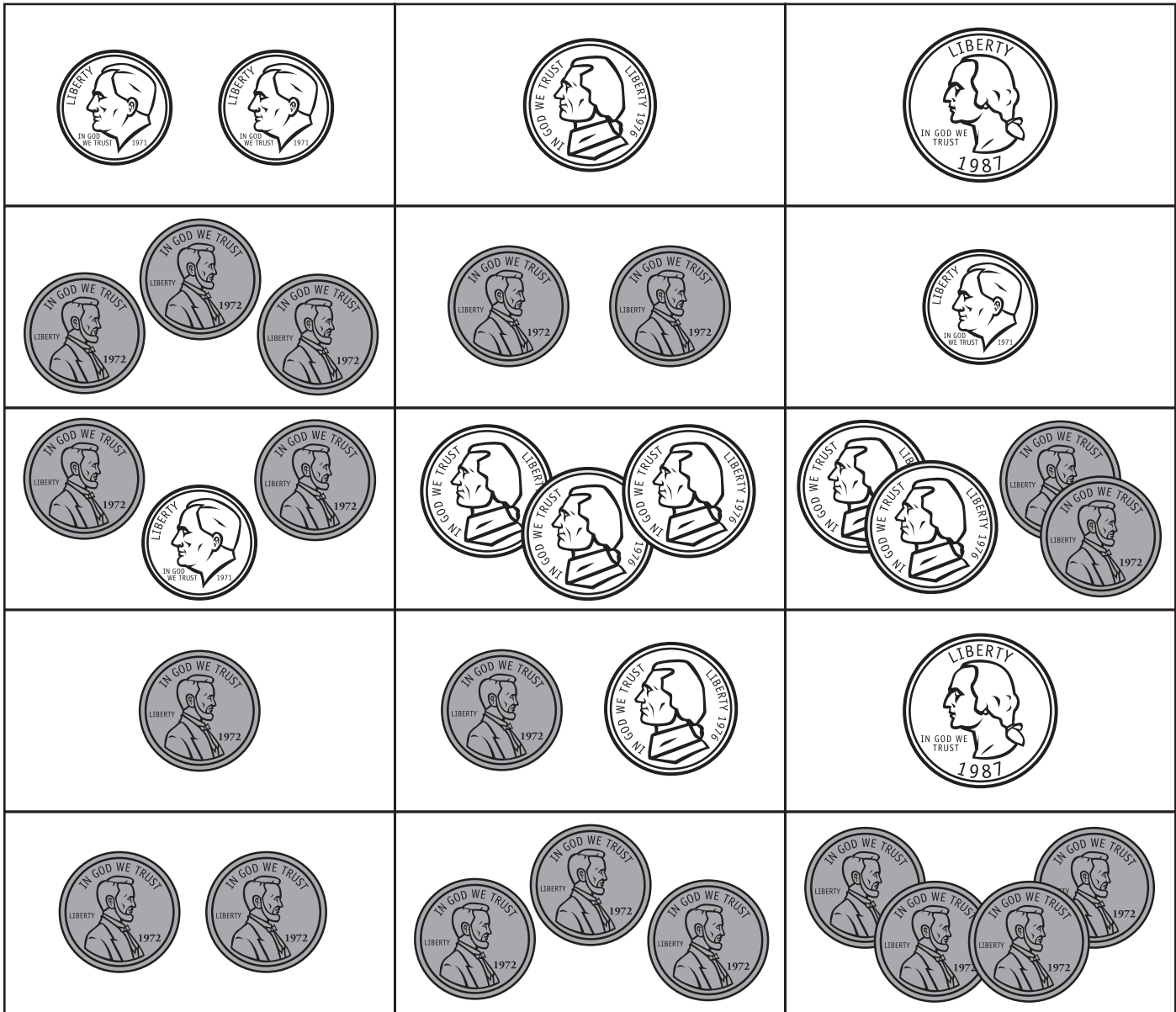
**4** When you have used as many cards as you can, count your cards to determine the winner. It is possible that a few cards will go unused at the end because they can't be combined to make 25¢.



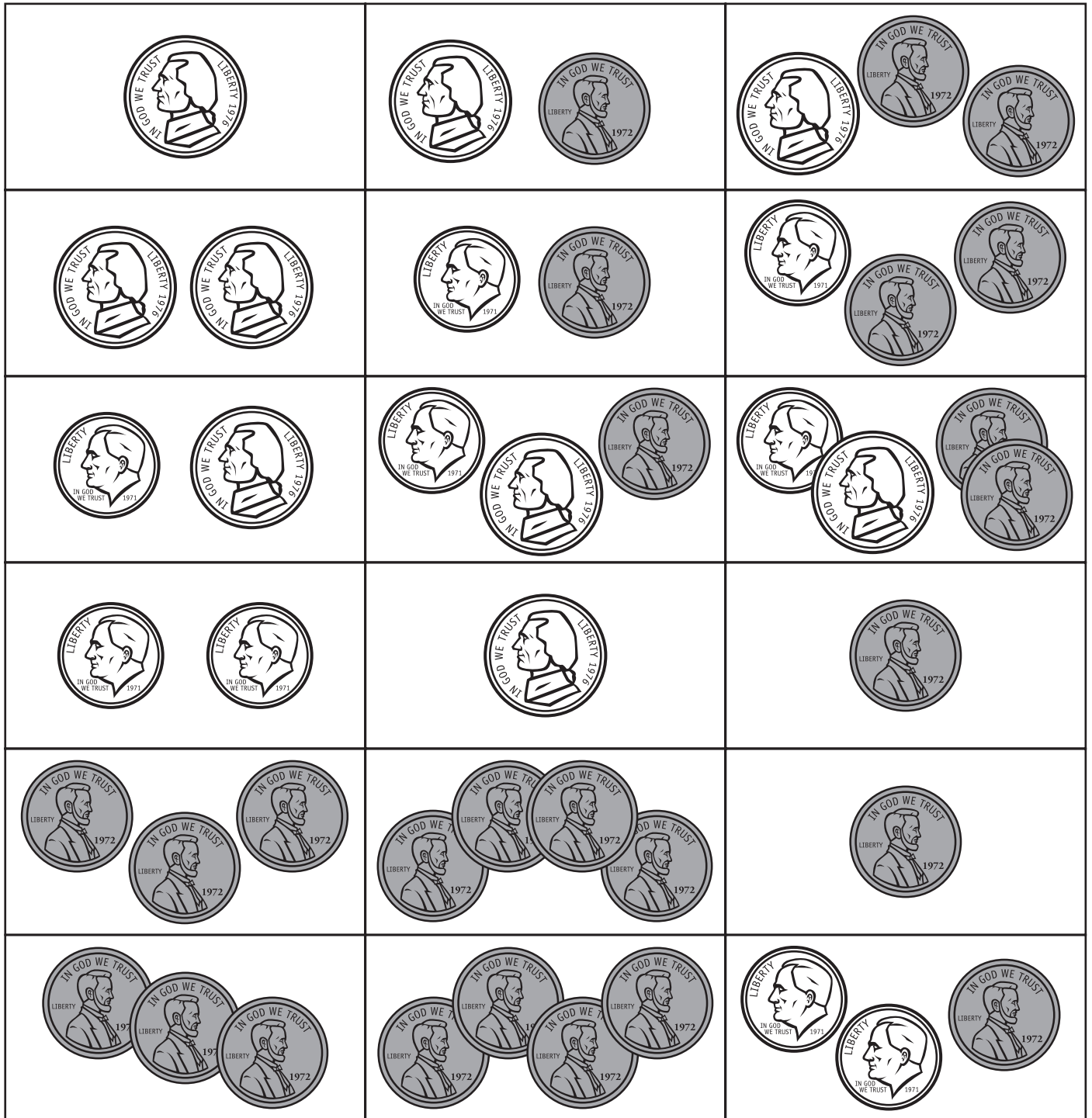
**Child** *Your turn, Mom!*

**Mom** *I hope I get a card with 9¢ on it!*

# Make a Quarter cards, sheet 1



# Make a Quarter cards, sheet 2



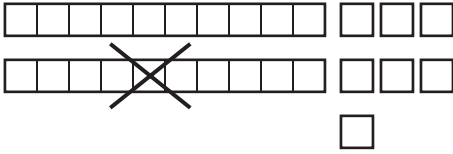

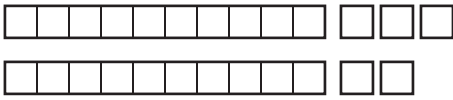
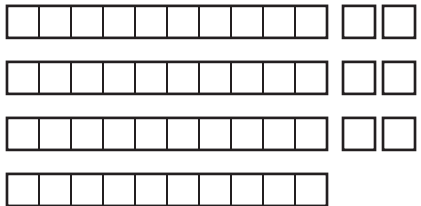
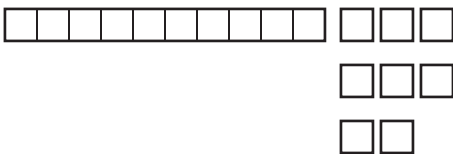
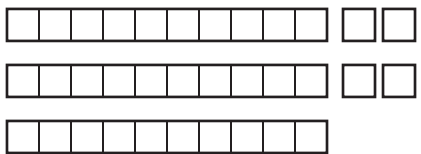
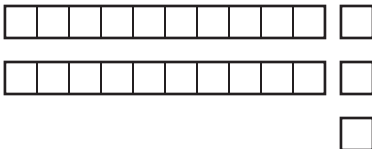

NAME \_\_\_\_\_

RETURN BY \_\_\_\_\_

# Home Connection 18 ★ Worksheet

## Adding & Subtracting 10's

Subtract.

 $\begin{array}{r} 27 \\ -10 \\ \hline \end{array}$	 $\begin{array}{r} 33 \\ -10 \\ \hline \end{array}$
 $\begin{array}{r} 25 \\ -10 \\ \hline \end{array}$	 $\begin{array}{r} 46 \\ -10 \\ \hline \end{array}$
 $\begin{array}{r} 18 \\ -10 \\ \hline \end{array}$	 $\begin{array}{r} 34 \\ -10 \\ \hline \end{array}$
 $\begin{array}{r} 23 \\ -10 \\ \hline \end{array}$	 $\begin{array}{r} 31 \\ -10 \\ \hline \end{array}$

What happens every time you subtract 10 from a number?

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Practice adding tens.

$$\begin{array}{r} 24 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 10 \\ \hline \end{array}$$

NAME \_\_\_\_\_

RETURN BY \_\_\_\_\_

## Home Connection 19 ★ Activity

### 25¢ or Bust!

#### Game Rules

**1** Cut out the cards on the accompanying sheet. Mix them thoroughly and place them in a stack, face down.

**2** Draw a card from the top of the pile, take a peek at it, and place it face down so your partner cannot see it. Have your partner do the same.

**3** After both of you have taken your first card, decide whether or not you want to draw any more cards in an attempt to get closer to 25¢ without going over. If you do decide to draw more cards, take turns pulling them off the top of the pile until neither of you wants any more. You can't take any more than 4, no matter what, and you have to place any other cards you take face up, so that both you and your partner can see them. (It's fair to peek at your own first card if you happen to forget what's on it!)

**4** After you've both taken all the cards you're going to take, you each need to turn your first card over and report the total to your partner. The person who gets closest to 25¢ without going over is the winner of the first round. If you both go over the mark, neither of you wins.

**5** After each round, record a number sentence about the cards you got in one of the boxes on the back of this sheet. For example, suppose the first card you drew in Round 1 was a dime. You decided to draw another card to get closer to 25¢. The next card you drew was a nickel and 2 pennies. That still didn't seem close enough, so you drew 1 more card and got 3¢. Your total was 20¢. Your partner drew a dime and 3 pennies, a nickel, and then 4¢, for a total of 22¢. You would write  $10¢ + 7¢ + 3¢ = 20¢$  in your Round 1 box. Your partner would write  $13¢ + 5¢ + 4¢ = 22¢$  in his or her Round 1 box, and circle it because the total was closest to 25¢ without going over.



**Sister** *I'm not going to take any more cards. There's a dime on my hidden card!*



**Child** *I need 1 more card. I only have 2 cents on my hidden card!*

(Continued on back.)

## Home Connection 19 Activity (cont.)

### Round 1 Results

		
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Me

My Partner

### Round 2 Results

		
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Me

My Partner

### Round 3 Results

		
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Me

My Partner

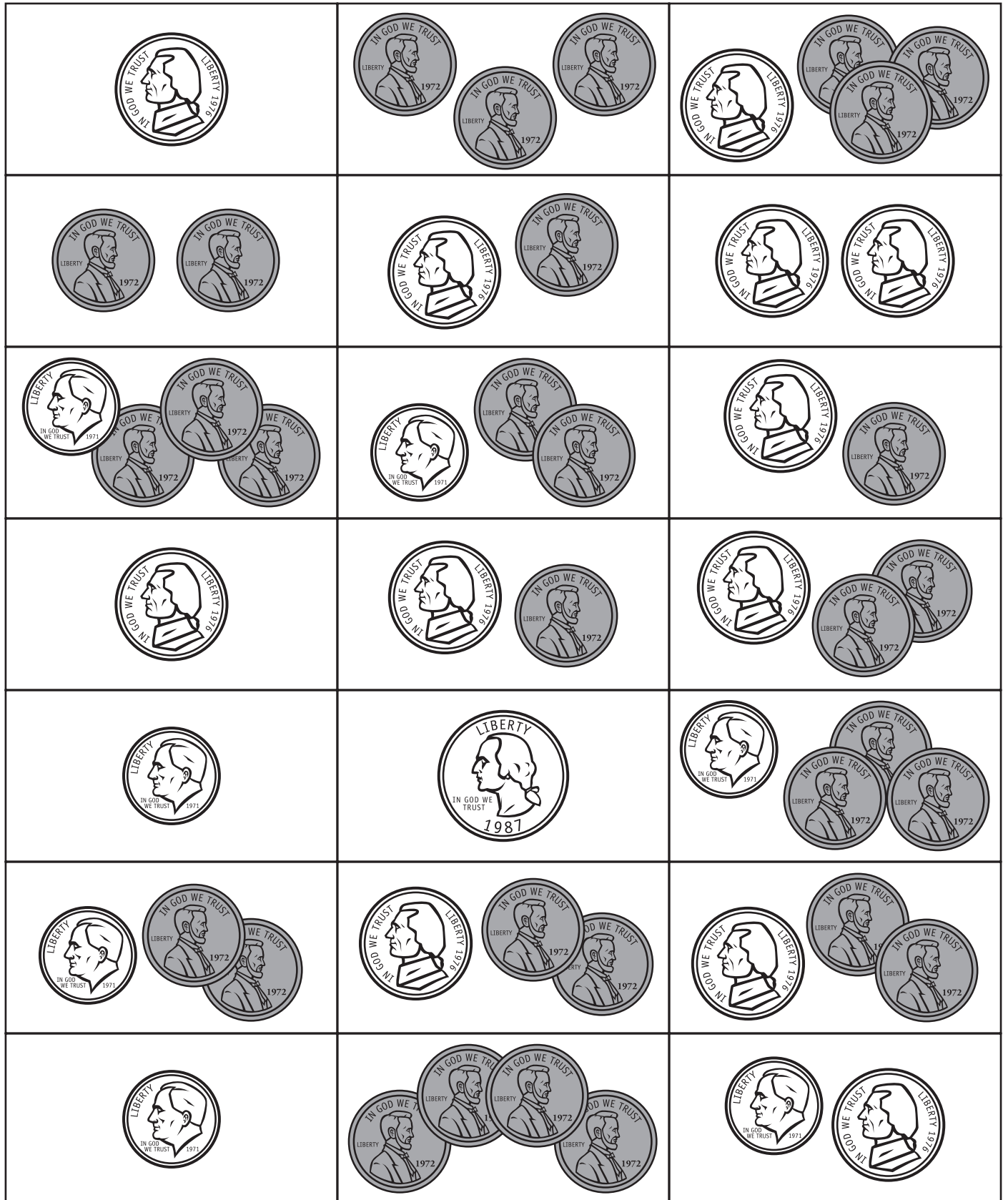
### Round 4 Results

		
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Me

My Partner

# 25¢ or Bust! cards



NAME \_\_\_\_\_

RETURN BY \_\_\_\_\_

# Home Connection 19 ★ Worksheet



## NOTE TO FAMILIES




Over the past week or so, the children have been posing and solving story problems about presents and parcels. In these story problems, people give and receive presents for various reasons. The presents either come individually or packed 10 to a box in “parcels.” Our challenge to the children has been to think and work in groups of 10 rather than counting one by one to arrive at solutions. Given a problem that requires adding 16 and 28 presents, we tell them that they could draw 16 tally marks, 28 more, and then count them all. It always works. But it’s so much faster and easier to work in 10’s and 1’s, especially when the presents already come conveniently packaged in 10’s. Once again, there are many different ways to reach the same answer, but some methods are more efficient than others. We encourage you to watch your child’s problem-solving strategies with interest and nudge just a tiny bit if he or she persists in counting everything one by one.

## Solving Presents & Parcels Story Problems



Read the presents and parcels story problems on this sheet and the next and choose at least 4 of them you want to solve. Then go to work. Remember—the answer is not enough. You need to show how you solved each problem, using pictures, numbers, and/or words. Be sure to work in 10’s rather than 1’s whenever you can.

**Example** *The triplets are having a huge birthday celebration. There are 33 presents sitting on the table for them. How many presents will they each get if they share them equally?*

10	10	10		They each get 10 and 1 more. 11 each.
				$11 + 11 + 11 = 33$

**1** It was June 29, Vincent’s birthday. There were 12 presents on the fireplace and 23 on the table. How many presents in all?

(Continued on back.)

**Home Connection 19** Worksheet (cont.)

**2** It was Jake and Sam's birthday. There were 26 presents; Jake and Sam wanted to split them evenly, but they didn't know how. Can you help them?

**3** It was April 24, my sister's birthday. 6 kids came to her party. She had it at Chuck E Cheese's. Each kid brought 10 presents. My mom gave her 2 presents. How many presents did she get in all?

**4** Today is Briana's 18th birthday. She knows there are 18 presents in the closet and also 23 presents under the table. Now Briana wants to know how many in all.

**5** Dan was having a Valentine's party. There were 24 presents in the closet and there were 23 on the table. Then someone opened 12 of the presents. How many were not yet opened?

(Continued.)

**Home Connection 19** Worksheet (cont.)

**6** It was Jessie's big party. Jessie said to come at 8:00. One of his friends peeked through the window. He saw only 13 presents. Jessie said there were supposed to be 42 presents. How many presents were in the closet?

**7** It was Taylor's 8th birthday and there were 47 presents. Each kid brought 10 presents except for 3 kids who brought 5 presents each, and 2 kids who brought 1 present each. How many kids came to Taylor's party?

# Home Connection 20 ★ Activity



## NOTE TO FAMILIES

Base Ten Triple Spin is a deceptively easy strategy game that helps children continue to develop firm understandings of 3-digit numbers. Your child has already played this game at school and may enjoy showing you the tricks of the trade. On the other hand, he or she may simply enjoy winning until you “catch on.”

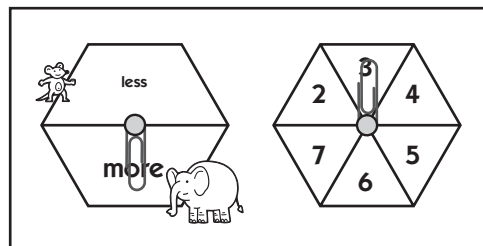
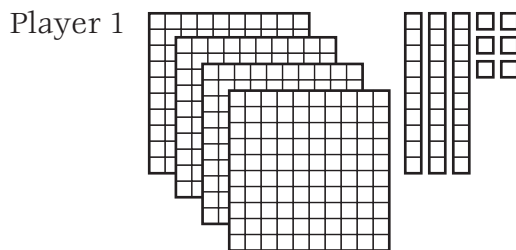
## Base Ten Triple Spin

### Game Rules

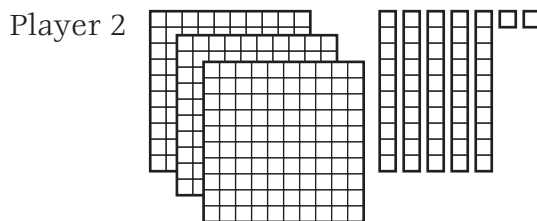
**1** Cut out the base ten pieces on the accompanying 2 sheets. Then find this week’s worksheet, which includes a place to record several rounds of this game, and you’re in business.

**2** Spin the More/Less spinner to determine whether you’re playing the first round for more or less. Indicate which it is on the record sheet by circling the appropriate word at the top.

**3** Each of you will spin 3 times, alternately. You have to take one spin in 100’s (mats), one in 10’s (strips), and one in 1’s (units). Be sure to take a different denomination for each of your 3 spins. (You can’t take 2 of your spins in 100’s and none in 1’s, for instance.) Each time you spin and decide which denomination to take your spin in, take that many base ten pieces and lay them out in front of you. By the time you and your partner have both had 3 turns, you should each have some mats, some strips, and some units.



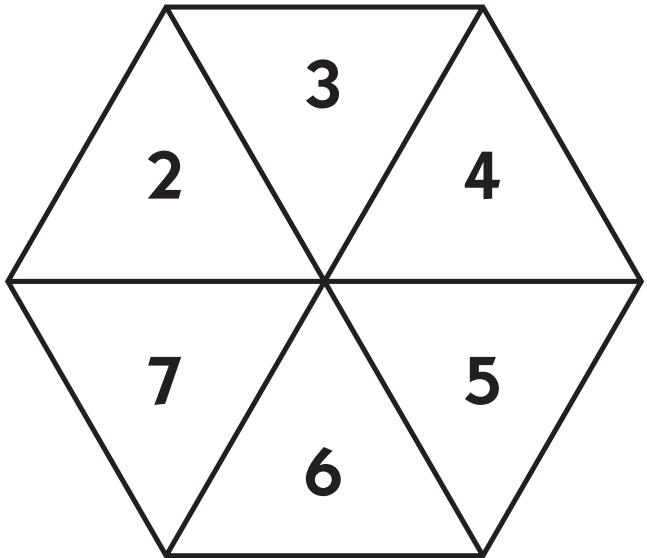
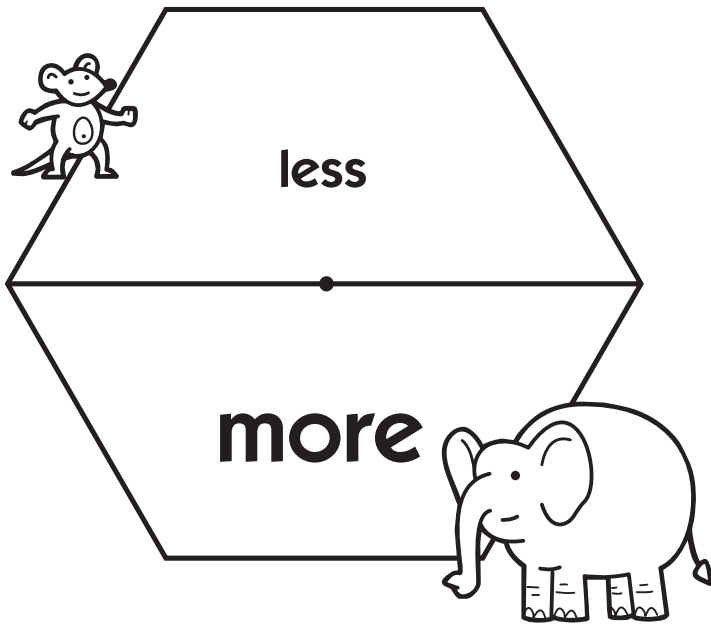
Player 2’s last spin



*“Oh, golly! I wish I’d taken that 5 in 100’s instead of 10’s!”*

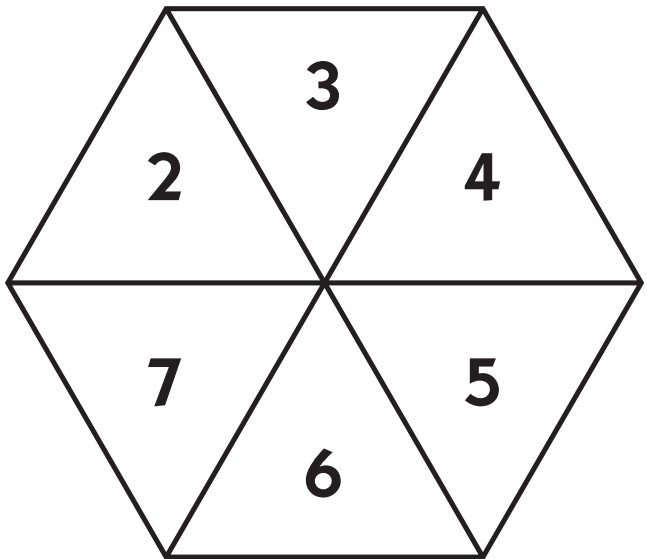
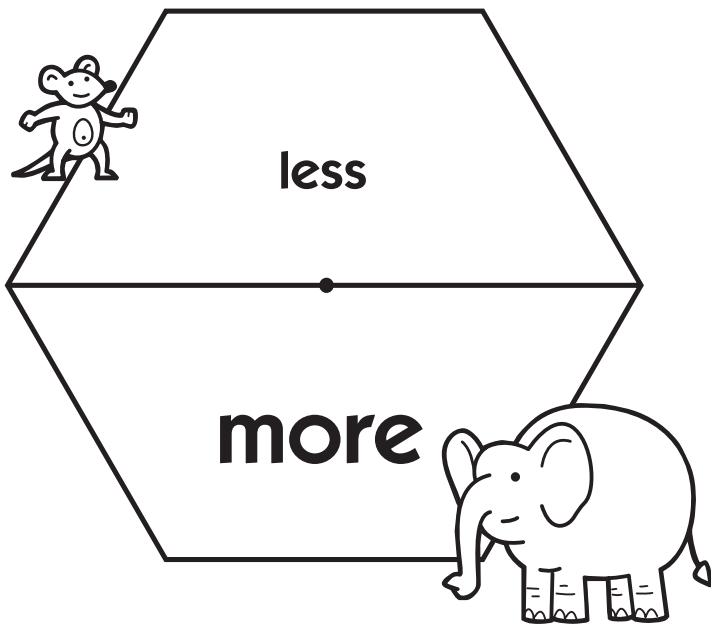
**4** After you and your partner have both taken your 3 spins, collected your base ten pieces, and counted up your totals, take turns recording your results on the worksheet. Then play the game again. Remember to spin the More/Less spinner before each new round so you know if you’re playing for more or less.

## Base Ten Triple Spin spinner



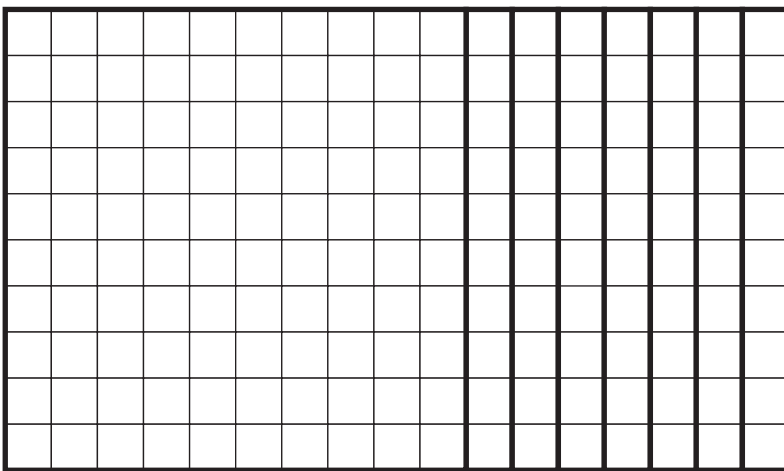
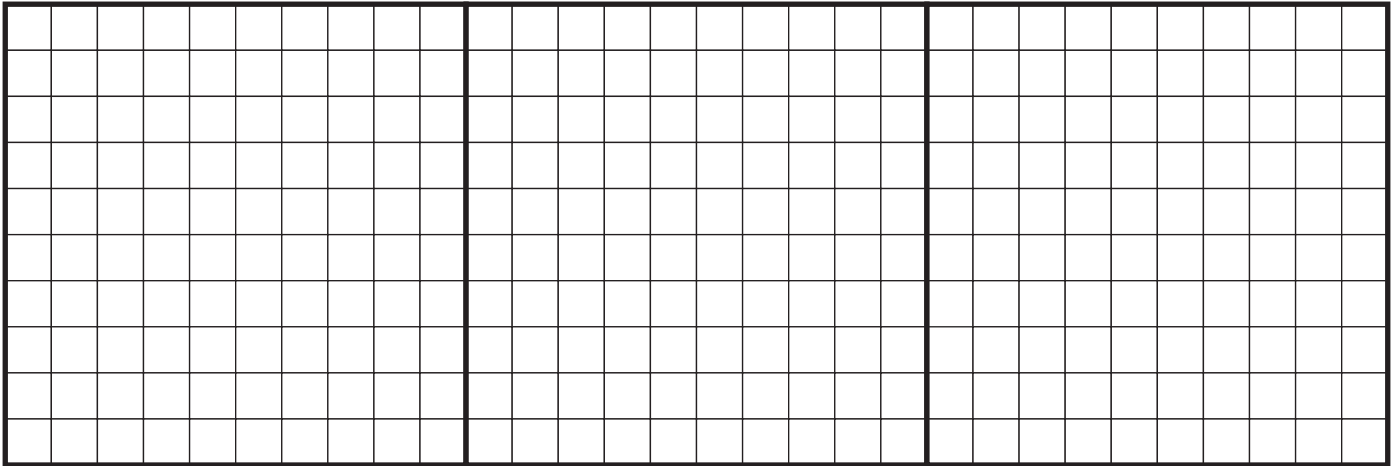
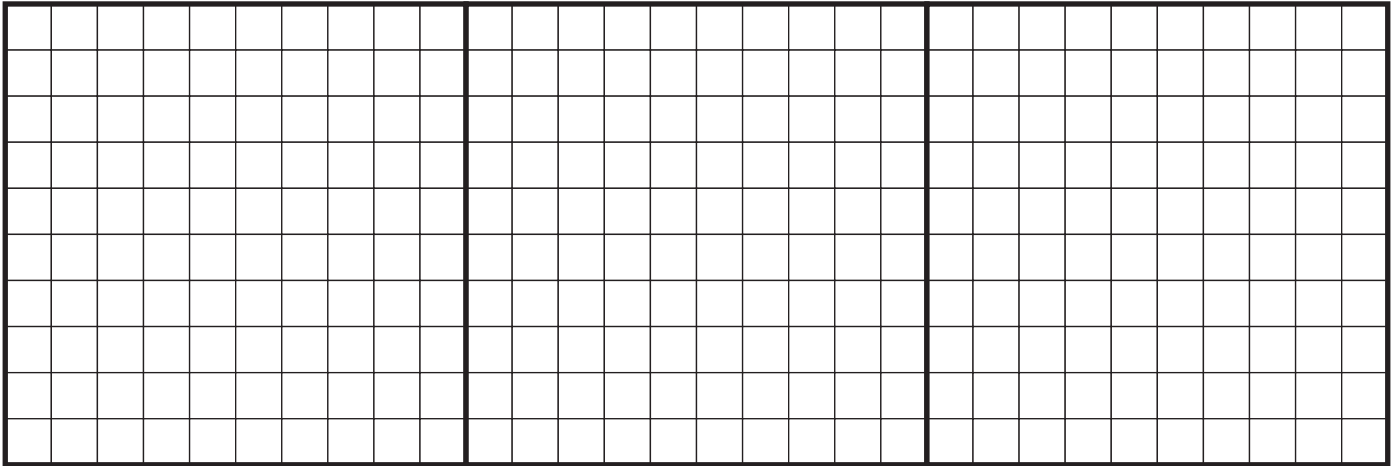
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## Base Ten Triple Spin spinner



# Base Ten Triple Spin pieces

Cut apart on thick black lines



NAME \_\_\_\_\_

RETURN BY \_\_\_\_\_

# Home Connection 20 ★ Worksheet

## The Triple Spin & More


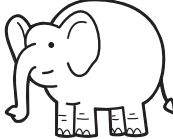

Record the results of your Base Ten Triple Spin games by drawing what you got each time and writing your score. Be sure to indicate whether you played for more or less each time, and don't forget to circle the winner. (See example below.)




<b>EXAMPLE</b> <span style="font-size: 2em; vertical-align: middle;">0</span> Round				Did you play for More or Less?			
100's <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>	10's 	1's <div style="display: flex; flex-direction: column; align-items: center;"> <div style="width: 10px; height: 10px; border-radius: 50%; margin-bottom: 2px;"></div> <div style="width: 10px; height: 10px; border-radius: 50%; margin-bottom: 2px;"></div> <div style="width: 10px; height: 10px; border-radius: 50%; margin-bottom: 2px;"></div> </div>	My score <div style="border: 1px solid black; border-radius: 15px; padding: 2px; display: inline-block;">437</div>				
<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="width: 10px; height: 10px; border-radius: 50%; margin-bottom: 2px;"></div> <div style="width: 10px; height: 10px; border-radius: 50%; margin-bottom: 2px;"></div> </div>	My partner's score 352				

<span style="font-size: 3em; vertical-align: middle;">1</span> Round				Did you play for More or Less?			
100's	10's	1's	My score				
_____	_____	_____	My partner's score				

(Continued on back.)

Home Connection 20 Worksheet (cont.)

 <b>Round</b>	<b>Did you play for</b>	  <b>More or Less?</b>	
100's	10's	1's	My score
			My partner's score

 <b>Round</b>	<b>Did you play for</b>	  <b>More or Less?</b>	
100's	10's	1's	My score
			My partner's score

Circle the number in each pair that is greater.

<b>351      315</b>
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<b>437      473</b>
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<b>103      112</b>
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<b>200      198</b>
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# Home Connection 21 ★ Activity



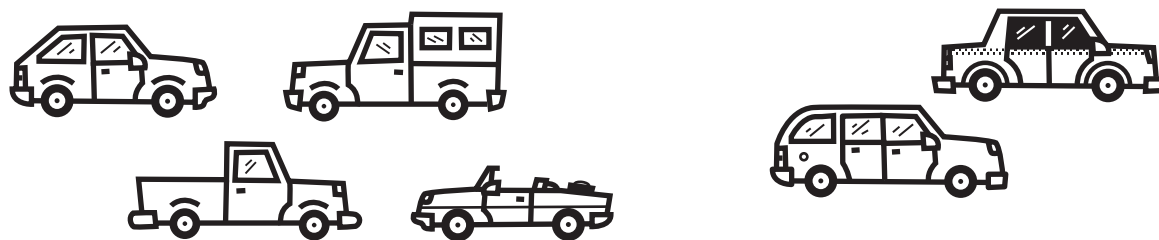
## NOTE TO FAMILIES

Over the past few days, we’ve been learning more about how to read, interpret, and construct graphs. In this Home Connection Activity, we’re asking you to help your child locate a collection of some type, sort it in a variety of ways, and then make a graph about it. This might be a collection your child has been keeping for awhile—sports cards, stamps, stickers, rocks, shells, toy vehicles, action figures, dolls; there are all kinds of things youngsters seem to accumulate over time. Whatever it is, this collection should be a set of like items numbering no fewer than 30, but no more than 100. If you’ve just done a major room-cleaning, or moved, or your child simply isn’t a collector, don’t despair. A collection of buttons, nuts and bolts, keys, bottle caps, or other small household items will work just fine. Once the two of you have found a collection, you’re ready to roll!

## Sorting a Collection

Find a collection of some type around your house. It can be almost anything—rocks, shells, action figures, buttons, nuts and bolts, stamps, sports cards, etc. The collection you use for this assignment should have somewhere between 30 and 100 items. Once you’ve decided on your collection, work with someone in your family to sort it in as many ways as you can. List your ideas below.

*Here’s an example* Suppose I decide to sort my collection of model cars. I could sort them by 2-door and 4-door, as I have in this picture. (I didn’t have room to show all 30!) Or I could sort them by color, size, make, type, etc., etc., etc. See if you can think of at least 10 different ways to sort your collection.



"2-door"

"4-door"

2-door and 4-door

(Continued on back.)



NAME \_\_\_\_\_

RETURN BY \_\_\_\_\_

# Home Connection 21 ★ Worksheet

## Graphing a Collection



Look at all the ways you just sorted your collection. Now pick your favorite and make a graph about it on the back of this sheet. If, for instance, you were working with your collection of shells and decided that the most interesting way you sorted them was by markings (plain, spots, stripes, and swirls), that's what you would make your graph about. Here are some things to remember as you make your graph:

- 1** Use the graphing form on the back of this sheet. You don't have to mark all the columns if you don't need them, but be sure to label each column that you use.
- 2** If you have more than 10 items in any 1 group, you'll have to make your graphing boxes stand for more than 1. It's okay to have each box stand for 2, 5, or even 10, depending on how many things you have to graph. Just remember to write your numbers in the boxes up the side so that we know how much each is worth.
- 3** Be sure to give your graph a title so that we understand what it's about.

(Continued on back.)

# Home Connection 21 Worksheet (cont.)

**Graph Title** \_\_\_\_\_

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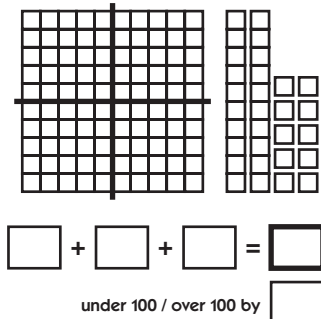
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# Home Connection 22 ★ Activity



## NOTE TO FAMILIES

Make 100 is a game that's lots of fun, and is designed to provide children with more opportunities to add 2-digit numbers. It also helps youngsters use a visual model to find differences. The record sheet looks like this, and the object of the game is to be the person who colors in closest to 100 tiny boxes. Unlike some of the other games we've played recently, it doesn't matter if you go over 100. A score of 105 will beat a score of 92 because it's only off by 5 as opposed to 8.



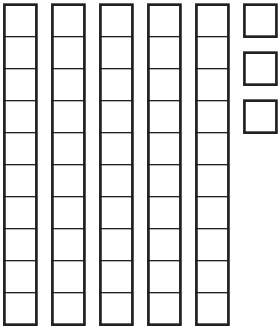
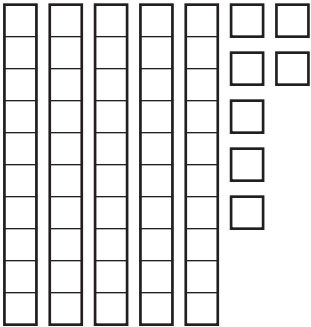
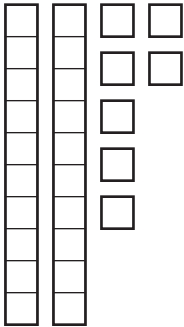
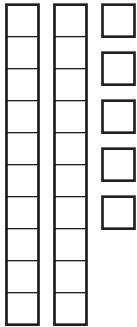
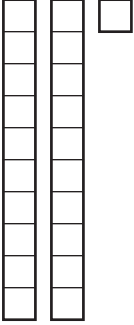
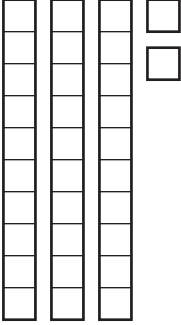
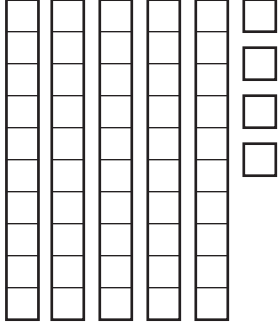
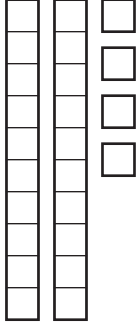
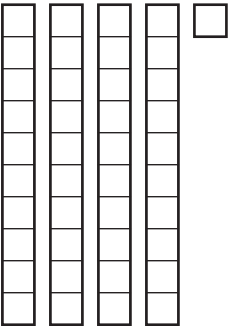
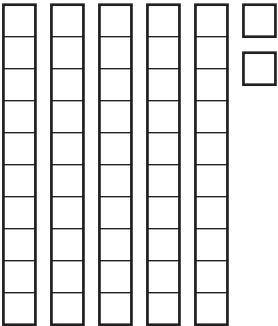
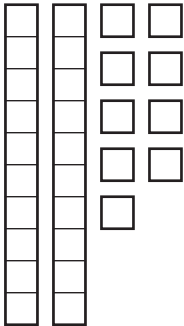
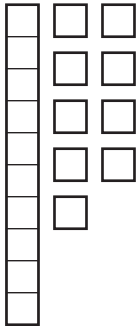
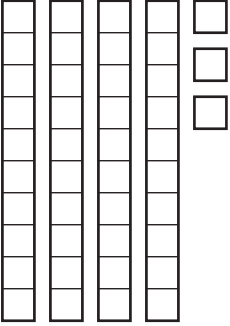
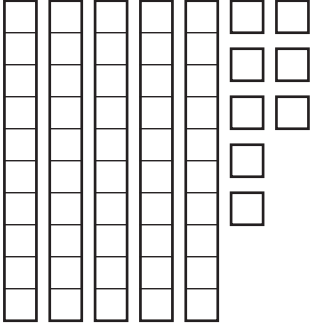
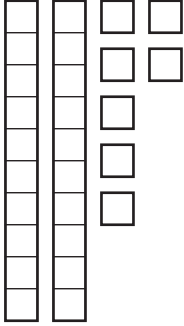
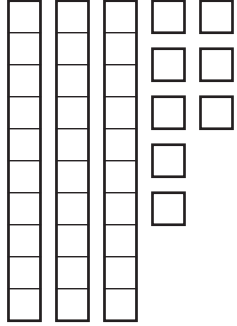
## Make 100

You need crayons, markers, or colored pencils in several different colors to play this game.

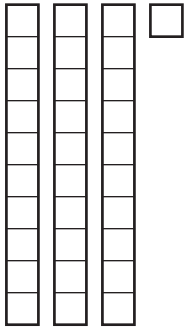
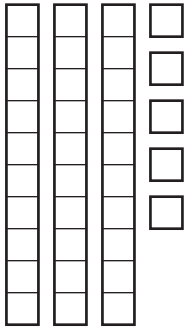
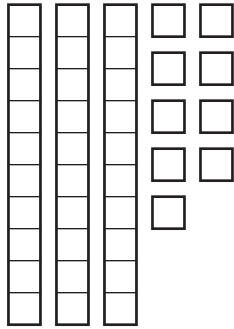
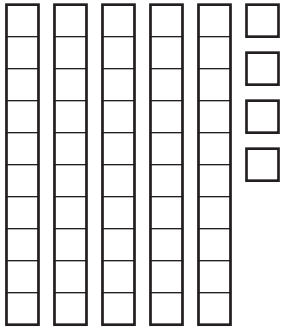
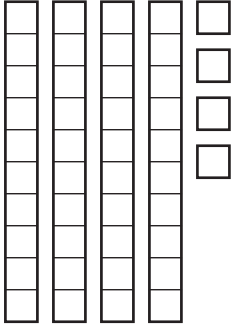
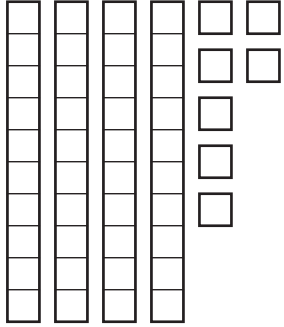
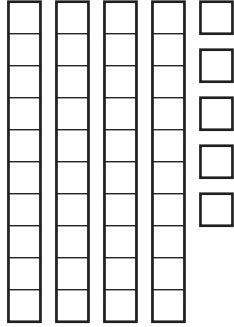
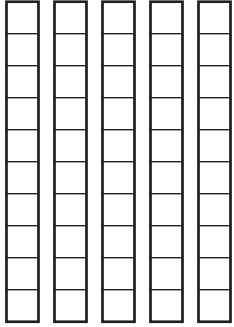
### Game Rules

- 1 Cut out the cards on the accompanying 2 sheets. Mix them thoroughly and place them in a stack, face down.
- 2 Once your deck is ready, take 2 cards and turn them face up. Have your partner do the same. Record the 2 numbers in the boxes below the hundreds grid and color in the amounts on your grid. Be sure to use a different color for each number. Also, be sure to fill in the hundreds grid completely before you start using the 10's and 1's pictured to the right side of the grid. (There are many different ways to color in the amounts shown on the cards you get, but the easiest seems to be to color in the 10's first and then the 1's.)
- 3 Decide whether or not you want to take a third card. If you're very close to 100, you may choose to stay put. If you're still a ways off, you might decide to draw a third card. (3 is the maximum number of cards you can draw.) Again, be sure to fill in the entire grid before you use the 10's and 1's pictured to the right. Those are there just in case you go over 100.
- 4 Record your results in the boxes below the grid you've been coloring and have your partner record his or her results on the same sheet. Compare to see who came closest to 100, whether under or over. Circle the winner, turn the sheet over and play the game again.

# Make 100 cards, sheet 1

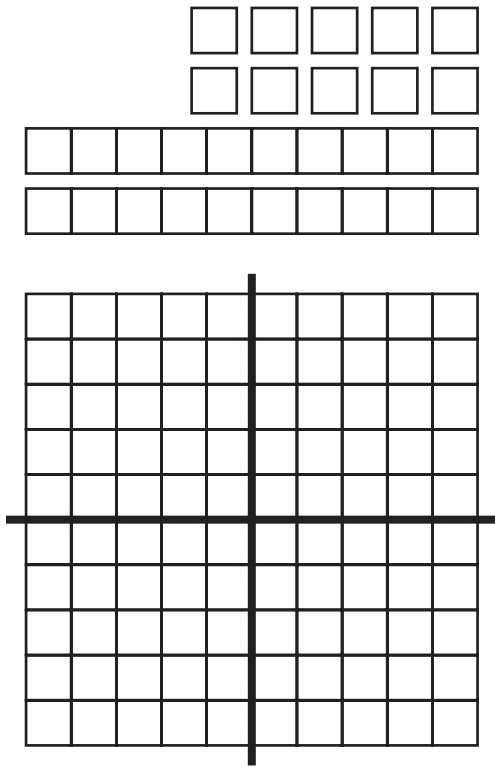
			
			
			
			

# Make 100 cards, sheet 2

 <p>Three vertical rods of 10 units each and one single unit cube.</p>	 <p>Three vertical rods of 10 units each and six single unit cubes.</p>	 <p>Three vertical rods of 10 units each, two vertical rods of 10 units each, and eight single unit cubes.</p>	 <p>Five vertical rods of 10 units each and five single unit cubes.</p>
 <p>Four vertical rods of 10 units each, two vertical rods of 10 units each, and four single unit cubes.</p>	 <p>Four vertical rods of 10 units each, two vertical rods of 10 units each, and seven single unit cubes.</p>	 <p>Four vertical rods of 10 units each, two vertical rods of 10 units each, and six single unit cubes.</p>	 <p>Five vertical rods of 10 units each.</p>

NAME \_\_\_\_\_

**Make 100! Over or Under? See the Difference**  
record sheet

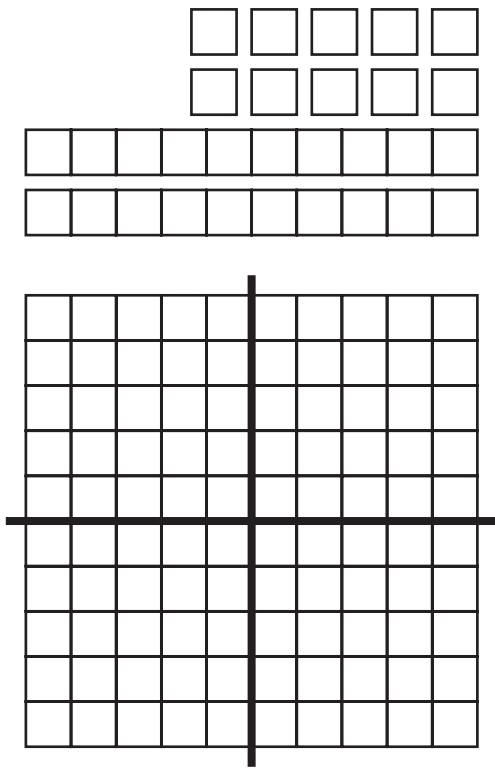


$$\boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

**My partner was under 100 / over 100 by**  
(circle one)

NAME \_\_\_\_\_

**Make 100! Over or Under? See the Difference**  
record sheet



$$\boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

**I was under 100 / over 100 by**  
(circle one)

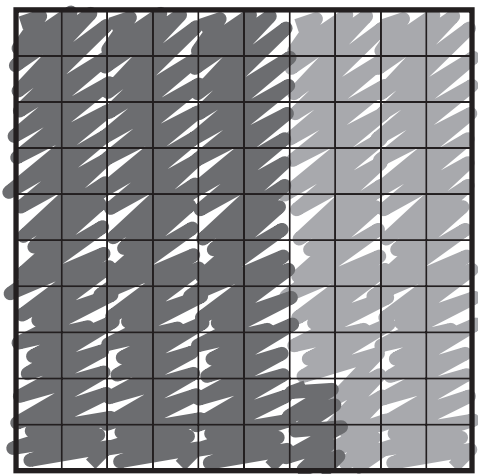
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RETURN BY \_\_\_\_\_

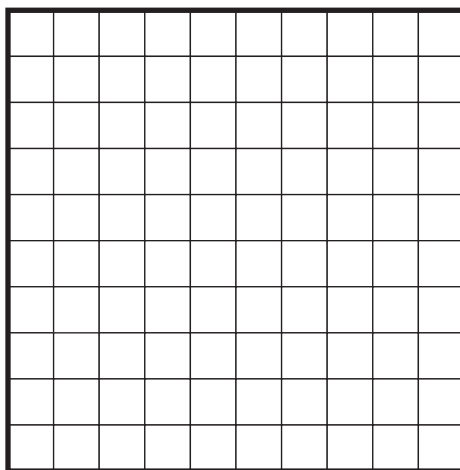
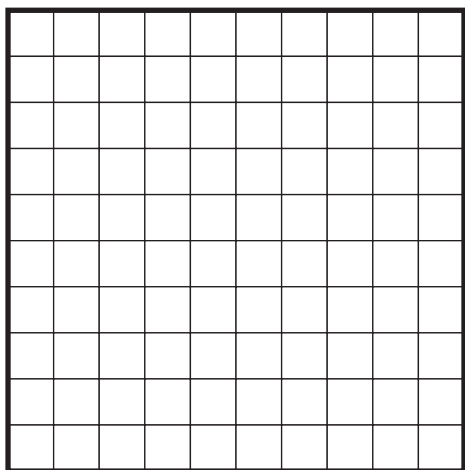
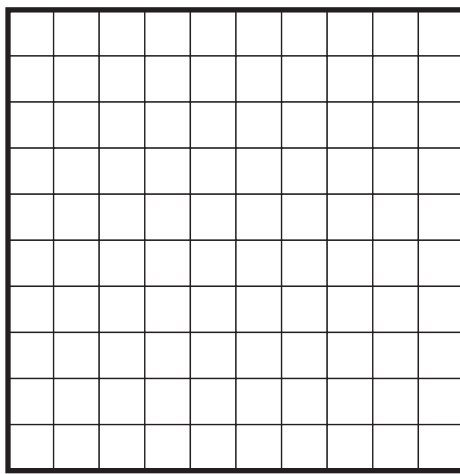
# Home Connection 22 ★ Worksheet

## How Many Ways Can You Make 100?

How many different ways can you think of to make 100? Start by coloring in a grid with 2 different colors and recording the amounts you colored. Do that 3 times. Then write as many more number sentences for 100 as you can on the back of this sheet. You can use addition, subtraction, multiplication, or division. Try to come up with at least 20 different ways.



$62 + 38 = 100$



(Continued on back.)

## Home Connection 22 Worksheet (cont.)

Now write some more number sentences for 100.

$$101 - 1 = 100$$

$$10 \times 10 = 100$$

# Home Connection 23 ★ Activity



## NOTE TO FAMILIES

One of the more difficult things primary children have to learn to do is subtract double-digit numbers.  $45 - 12$  is easy, but  $52 - 17$  can be a real challenge. Most of us were simply taught a procedure for doing this operation, but almost any third or fourth grade teacher will tell you that he or she spends a lot of time reteaching children who never really understood what they were doing in the first place. The 100 to 0 Race helps children understand double-digit subtraction. In this game, each of you starts with a mat of 100 base ten units. With every spin, you remove some units from your collection until one of you reaches 0. Sometimes this is very easy, and other times, the operation is more complex. Presented with a situation in which they have to remove 16 units from a collection of 71, many children will take a 10 away first and then be a bit stumped as to where to get the other 6. Some will “trade in” a 10 for ten 1’s in order to be able to take 6 away. Others will remove a 10 and take 4 units back in change. A few won’t be sure what to do, and if your child is one of these, you’ll have to help him or her. Plan to play this game many times—it will truly enhance your child’s understanding of place value.

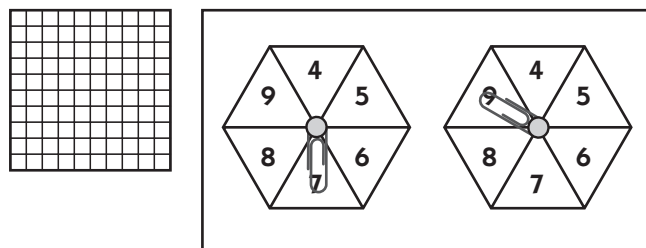
## The 100 to 0 Race

### Game Rules

**1** Cut out the base ten pieces on the accompanying sheet. Divide them evenly so you each have 1 mat, 10 strips, and 20 units. Then place the mat of 100 in front of you, keeping your other pieces for making trades as necessary.

**2** Take turns spinning the spinners, adding the 2 numbers, and removing that many units from your collection. You’ll have to make trades every 2 or 3 turns, starting with trading the mat in for 10 strips. This can be pretty confusing, and if it seems really difficult for your child, play the game with 1 spinner instead of 2 a couple of times.

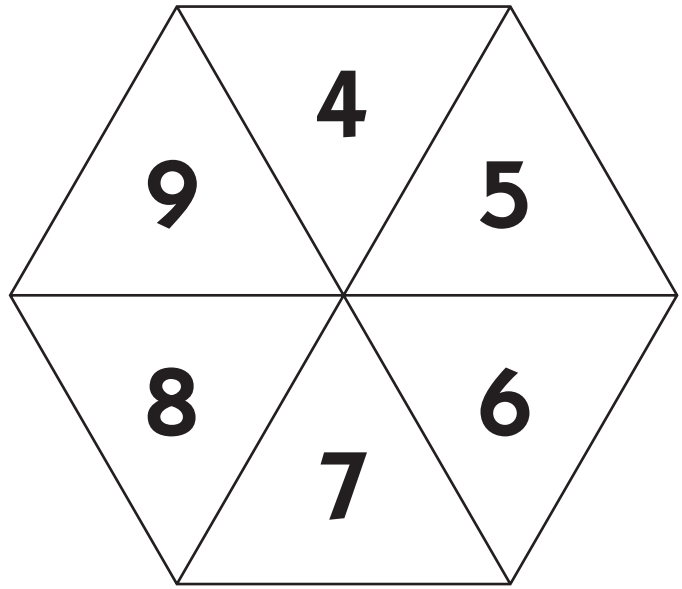
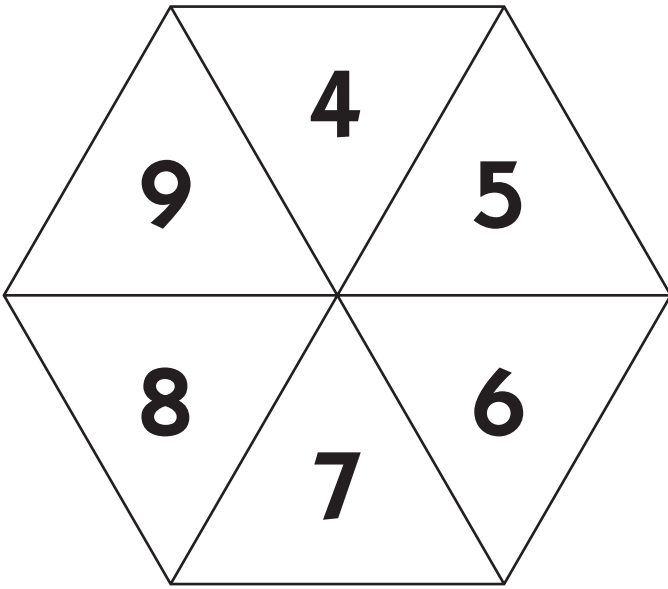
**3** Continue playing backward, spinning, adding, and removing pieces from your collection. You have to go out exactly to win, so when you get down to 6 units, be sure to find the difference between the 2 numbers you spin instead of the sum. If you spin a 7 and a 5, for instance, your score for the turn will be 2 instead of 12. The first person to get down to 0 exactly wins the game.



**Child** *I got  $7 + 9$ . That’s 16. How can I take 16 away from my mat?*

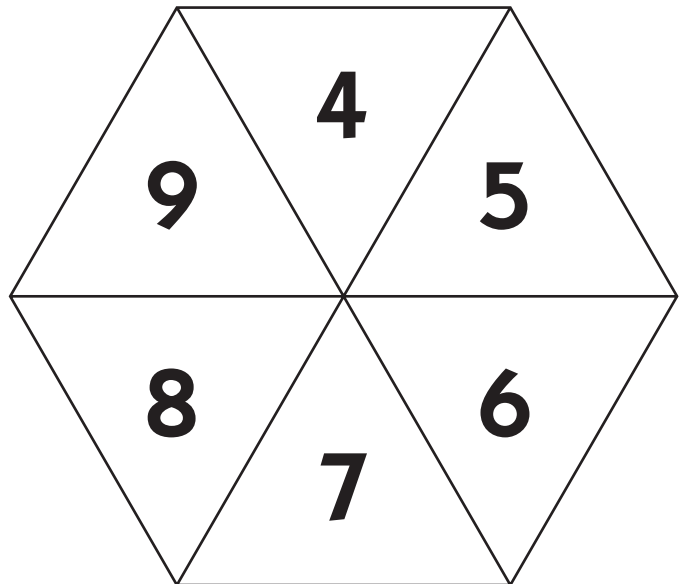
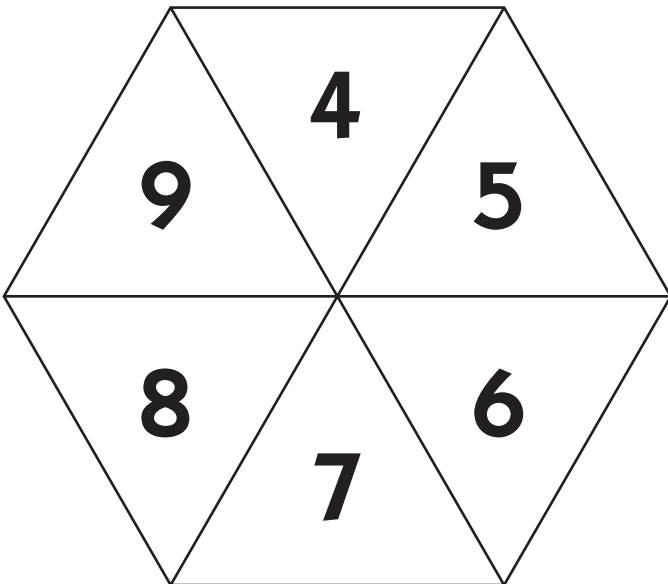
**Grandpa** *Try trading it in for 10 strips. That’s a good first step.*

## The 100 to 0 Race spinners



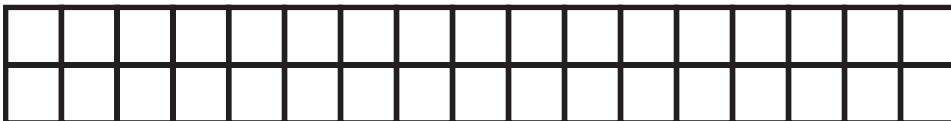
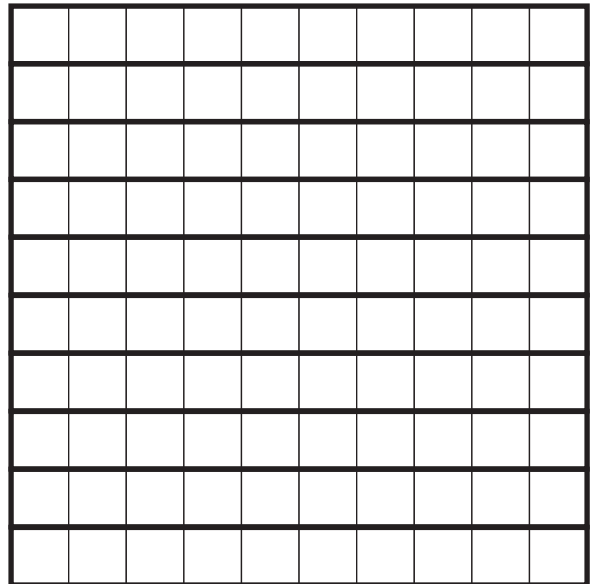
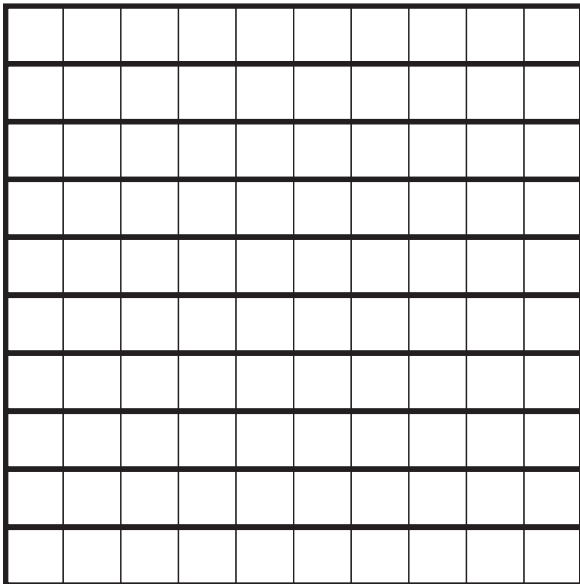
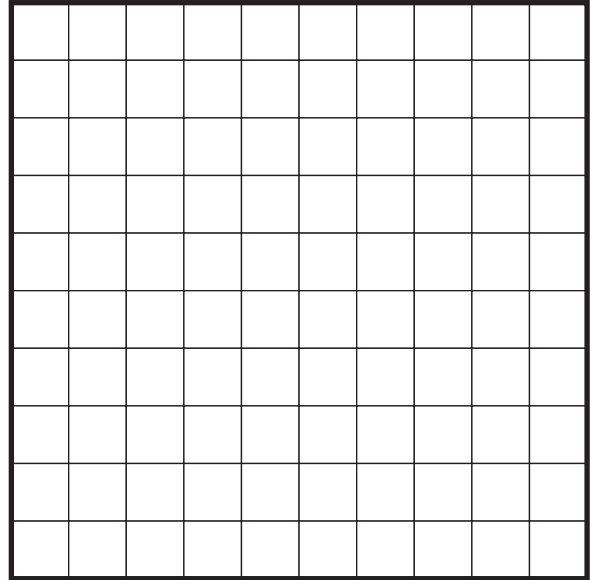
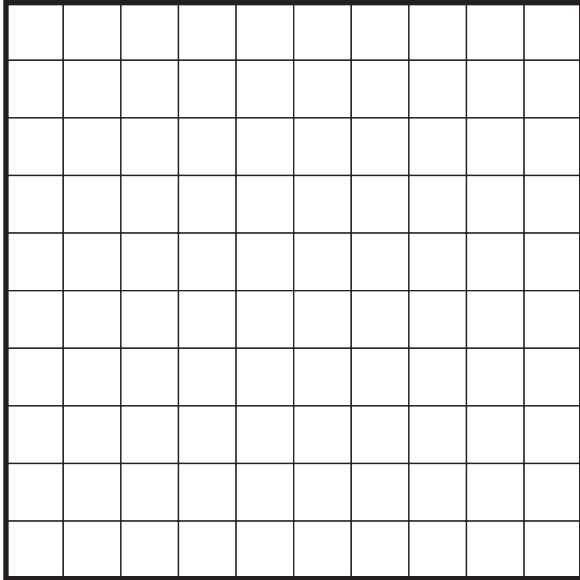
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## The 100 to 0 Race spinners



# The 100 to 0 Race pieces

Cut apart on thick black lines



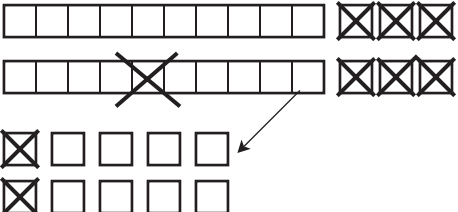

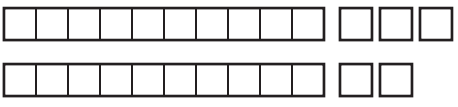
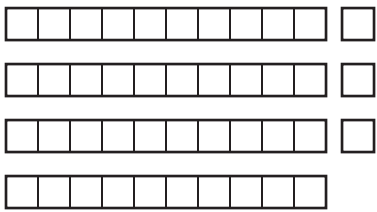
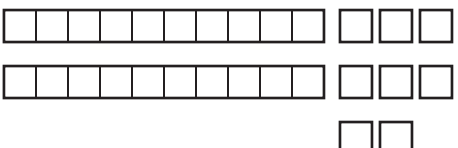

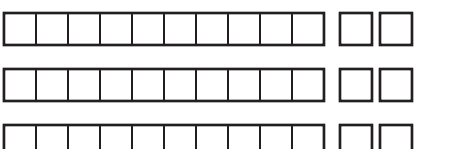
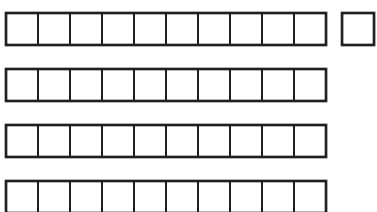
NAME \_\_\_\_\_

RETURN BY \_\_\_\_\_

# Home Connection 23 ★ Worksheet

## Subtracting Big Numbers

Use the pictures shown below or the base ten pieces from the game you just played to help you do these problems.

 $\begin{array}{r} 26 \\ - 8 \\ \hline 18 \end{array}$	 $\begin{array}{r} 33 \\ - 14 \\ \hline \end{array}$
 $\begin{array}{r} 25 \\ - 7 \\ \hline \end{array}$	 $\begin{array}{r} 46 \\ - 27 \\ \hline \end{array}$
 $\begin{array}{r} 28 \\ - 8 \\ \hline \end{array}$	 $\begin{array}{r} 34 \\ - 17 \\ \hline \end{array}$
 $\begin{array}{r} 36 \\ - 14 \\ \hline \end{array}$	 $\begin{array}{r} 41 \\ - 23 \\ \hline \end{array}$

Practice subtracting tens.

31	45	16	68	50	29	72
<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
- 10	- 10	- 10	- 10	- 10	- 10	- 10

83	99	36	54	90	37	65
<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
- 10	- 10	- 10	- 10	- 10	- 10	- 10