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MAKE A TEN SHAKERS

- LEVEL:** Kindergarten - Grade 2
- SKILL:** fact fluency, subitizing, making a sum of 10
- SET UP:** vertical or horizontal, 1 die in each slot, 1 shaker for 2 students
- PLAYERS:** 2 (cooperative pair) or solitaire
- GOAL:** call out number, immediately give missing addend to equal a sum of 10

GETTING STARTED:

For solitaire or pair work have students shake a container, hold it still, then say out loud their numbers as they work down the slots:

SEE	SAY
	"4"
	"3"
	"3"
	"6"
	"1"
	"2"
	"4"



Have students then go back through, working from the top, giving the missing addend to equal 10.

SEE		SAY
	+6	"10"
	+7	"10"
	+7	"10"
	+4	"10"
	+9	"10"
	+8	"10"
	+6	"10"



Have students work toward full fluency, see say "4 + 6 = 10"

Have students record their "ten facts" using the recording sheets when ready.

MAKE A TEN SHAKERS RECORDING SHEET

SEE	+	?	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10

SEE	+	?	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10

SEE	+	?	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10

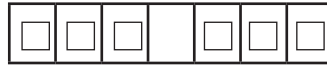
SEE	+	?	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10

SEE	+	?	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10

SEE	+	?	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10
<input type="text"/>	+	<input type="text"/>	=	10

HUNDRED HORIZONTAL SHAKE UP

- LEVEL:** Grade 2 and up
- SKILL:** comparing 3-digit numbers $>$ $<$
- SET UP:** horizontal only, 3 dice in a row, 1 blank slot, 3 dice in a row
1 shaker per pair
- PLAYERS:** 2 (1 vs 1)
- GOAL:** to have the greatest 3-digit number



GETTING STARTED:

Have students stand or sit side-by-side. One player will be creating a HUNDREDS number on the left hand side of the container, the other a HUNDREDS number on the right hand side of the container. One player shakes until  is called. The container is placed down and the two numbers are verbalized.

			blank slot			
four	two	six		five	three	one
hundreds	tens	ones		hundreds	tens	ones
"426"				"531"		
four hundred twenty-six				five hundred thirty-one		
Player One				Player Two		



Both players say their number, then Player Two says " $531 > 426$ ". The player with the greatest number scores a point. Play continues for a set period of time. The player with the most points is the winner. In the event of a TIE (same number) both players score a point. Players shake for new combinations/hundreds numbers, and again compare their two numbers.

HUNDRED HORIZONTAL SHAKE UP

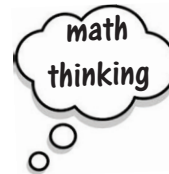
FOLLOW UP ACTIVITIES:

1. Play for the least number. Alternate one shake greatest number wins, next shake least number wins.
2. Have students record their numbers and have them use $>$ $<$ symbols to show comparison.
3. As students mature, have them verbalize and record BUMP BACK and BUMP UP numbers and patterns such as $+10$, $+100$, -10 , $+2$, etc.

EXAMPLE:

642 $+ 10$ 652, 662, 672 etc. $+ 100$ 642, 742, 842 etc.

642 $- 10$ 632, 622, 612 etc. $- 100$ 542, 442, 342 etc.

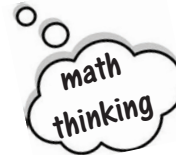


4. Have students record their verbalized patterns on the Hundred Patterns Recording Sheet on page 70.
5. Have students rewrite their shake each time to make the greatest possible number and the least possible number with the three dice rolled.

EXAMPLE:

My shake	$>$ Possible	$<$ Possible
342	432	234

6. Have students estimate the difference between the two numbers being compared, for example $426 \leftrightarrow 531$. The difference is about 100... 426 is almost 431, about 100 from 531.



HUNDRED HORIZONTAL SHAKE UP RECORDING SHEET

MY NUMBER				MY FRIEND'S NUMBER		
Hundreds	Tens	Ones	> = <	Hundreds	Tens	Ones
			○			
			○			
			○			
			○			
			○			
			○			
			○			
			○			
			○			
			○			
			○			