



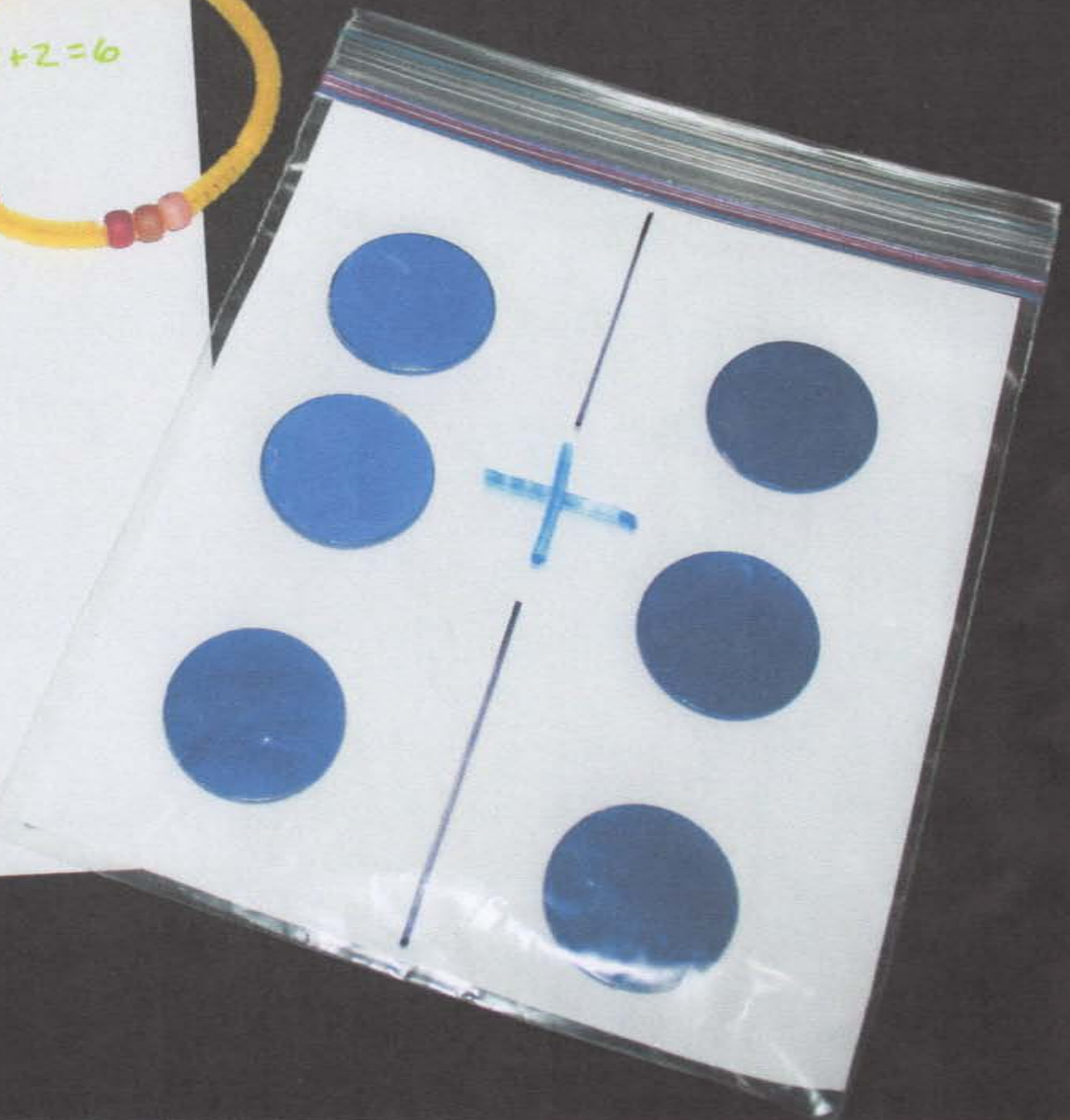
- Find the *dim.*
- Find the equation on your recording sheet.
- Solve the problem.
- Rewrite the equation.
- Show the equation on your board (round it) with your nonnegative slope.

$$\begin{array}{|c|} \hline \bullet \\ \hline \end{array} + \begin{array}{|c|} \hline \bullet \\ \hline \end{array}$$



$$+ \begin{array}{|c|} \hline \bullet \\ \bullet \\ \bullet \\ \bullet \\ \bullet \\ \hline \end{array} =$$

$$+[\cdot] =$$





It All Adds Up! Numbers On A Roll Addition Dice Game

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Materials:

- Pony Beads
- Pipe Cleaners
- Dice
- Recording Sheets
- Markers
- Small Baggies
- Manipulatives for Baggies
- Black permanent marker

Directions:

- Students can either work independently or choose a partner and play against them, seeing who can solve the most equations before the timer rings.
- Children roll 2 dice and find that equation on their paper.
- They rewrite it,
- solve the problem and
- work it out on either their bead bracelet or manipulative bag.
- If they roll the same 2 dice that they already have an equation for, they lose their turn.
- After students have played the addition version of the game, have them switch to subtraction.

I got the manipulative ideas from creative Pinterest teachers, and decided to use them for this game to make it more hands-on and “seeing-is-believing/understanding!” for the students.

Bead bracelets:

To make a class set of bead bracelets for this game, put 6 pony beads on 25 pipe cleaners. (Or however many students you usually have in your class.) Twist the ends so they look like a bracelet. Students move the beads to show the various rolls of the dice. i.e. $4 + 2 = 6$ (See photo above.)

I got the bead bracelet idea from: *Mrs. Tunstall's Teaching Tidbits*:

<http://tunstalltimes.blogspot.com/2011/08/number-bracelets.html>

Baggie Manipulatives:

Put 6 buttons, or whatever manipulatives you have, in small Ziploc Baggies. Using a permanent marker, draw a blue or red + sign in the middle of the bag. Draw a black line above and below the + sign so that the line runs down center. Students move the manipulatives to the right and left to show what equation they rolled. i.e. $3 + 3 = 6$ (See the photo above.)

I used poker chips that I bought at The Dollar Store.

I also make subtraction bags and put a minus sign down the middle.

You can eliminate the math symbol and use your Baggies for both addition and subtraction, but I think it's important for them to see that symbol for the concept to get ingrained in their brain and the proverbial light bulb to go on.

I got the Baggie idea from *Mrs. T's First Grade Blog*:

<http://mrstsfirstgradeclass-jill.blogspot.com/2011/08/number-concept-bag.html>





It All Adds Up! Numbers On A Roll Addition Dice Game

- Roll the dice.
- Find the equation on your recording sheet.
- Solve the problem.
- Rewrite the equation.
- Show the equation on your bead bracelet or with your manipulative Baggie.

$$\begin{array}{|c|} \hline \bullet \\ \hline \bullet \\ \hline \bullet \\ \hline \end{array} + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \bullet \\ \hline \bullet \bullet \\ \hline \end{array} =$$

$$\begin{array}{|c|c|} \hline \bullet & \bullet \\ \hline \bullet & \bullet \\ \hline \end{array} + \begin{array}{|c|} \hline \bullet \\ \hline \end{array} =$$

A visual equation: a square with four dots inside plus another square with four dots inside equals a blank square.

$\begin{array}{|c|c|} \hline \bullet & \bullet \\ \hline \bullet & \bullet \\ \hline \end{array} + \begin{array}{|c|c|} \hline \bullet & \bullet \\ \bullet & \bullet \\ \hline \end{array} = \begin{array}{|c|c|} \hline & \\ \hline & \\ \hline \end{array}$

A visual equation showing the addition of two groups of dots. The first group is a square containing 4 dots (2 in the top row, 2 in the bottom row). This is followed by a plus sign, then a second square containing 6 dots (3 in the top row, 3 in the bottom row). This is followed by an equals sign, and finally a square containing 10 dots (5 in the top row, 5 in the bottom row).

A visual addition problem. On the left, a square box contains 5 dots (4 in the corners and 1 in the center). To its right is a plus sign (+). Next is another square box containing 1 dot in the center. To the right of this box is an equals sign (=). Finally, there is a blank square box for the answer.

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$$\begin{array}{|c|c|} \hline \bullet & \bullet \\ \hline \bullet & \bullet \\ \hline \end{array} + \begin{array}{|c|c|} \hline \bullet & \bullet \\ \hline \bullet & \bullet \\ \hline \end{array} =$$

$\square + \square =$

$$\boxed{1} + \boxed{2} = \boxed{3}$$

1 + 3 = 4

$$\boxed{1} + \boxed{4} = \boxed{5}$$

$$\boxed{1} + \boxed{5} = \boxed{6}$$

$$\boxed{1} + \boxed{6} = \boxed{7}$$

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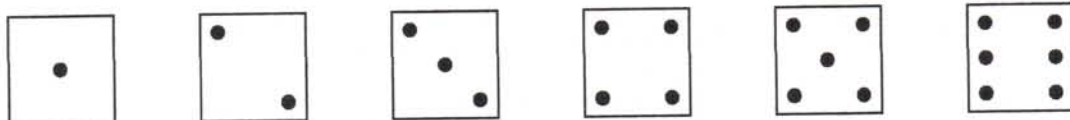
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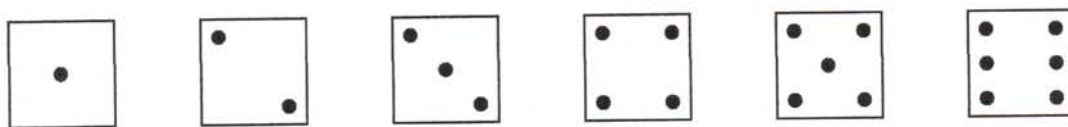


Congratulations!



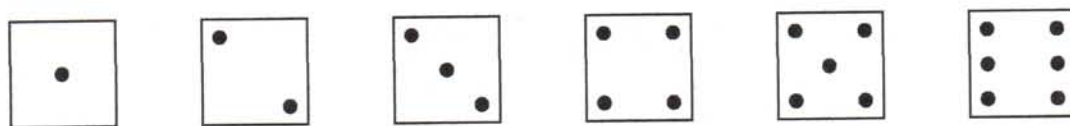
participated in our addition dice game and did well.

Congratulations!



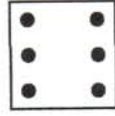
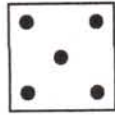
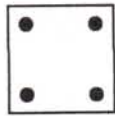
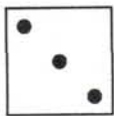
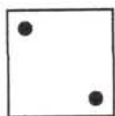
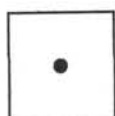
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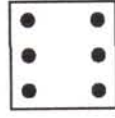
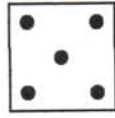
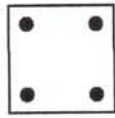
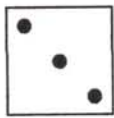
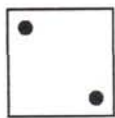
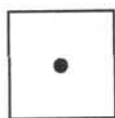
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Congratulations!



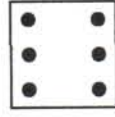
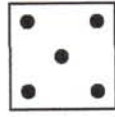
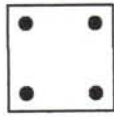
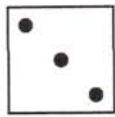
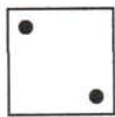
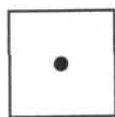
won our addition dice game!

Congratulations!



won our addition dice game!

Congratulations!



won our addition dice game!



What Difference Does It Make To Ya?

Numbers On A Roll Subtraction Dice Game

- Roll the dice.
- Find the equation on your recording sheet.
- Solve the problem.
- Rewrite the equation.
- Show the equation on your bead bracelet or with your manipulative Baggie.

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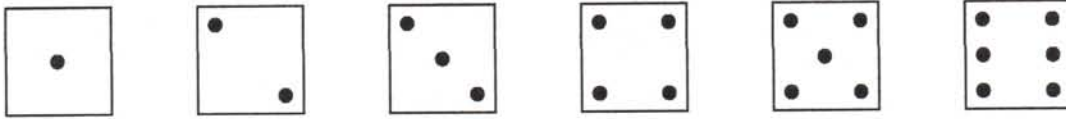
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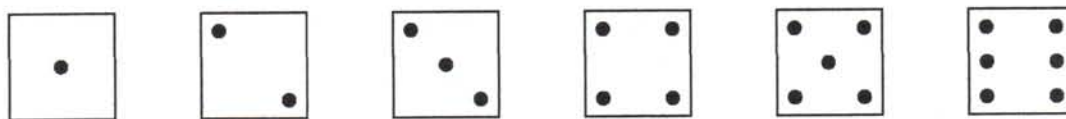


Congratulations!



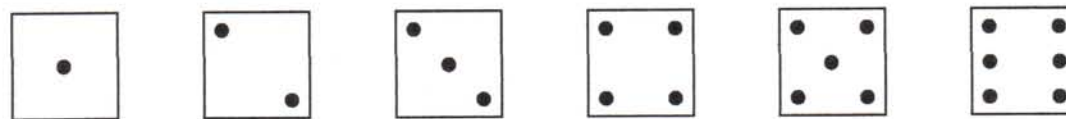
participated in our subtraction dice game and did well.

Congratulations!



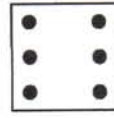
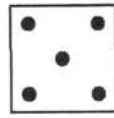
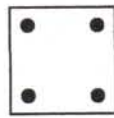
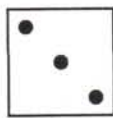
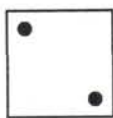
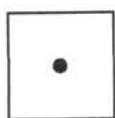
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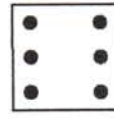
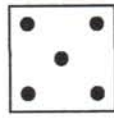
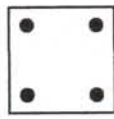
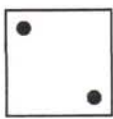
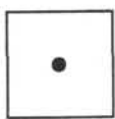
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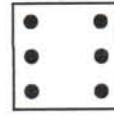
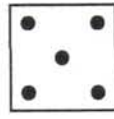
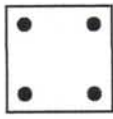
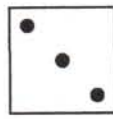
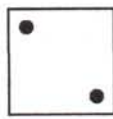
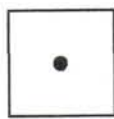
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