

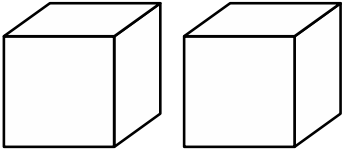
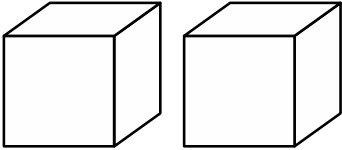
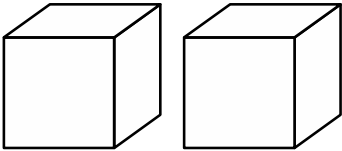
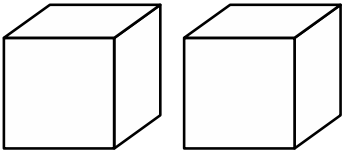
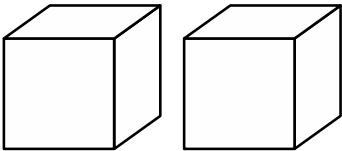
Developing, Maintaining, and Extending Fluency in Math: Addition and Subtraction

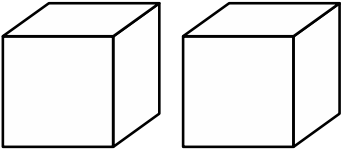
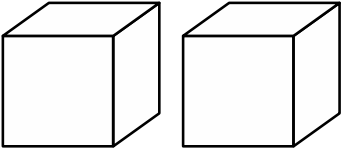
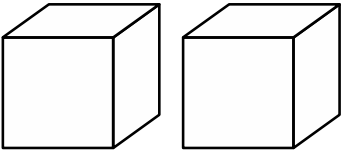
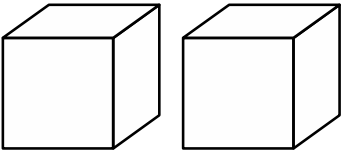
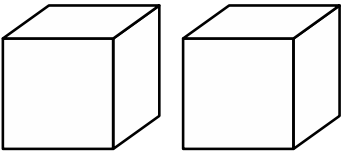


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REINFORCE: Count on 1 and 2

- Roll your number cubes and count on 1 or 2.
- Find your answer below.
- Write your numbers on the number cubes. Write the number fact.

 ___ + ___ = 11
 ___ + ___ = 5
 ___ + ___ = 9
 ___ + ___ = 8
 ___ + ___ = 7

 ___ + ___ = 6
 ___ + ___ = 8
 ___ + ___ = 7
 ___ + ___ = 6
 ___ + ___ = 10

Cube A: 4, 5, 6, 7, 8, 9

Cube B: 

REINFORCE: Double plus 1

11	19	13	15
13	9	17	19
17	11	15	9

Cube: 4, 5, 6, 7, 8, 9 (Same as previous game)

REINFORCE: Bridge to Ten

- Roll your number cubes and write the fact below the example in the grid that will help you figure out the answer.
- Write the answer to both facts.

$10 + 6 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 4 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
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$10 + 3 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 3 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 2 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 1 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

$10 + 6 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
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$10 + 2 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 1 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

Cube A: 8, 8, 8, 9, 9, 9

Cube B: 3, 4, 5, 5, 6, 7

Directions for the Games

Count on 1 or 2

Focus:

Adding 1 or 2 using the count on strategy

Materials:

Two number cubes configured as follows:

Cube A: 4, 5, 6, 7, 8, 9

Cube B: 1, 1, 1, 2, 2, 2

Colored pencil or marker for each student in different colors

Game board

Directions:

The player who completes the most equations is the winner.

How to Play:

Player 1 rolls, finds the matching equation with the matching sum and fills in the dice and equation on the game board in his/her color.

Next player rolls and fills in dice and equation in his/her color.

If a player rolls a sum that is already filled, he/she misses a turn.

Play continues until board is filled or time runs out.

Example:

Gertrude rolls a numeral six and 2 dots. She says, Six count on 2 is seven, eight. I will fill in one of the equations with the sum of 8 and fill in the dice to match my roll.

Doubles plus 1

Focus:

Using doubles facts to solve a doubles plus 1 equation

Materials:

Doubles add one game board

Once cube showing the numerals 4, 5, 6, 7, 8, 9

Four counters per player, each player has a different color counter

Directions:

The player who places all four counters on the board first, wins.

How to Play:

First player rolls the number cube and doubles the number rolled, then adds one to it.

Player claims the sum by covering it with a counter. If that sum is already covered, the player misses a turn.

Other players have a turn.

Example:

Carla rolls a 7 and says, "I know that double 7 is 14, so 7 add 8, must be one more, that's 15."

For ideas on how to bring out the mathematics in this game, see Fundamentals Yellow, pp 56-57.

Bridge to Ten

Focus:

Reinforce the Bridge-to-Ten strategy for addition

Materials:

Two number cubes configured as follows:

Cube A: 8, 8, 8, 9, 9, 9

Cube B: 3, 4, 5, 5, 6, 7

Colored pencil or marker for each student in different colors

Game board

Directions:

The player who completes the most equations in their color is the winner. One player plays the left side of the board, one plays the right side. It is possible to add another player or two. In that case, each player would use the entire board and count the equations completed in his/her color at the end of the game.

How to Play:

First player rolls both cubes.

Player finds the tens fact that corresponds to the 8 or 9s fact that is rolled.

Player fills in the sum of the tens fact and the equation for the 8 or nines fact.

Next player has a turn.

Play continues until one player fills a side (in a two-player game), or the board is filled (if more than two are playing), or until time runs out.

Player with the most equations in his/her color is the winner.

Example:

Jorge rolls a 9 and a 5. He says, "I know that 9 is one away from ten. Nine add 5 has the same value as 10 add 4. That's 14. So I will fill in the space with 10 add 4 and add the equation 9 add 5 equals 14."

Addition and Subtraction Strategies Videos

Introducing the ORIGO Model for Teaching Skills

ORIGO One: <https://origo-education.wistia.com/medias/26icnyoznj>

Using Five- and Ten- Frames to Represent Numbers

ORIGO One: <https://origo-education.wistia.com/medias/affdnu185b>

Teaching the Count-On Strategy for Addition

ORIGO One: <https://origo-education.wistia.com/medias/bv1c3s6bht>

GS13: Exploring Doubles in the Real World

Gem Stones: <https://www.youtube.com/watch?v=qfuWSb5CixY>

GS14: Doubling Numbers Less Than 10

Gem Stones: <https://www.youtube.com/watch?v=JZt2P4OdGx8>

Teaching the use Doubles Strategy for Addition

ORIGO One: <https://origo-education.wistia.com/medias/w14o4303pm>

GS15: Using Doubles to Add “Next Door” Numbers (Doubles-Plus-1 facts)

Gem Stones: <https://www.youtube.com/watch?v=KMfqfZHzh8I&t=26s>

Using Doubles to Add Nearby Numbers (Doubles-Plus-2 facts)

Gem Stones: <https://youtu.be/0QcCVR6Yqus>

GS4: Exploring combinations that make 10

Gemstone: <https://youtu.be/o6ZkDCE5BWc>

Using the Make-Ten or Bridge-to-ten Strategy for Addition

ORIGO One: <https://origo-education.wistia.com/medias/e7tku31liu>

Making a Ten to Add Basic Facts

Gem Stones: <https://youtu.be/ROuWdXdQ11g>

GS7: Making a Ten to add a 2 digit number and activity

Gem Stones: <https://youtu.be/kq1meaJDirA>

Teaching the Think-Addition Strategy for Subtraction

ORIGO One: <https://origo-education.wistia.com/medias/cm98lr2tax>