| Bump and Freeze |  |  |
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| Presenter: Karen Kehl |  |  |
| Grade Range | Content Area | Materials |
| Everyone | - Subitizing numbers 1-6 <br> - Making doubles from 2-12 <br> - Addition and subtraction with numbers to 10,12 and 20 | - Two 6-sided dice <br> - Paper and pencil <br> - 12 tokens (6 each of one colour) |

## How to Play

1. With a pencil, draw the numbers $9-8-7-6-5-4$ at the top of a piece of paper. This will be your playing board.

| 9 | 8 | 7 | 6 | 5 | 4 |
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2. First player rolls one 6 -sided die. What number added to their roll equals 10 ? Example:

$$
\because \because+
$$

$\qquad$ $=10$

Answer: 6
First player places their coloured token on the number " 6 " they calculated.
3. Second player rolls and places their coloured token on the number added to their roll to make 10 .
4. If a player places a token on a number that their opponent has a marker on already, the player can "bump" it off and return the token to their opponent. The opponent will have a chance to place the token back onto the board on their next turn.
5. If there are two of the same-coloured tokens on a number, then that number is "frozen". Players cannot place more than two tokens on a number. If a number is already frozen, you cannot place another token down on this turn and the play passes to the next player.
6. The winner is the first person to place all 6 of their coloured tokens on the board.

## Extensions

1. Change the operation to subtraction:

Example: $10-::=$ $\qquad$
2. Use two 6-sided dice and subtract one from the other? What would the numbers on your playing board be?
3. Use 1 dice and double it. What is the double subtracted from 12 ? What would the numbers on the playing board be?
4. Roll 2 dice and add together. What is the number subtracted from 20? What would the numbers on the playing board be? Instead of a linear board of numbers, could you place your numbers in a grid? How many times could you repeat the numbers to make the grid? The first player to get three tokens in a row wins.

