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## \$100 or bust

Use this game to review and practise making simple money calculations using whole-dollar amounts.
Teaching strategies involved:
Collaborative Learning; Concrete, representational, abstract; Metacognitive strategies; Questioning

## Overview:

This is game is for two players. It's a great way to tune back into the money system and practise making whole-dollar calculations. It also provides opportunities for students to think strategically about their total amounts in relation to $\$ 100$ when making play decisions.

## Materials:

For this task, each pair of students will need:

- two six-sided dice
- paper
- pencil or pen
- copy of the Race to $\$ 100$ playing key (attached)


## How to play:

Both players start at \$0.

Players take turns to:

- roll the two dice
- check the value of each roll on the Race to $\$ 100$ key
- decide which amount to add to their cumulative total.

The object of the game is to get to, but not exceed, $\$ 100$. If a player wishes to skip a roll, they can do this by saying 'stop'. Once a player 'stops' they can't start again. The winner is the player who is closest to \$100 without going 'bust'.


It's in the best interest of each player to observe the computations made by their opponent. Cases where there is doubt about the precision of a subtotal are great opportunities to use mathematical reasoning!

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## Example game:

Player 1 rolls a 2 and 5 . They choose to use the 5 and add $\$ 20$ to their total.

Player 2 rolls a 1 and 6 . They choose to use the 6 and add $\$ 50$ to their total.

Player 1 rolls a 2 and a 3 . They choose to use the 3 and add $\$ 5$ to their total, making $\$ 25$.

Player 2 rolls two 4s. They don't have a choice and add $\$ 10$ to their total, making $\$ 60$.

Player 1 rolls a 5 and a 2 . They choose to use the 5 and add $\$ 20$ to their total, making $\$ 45$.

Player 2 rolls a 5 and a 6. They choose to add $\$ 20$ to their total, making $\$ 80$.

Player 1 rolls a 1 and a 2 . They choose to use the 2

| Player 1 | Player 2 |
| :--- | :--- |
| $\$ 20$ | $\$ 50$ | and add $\$ 2$ to their total, making \$47.

Player 2 rolls a 3 and a 6 . They choose to use the 3 and add $\$ 5$ to their total making $\$ 85$.

Player 1 rolls two 6 s . They add $\$ 50$ to their total, making \$97.
\$25
\$60
\$45
\$47
Player 2 rolls a 1 and a 5 . They choose to use the 1 and add \$1 to their total, making \$86.

Player 1 says 'stop' and stays at $\$ 97$.

Player 2 rolls a 1 and a 2 . They choose to use the 2 and add $\$ 2$ to their total, making \$88.

## $\$ 97$

Player 2 rolls a 3 and a 4 . They choose to use the 4 and add \$10 to their total, making \$98.

Player 2 wins.

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## Variations:

For a shorter game, play $\$ 50$ or Bust. Change the value of 6 on the dice from $\$ 50$ to a 'wild card' where students can pick any of the five values above (\$1, \$2, \$5, \$10, \$20).

For a different challenge, play Nearest to $\mathbf{\$ 0}$. In this version, both players agree on a starting point up to $\$ 100$ (e.g. $\$ 50, \$ 80, \$ 100$ ) and subtract from their total on each turn. Negative amounts are out of bounds. If a player goes below $\$ 0$ by subtracting, they lose. Like in $\$ 100$ or Bust, if a player wishes to stop rolling, they can do so by saying 'stop'.


Image credit: Alamy Stock Photo/Ivan Vdovin

| Roll | Collect |
| :---: | :---: |
| 1 | Image credit: Istock.com/hddigital |
| $2$ | Image credit: Istock.com/hddigital |
| 3 |  |
| 4 |  |

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