

IS IT FAIR?

Game



- a die

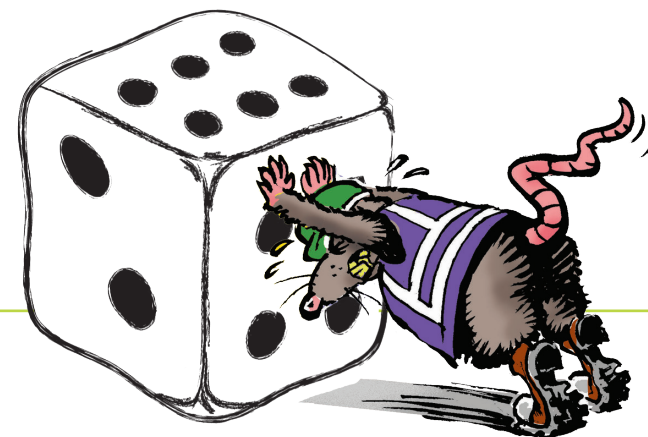
1 **Player A** is the person with the longest surname.

2 Roll the die.

3 If it lands on a number bigger than 4, **Player A** takes 5 points.
If it lands on any other number, **Player B** takes 5 points.

4 Repeat **steps 2 and 3** twenty times.

5 The player with the most points wins.



a Is the game fair?

b Who is likely to win the game? Why?

LET'S PLAY WITH DICE

- a Play this game as many times as you need to answer **part b**.
Record who wins each time.

Game



- two dice

Roll it, roll it, roll it

- 1 The person with the most letter a's in their name is **Player A**.
- 2 Roll the dice.
- 3 **Player A** wins if the difference between the numbers on the two dice is **3, 4 or 5**.
Player B wins if the difference between the numbers on the two dice is **0, 1 or 2**.

- b Is this a fair game? Explain why or why not.
- c Which player would you rather be, **Player A** or **Player B**?
- c **Challenge**
How could you make this a fair game?



TAKE TEN

a Play this game as many times as you need to answer parts b and c below.

Game

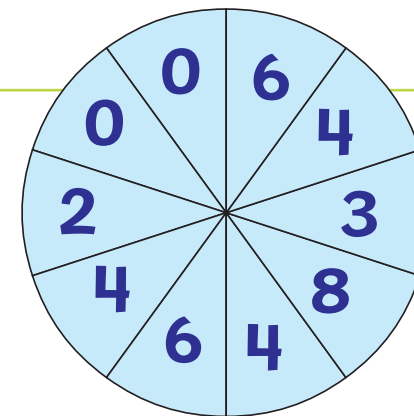


- a copy of the two spinners

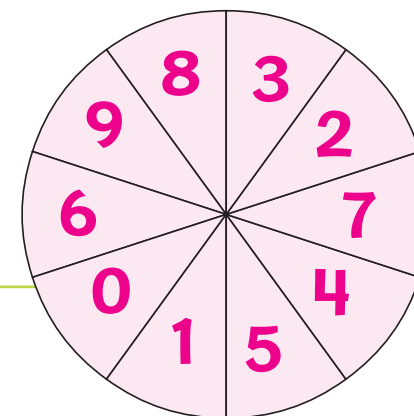
Take ten

1 **Player A** is the player with most letters from the second half of the alphabet in their first name.

- 2 Each player spins their spinner twice and adds the numbers together.
If your numbers add to ten, take 10 points.
- 3 Take turns to repeat **step 2** until someone has 50 points.
This person is the winner.



Player A



Player B

- b Is this a fair game? Explain your answer.
- c Who is most likely to win?
- d How could you make this game fair?