## Middle It

Big Idea: Place Value
Suits: Years 1-8

## Materials:

Dice (6 or 10 sided)
Recording grid


Instructions: A game for 3 (individuals or pairs)
> Each player throws the dice and chooses a number to write on the game sheet ( 2 and a 5 could be 25 or 52 )
> Player 2 rolls two 3 s and writes their number on the game sheet.
> Player 3 does the same and rolls 1 and a 6 unable to middle it themselves they decide that team 1 will middle it. Payers rotate the order of throws.
> Best of five wins.

| Game | Team 1 | Team 2 | Team 3 |
| :---: | :---: | :---: | :---: |
| 1 | $(25$ | 33 | 16 |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |

## Teacher Notes

It is important for players to rotate who starts to ensure a fair game. After a number of games it is important to discuss the strategies students are using when choosing between the possibilities. Why 25 instead of 52.

## Be aware that:

- In the early stages of this activity it is important for students to recognise the order of numbers and paying attention to the student's reasoning for the positioning.


## Differentiate the task by:

- Change the place value range to hundreds or hundredths
- Use common fractions


## Challenge students by:

- Everyone rolls the dice at the same time.
- Everyone sees each other's dice
- Select a number, secretly write it on a card and share
- Winner has middled it


## Guiding Questions:

$>$ What numbers are you able to make using these digits?
> Why did you choose your number?
$>$ Would chosing a different number have changed the result?
$>$ What numbers do you think are the best to roll? Why?

