Dicey Operations in Line

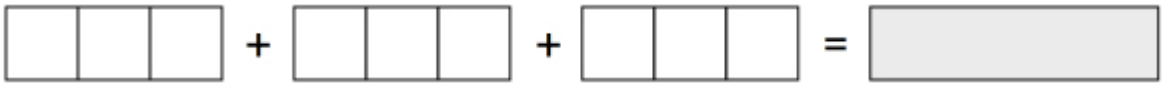
There are several games to choose from.

Find a partner and a 1-6 dice, or preferably a 0-9 dice if you have one.

Take turns to throw the dice and decide which of your cells to fill.
This can be done in two ways: either fill in each cell as you throw the dice, or collect all your numbers and then decide where to place them.

Game 1

Each of you might draw an addition layout like this:



Throw the dice nine times each until all the cells are full.

Whoever has the sum closest to 1000 wins.

There are two possible scoring systems:

- A point for a win. The first person to reach 10 wins the game.
- Each player keeps a running total of their "penalty points", the difference between their result and 1000 after each round. First to 5000 loses.

You can vary the target to make it easier or more difficult.

Game 2

Each of you might draw a subtraction layout like this:

Throw the dice eight times each until all the cells are full.

Whoever has the difference closest to 1000 wins.

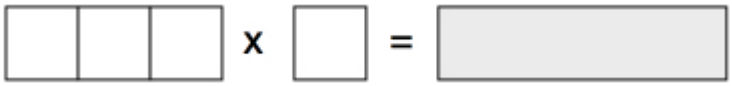
There are two possible scoring systems:

- A point for a win. The first person to reach 10 wins the game.
- Each player keeps a running total of their "penalty points", the difference between their result and 1000 after each round. First to 5000 loses.

You can vary the target to make it easier or more difficult, perhaps including negative numbers as your target.

Game 3

Each of you might draw a multiplication layout like this:



Throw the dice four times each until all the cells are full.

Whoever has the product closest to 1000 wins.

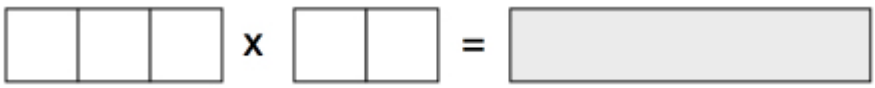
There are two possible scoring systems:

- A point for a win. The first person to reach 10 wins the game.
- Each player keeps a running total of their "penalty points", the difference between their result and 1000 after each round. First to 5000 loses.

You can vary the target to make it easier or more difficult.

Game 4

Each of you might draw a multiplication layout like this:



Throw the dice five times each until all the cells are full.

Whoever has the product closest to 10000 wins.

There are two possible scoring systems:

- A point for a win. The first person to reach 10 wins the game.
- Each player keeps a running total of their "penalty points", the difference between their result and 10000 after each round. First to 10000 loses.

You can vary the target to make it easier or more difficult.

You could introduce a decimal point. The decimal point could take up one of the cells so the dice would only need to be thrown four times by each player. You will need to decide on an appropriate target.

Game 5

Each of you might draw a division layout like this:

Throw the dice five times each until all the cells are full.

Whoever has the answer closest to 1000 wins.

There are two possible scoring systems:

- A point for a win. The first person to reach 10 wins the game.
- Each player keeps a running total of their "penalty points", the difference between their result and 1000 after each round. First to 5000 loses.

You can vary the target to make it easier or more difficult.

Game 6

Each of you might draw a division layout like this:

Throw the dice six times each until all the cells are full.

Whoever has the answer closest to 100 wins.

There are two possible scoring systems:

- A point for a win. The first person to reach 10 wins the game.
- Each player keeps a running total of their "penalty points", the difference between their result and 100 after each round. First to 500 loses.

You can vary the target to make it easier or more difficult.