

## Dicey Operations

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

$$XXX + XXX + XXX = 1000$$

Throw the dice nine times each until all the white cells are full. Then work out the sum of your two numbers and enter into the grey cells.

**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 works out the difference between their result and 1000 after each round. They keep their running total. First to 5000 loses.

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

### Game 2

$$XXXX - XXXX = 1000$$

Throw the dice eight times each until all the white cells are full. Then work out the difference between your two numbers and enter into the grey cells.

**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 works out the difference between their result and 1000 after each round. They keep their running total. 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

$$XXX \times X = 1000$$

Throw the dice four times each until all white the cells are full. Then work out the product of your two numbers and enter into the grey cells.

**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 works out the difference between their result and 1000 after each round. They keep their running total. First to 5000 loses.

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

#### Game 4

$$XXX \times XX = 10000$$

Throw the dice five times each until all the white cells are full. Then work out the product of your two numbers and enter into the grey cells.

**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 works out the difference between their result and 10000 after each round. They keep their running total. 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

$$XXXX / X = 1000$$

Throw the dice five times each until all the white cells are full. Then work out the quotient of your two numbers and enter into the grey cells.

**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 works out the difference between their result and 1000 after each round. They keep their running total. First to 5000 loses.

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

#### Game 6

$$XXXX / XX = 100$$

Throw the dice six times each until all the white cells are full. Then work out the quotient of your two numbers and enter into the grey cells.

**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 works out the difference between their result and 100 after each round. They keep their running total. First to 500 loses.

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