

# Maths Boggle: addition and subtraction

## Strand

Calculating

## Learning objective

Add or subtract mentally combinations of one-digit and two-digit numbers

## Type of starter

Refine

### Whiteboard tools

- Press 'new' to rattle the dice and start a new game.
- Highlight each dice by pressing it once (to remove the highlight, press again).
- Change the target by selecting a new question from the 'options' menu at the foot of the screen.
- Use the 'notepad' to show calculations.

### What to do

The aim of this activity is to use mental methods of addition and, where this is well established, to begin to use more sophisticated strategies to estimate which number strings (columns or rows) are most likely to contain the target answers.

Start by selecting a question from the 'options' menu at the foot of the screen (or, should you wish, by setting your own question). The dice are 'rattled' to reveal a random selection of numbers. In pairs or individually, the children find the answer to each question by calculating using the numbers on the screen. Answers can be checked by highlighting individual rows or columns. Challenge children to come to the board to show their calculations using the on-screen notepad.

### Differentiation

**Less confident:** limit the range of questions, focusing on pairs of numbers.

**More confident:** ask the children extension questions such as: *Which column or row would have the largest/smallest totals?*

### Key questions

- How can we estimate which rows or columns have the largest totals?
- How can we quickly check answers? (For example, doubling common numbers or finding multiples.)

The screenshot shows the Maths Boggle game interface. At the top, it says "Maths Boggle: addition and subtraction" and "SCHOLASTIC". The main instruction is "Add any pair of numbers together." Below this is a 5x5 grid of numbers: 42, 45, 2, 37, 25; 12, 33, 5, 31, 36; 29, 35, 19, 19, 8; 10, 3, 48, 46, 5; 28, 36, 24, 42, 8. The number 36 in the second row, fifth column is highlighted in green. At the bottom left is a red "NEW" button. At the bottom center are "back", "options", and "what to do" buttons. At the bottom right is a blue "NOTEPAD" button. There are also "print screen" and "main menu" buttons at the very bottom.

Annotations with arrows pointing to the interface:

- 'new' Press to rattle dice (points to the red NEW button)
- 'options' Select questions from menu (points to the options button)
- dice Press to highlight (points to the highlighted number 36)
- 'notepad' Note calculations on pad using the pen tool (points to the blue NOTEPAD button)

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