Shape values

Maths focus: recognising the use of shapes to represent unknown quantities in addition and subtraction calculations.

Learning objective: 5Nc.02

A game for two to four players

You will need:
- Game board (page 2).
- Game cards (page 3).
- A working sheet for each player (optional, page 4).
- A 1–6 dice (page 91) or a 1–6 spinner (page 93).
- A counter for each player.

How to play

1. Shuffle the game cards and place them in a pile face down.
2. Each player places their counter on the Start segment on the game board.
3. Players take turns to roll the dice and move their counter round the board.
4. Any player who lands on a Chance segment takes a game card, reads it and records any information that will help them to work out the values of the six shapes shown on the game board. Then they return the card to the bottom of the pile.
5. The first player to find the values of all six shapes to the satisfaction of the other players is the winner.

Answers:  = 2,  = 5,  = 7,  = 1,  = 4,  = 3

During the game, players have access to clue cards when they land on Chance segments on the board. Using the 'working out' sheets will encourage players to record the information they are given in an organised way. This will help them to analyse their data and draw conclusions.

Making 100

Maths focus: finding the total of more than three two-digit numbers using a written method.

Learning objective: 5Ni.01

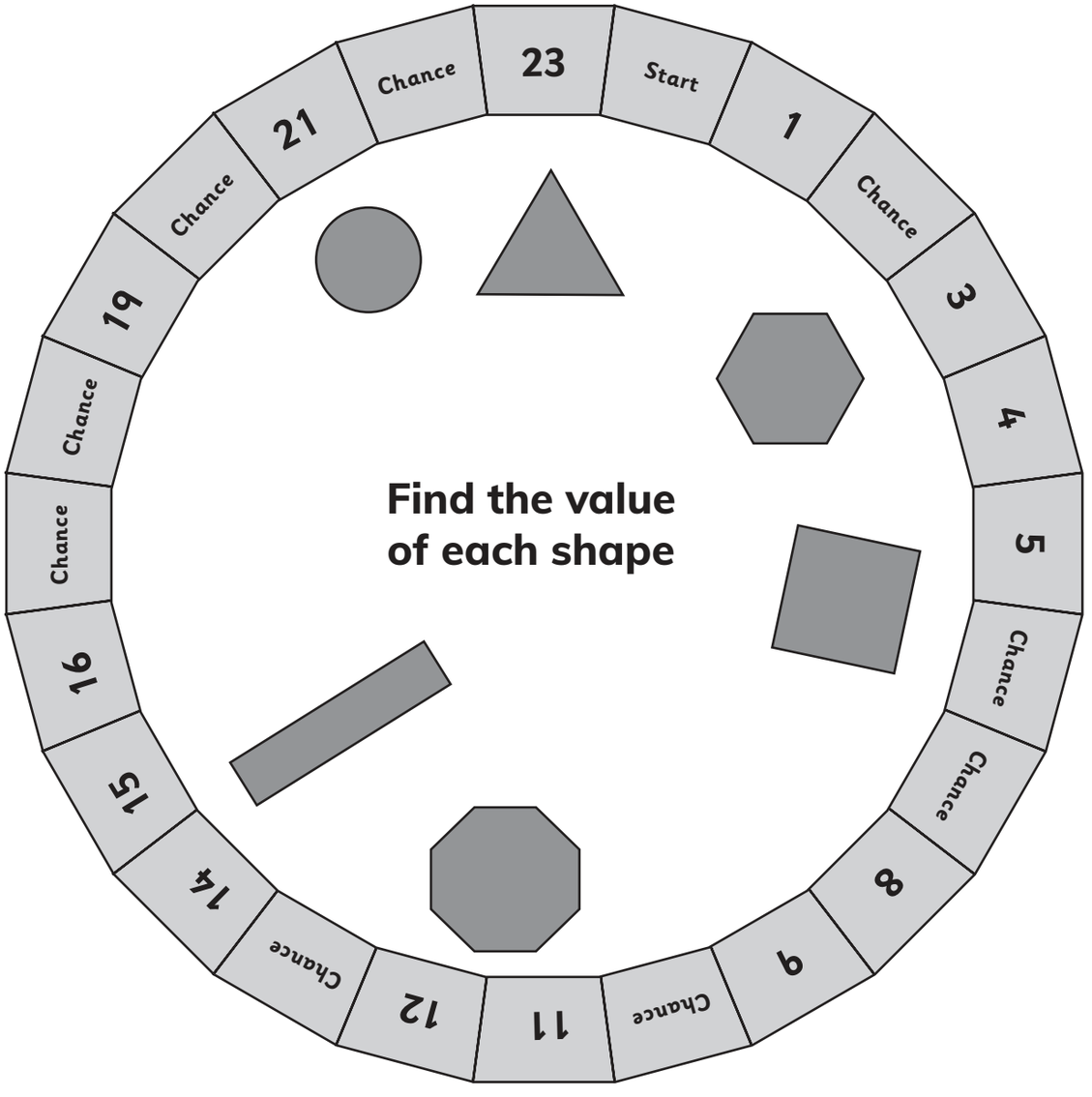
A game for two or more players

You will need:
- A game board for each player (page 5).
- A 1–6 dice (page 91) or a 1–6 spinner (page 93).

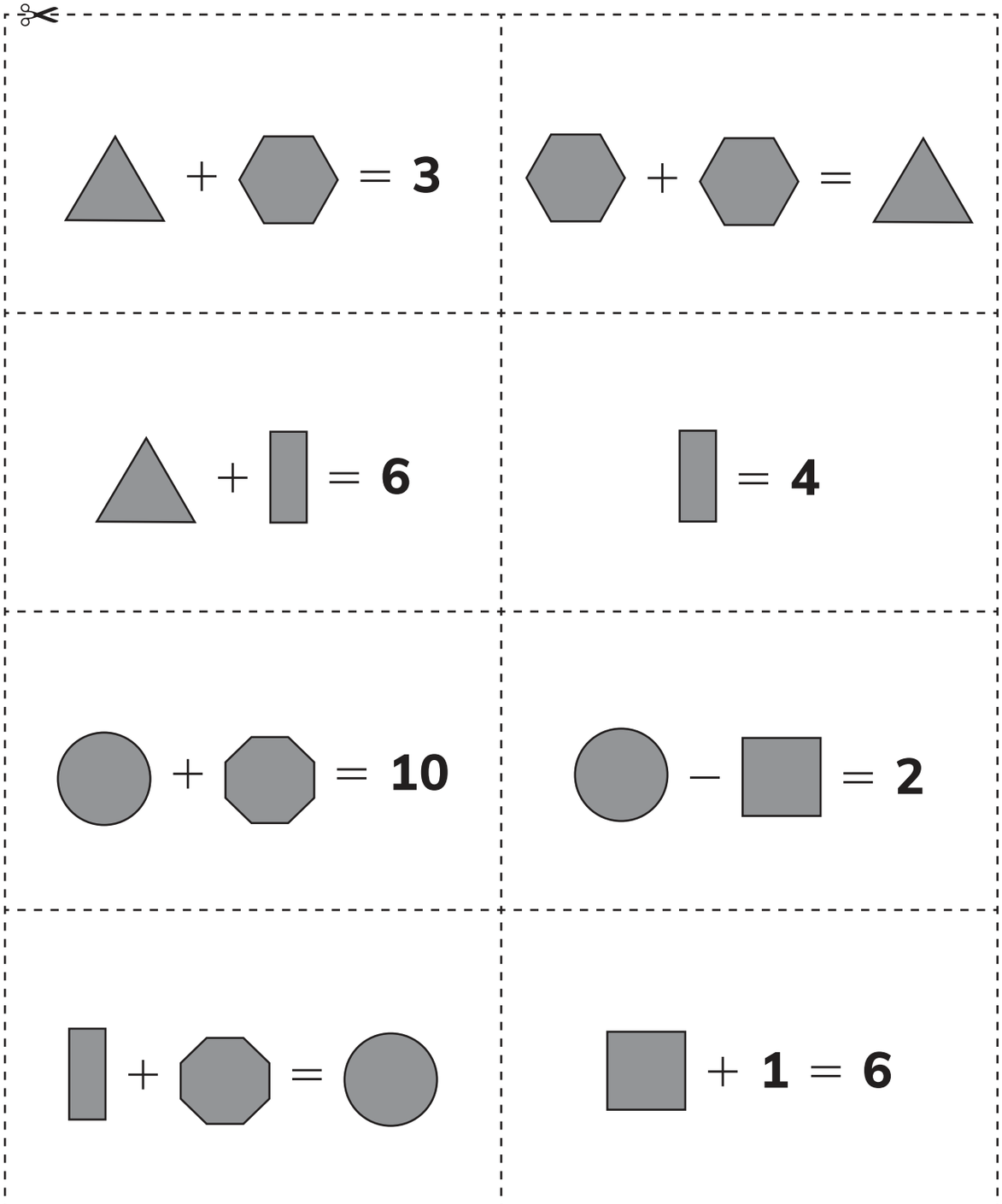
How to play

1. Each player needs a game board for adding four two-digit numbers.
2. Players take turns to throw the dice. After each throw, all players write the number on the dice into one of the boxes on their card. They continue until all the boxes are full.
3. Each player adds their two-digit numbers together, using any method they find reliable and efficient. They write down their total.
4. The player whose total is closest to 100 is the winner.

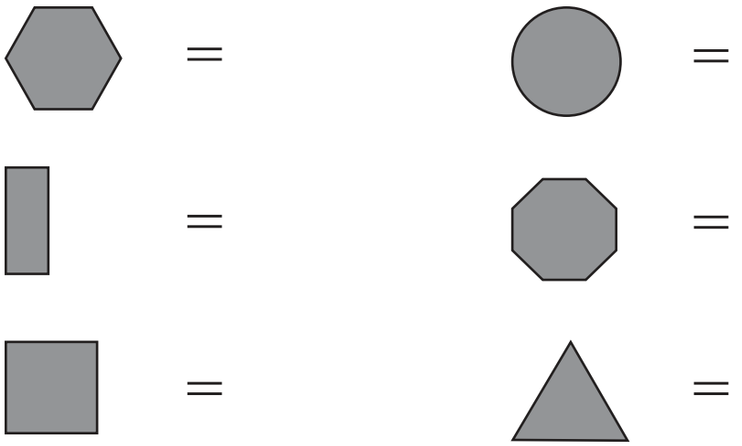
Shape values – Game board



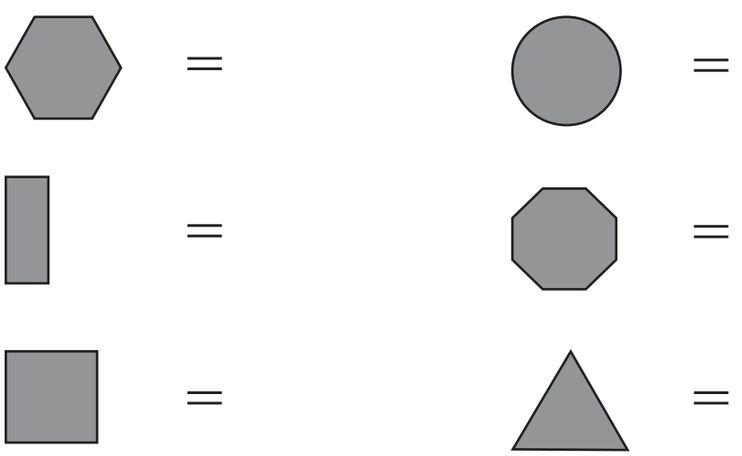
Shape values – Game cards



Shape values – Working sheets



Use this space for working:



Use this space for working:

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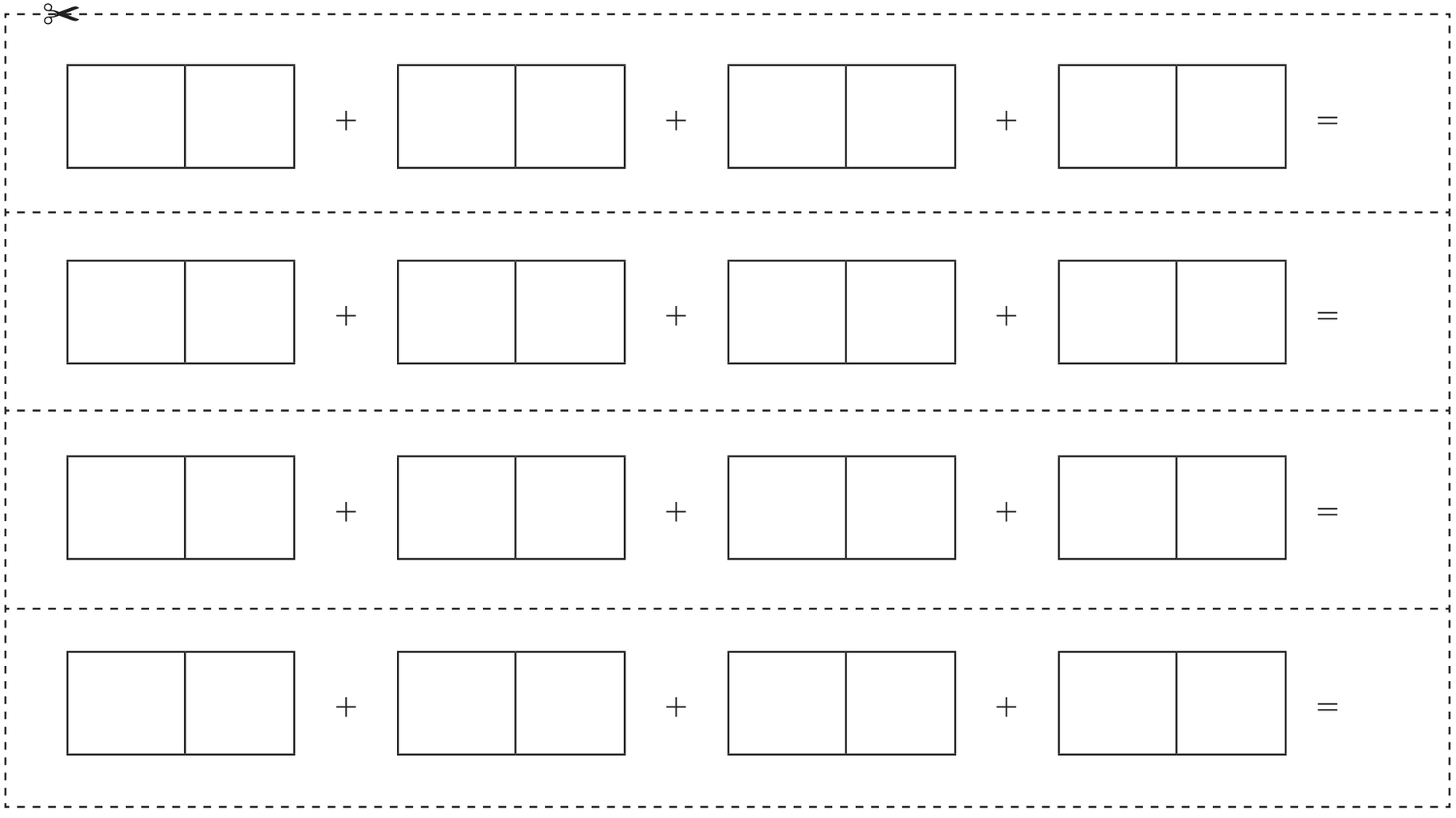
978-1-108-98687-8 — Cambridge Primary Mathematics Games Book 5 with Digital Access
Mary Wood , Emma Low
Excerpt
More Information

Making 100 – Game boards



Making 1000

Maths focus: finding the total of more than three three-digit numbers using a written method.

Learning objective: 5Ni.01

A game for two or more players

You will need:
- A game board for each player (page 7).
- A 1–6 dice (page 91) or a 1–6 spinner (page 93).

How to play

1. Each player needs a game board for adding four three-digit numbers.
2. Players take turns to throw the dice. After each throw, all players write the number on the dice into one of the boxes on their card. They continue until all the boxes are full.
3. Each player adds their three-digit numbers together, using any method they find reliable and efficient. They write down their total.
4. The player whose total is closest to 1000 is the winner.

The difference game

Maths focus: calculating differences between near multiples of 1000, e.g. 5026 – 4998.

Learning objective: 5Ni.01

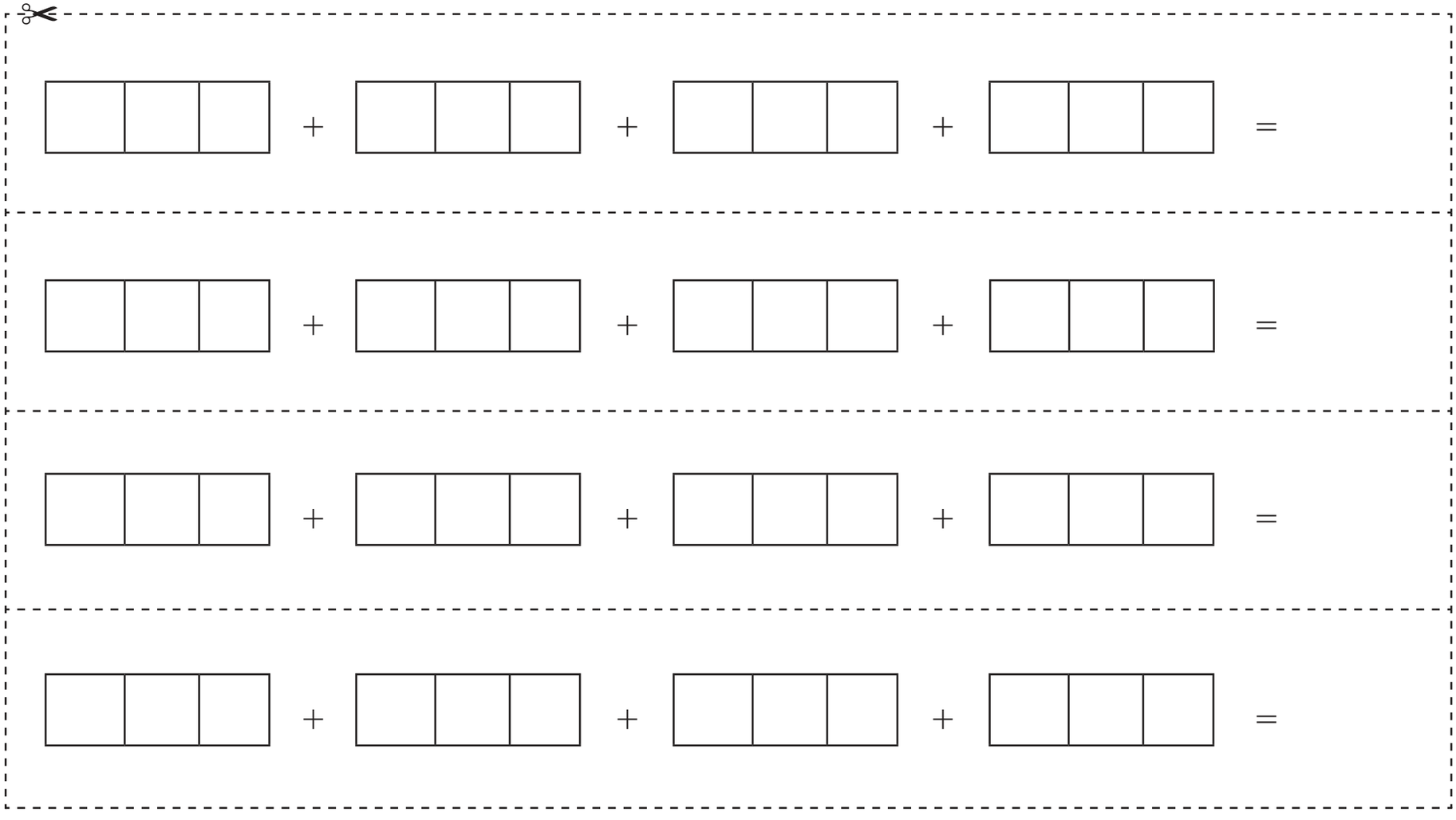
A game for two or more players

You will need:
- A game board for each player (page 8).
- Game cards (page 9).

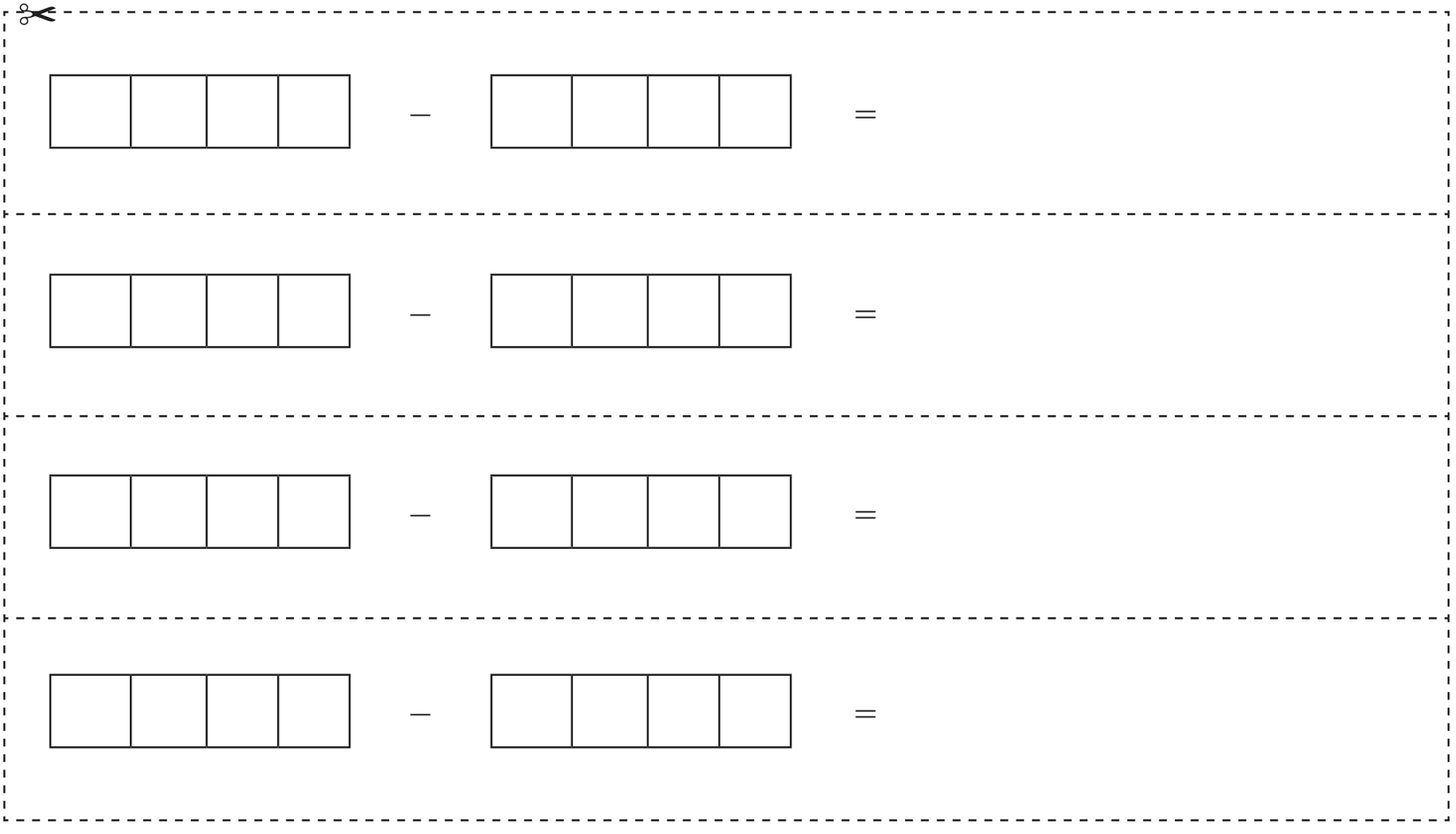
How to play

1. Each player takes a game board. They should see that it is for subtraction of two four-digit numbers.
2. Shuffle the game cards and place them face down in a pile.
3. Players take turns to turn over one card. After each turn, all players write the digit on the card in one space on their game board. Once a digit has been written in a box, it cannot be changed.
4. Players continue to turn over cards until all the boxes on their game boards are full.
5. Players carry out their subtraction. If a player has a second number greater than their first number, they are out of the game.
6. The player with the greatest difference is the winner.

Making 1000 – Game boards



The difference game – Game boards



The difference game – Game cards

0	0	0	0
0	0	0	0
1	1	1	1
1	1	1	1
8	8	8	8
8	8	8	8
9	9	9	9
9	9	9	9

Operation challenge

Maths focus: understanding that the four operations follow a particular order.

Learning objective: 5Ni.03

A game for two players

You will need:
- Game board (page 11).
- Three 1–6 dice (page 91) or a 1–6 spinner (page 93).
- A different coloured counter for each player.

How to play

1. Players take turns to roll three dice and use the numbers to make an expression for one of the numbers on the game board.

   Example:

   Possible expressions:
   $3 + 5 \times 2 = 13$
   $2 \times 3 - 5 = 1$
   $23 - 5 = 18$

2. If the other player agrees that the calculation is correct, Player 1 places a counter on the number they have made. If the calculation is incorrect, Player 1 misses that turn.
3. Players cannot put a counter on a square that already has a counter on it.
4. The winner is the first player to make a row of four counters, horizontally, vertically or diagonally.

Challenge

For a more challenging game, use four dice instead of three.

Domino multiplication

Maths focus: multiplying pairs of multiples of 10 and 100.

Learning objective: 5Ni.04

A game for two or four players

You will need:
- Multiplication dominoes (page 12).

How to play

1. Shuffle the dominoes and place them face down on the table.
2. Each player chooses their dominoes (seven each if there are four players and fourteen each if there are two players).
3. The player with the domino showing 81 000 (the highest number) lays it down to start the game.
4. Players then take turns to match one end of a domino from their 'hand' to one of the two 'ends' in the growing line of dominoes on the table. Dominoes must be placed so that the multiplication calculation on one domino is matched with the correct product on another domino.

Example:

5600 | 30 × 40	1200 | 50 × 30	1500 | 600 × 20

5. If a player is unable to place a domino, they miss that turn.
6. Play continues until one player has laid all their dominoes. That player is the winner.