

Applying the number grid patterns introduction



1 Use the patterns on a piece of the grid

Put a rectangular fragment — a piece of the grid — beside the full grid, seeded with a couple of anchor cards such as 42, 45 and 52. The whole grid is not here, but the anchor numbers tell us where the piece sits.

"This is just a piece of the grid. The full grid is gone — but these anchor numbers tell us where this piece belongs."

Show how the two directions work — move right and the right-hand digit changes; move down and the left-hand digit changes.

"From forty-two: move right, the right-hand digit changes — forty-three. Move down, the left-hand digit changes — fifty-two."

Fill the piece from the digit patterns, then check against the full grid — the grid is for checking, not for working from.

"Fill the piece using the digits. Then check with the full grid — only to check, not to count."

Take the full grid away — with just the fragment and its anchor, fill every cell from the two patterns alone.

"No full grid now. The anchor tells you where you are — fill the rest from the right-hand and left-hand digits."

Try an irregular piece — an L-shape or T-shape. From one anchor, the column pattern runs one way and the row pattern the other; where they meet, both digits are fixed.

"In an L-shape, the column runs down and the row runs across. Where they meet, both digits tell you the number."

Applying the patterns — demonstration fragments



Print on A4 (enlarge to A3 for the floor). Seed each piece with the shaded anchors, then model filling the blanks from the right-hand and left-hand digit patterns.

Rectangular piece — anchors 42, 45, 62

42			45
62			

L-shape — anchors 33, 63, 66

33			
63			66

Applying the patterns — discussion prompt cards

Cut out. Use a prompt to guide the talk before students place anything — the discussion is the work.



What is the right-hand digit of the anchor? Which column is that?

What is the left-hand digit? Which row is that?

Move down — what changes? Move right — what changes?

Which cells can you fill straight away? Which need both directions?

Check: does every number in this column share its right-hand digit?

How did you spot the error? Which pattern was broken?