

Puzzling squares

Use numbers 0 to 7 to make a total of 10 on each side of a square.

Skills practised:

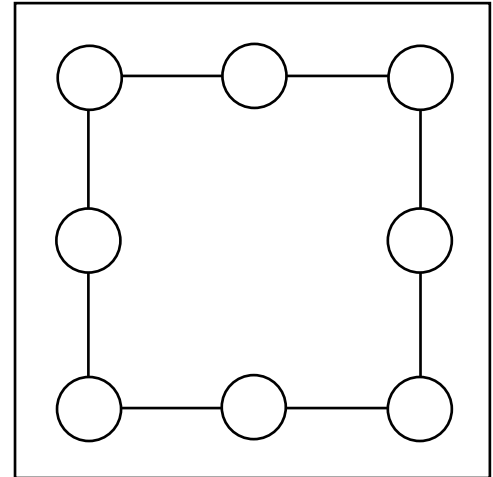
- Using number facts to solve puzzles
- Adding three single-digit numbers

Conjecture: It matters which numbers you put on the corners to solve the puzzle.

What to do:

Children work individually or in pairs.

1. Copy this square onto a piece of paper so that the circles are big enough for you to place digit cards over them (or use resource).
2. Use the 0 to 7 digit cards once each so that the total of each side is 10.
3. Once you have found a way, copy your arrangement of cards into your book.
4. Now try and find a different way.



What happens if you put the big numbers on the corners?

What happens if you put 0, 2, 4 and 6 on the corners?

What happens if you put 1, 3, 5 and 7 on the corners?

HINT: Save one arrangement that works and see if you can adapt it to find another way that works.

Aims:

- To find trios of numbers with a total of 10.
- To use reasoning skills to solve a number puzzle.

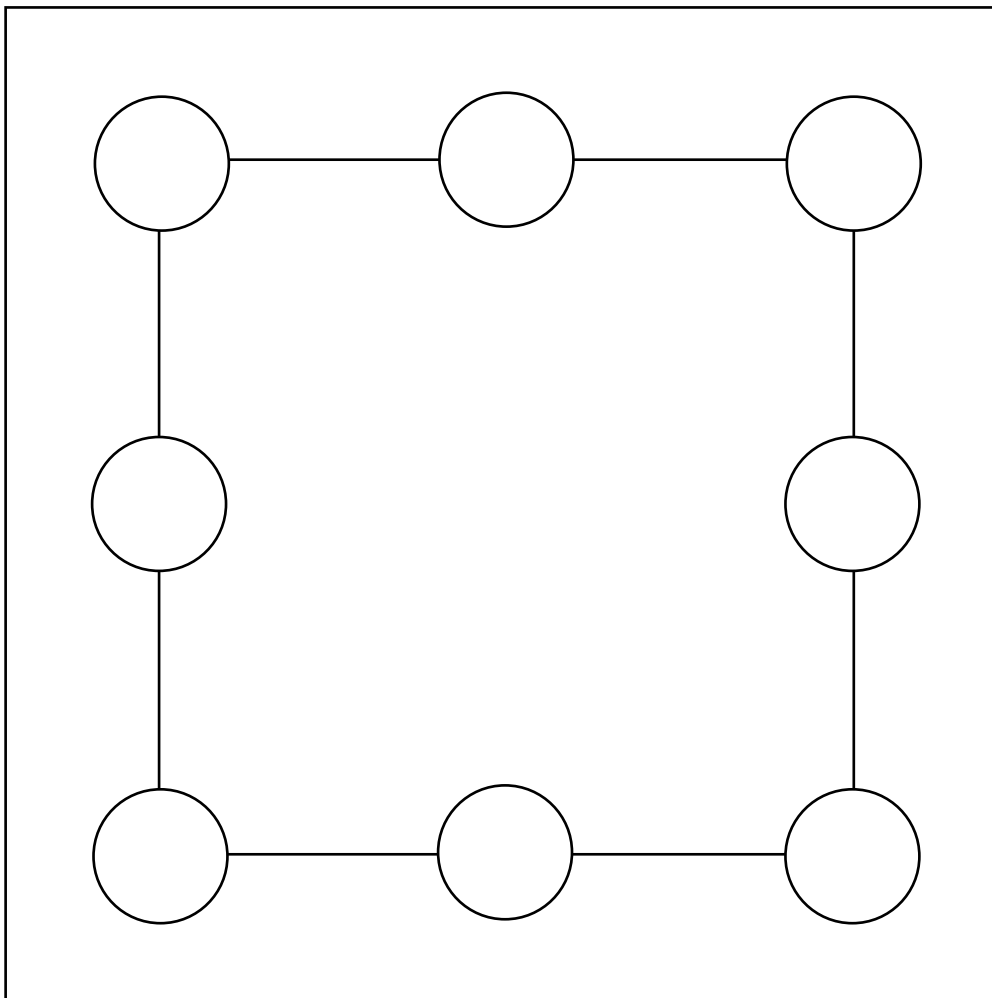
Minimum number of calculations expected

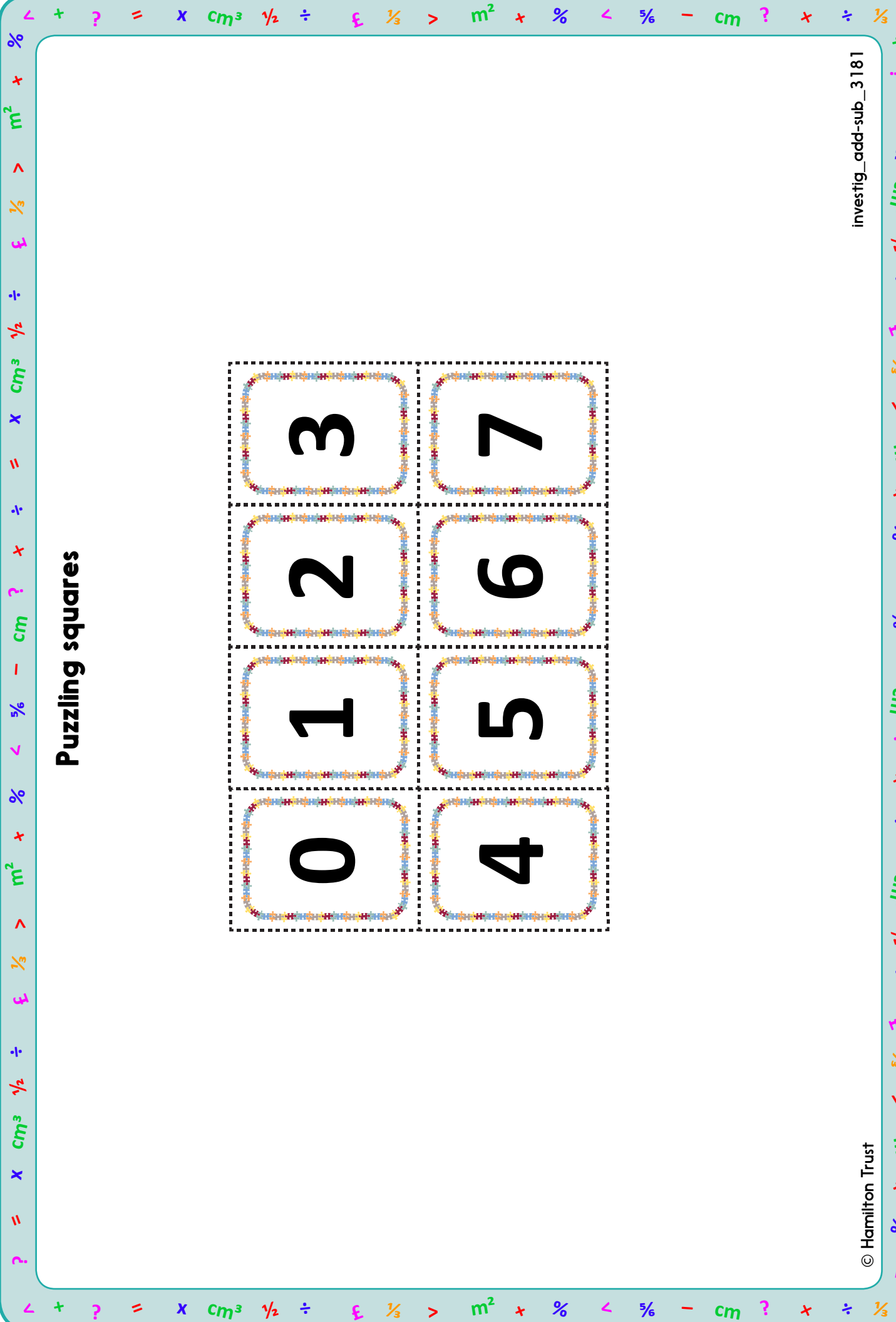
10

Puzzling squares

1. Use the 0 to 7 digit cards. You may use each one only once. Arrange the cards so that the total of each side is 10.
2. Look at the square below.
3. Once you have found a way, copy your arrangement of cards into your book.
4. Now try and find a different way.

What happens if you put the big numbers on the corners?
What happens if you put 0, 2, 4 and 6 on the corners?
What happens if you put 1, 3, 5 and 7 on the corners?





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