Maths investigation of square numbers:

Hard

If a number is **PALINDROMIC**, it can be read the same way forwards as backwards e.g. **989** or **1001**

Challenge: Can you find the first 3 numbers that are square numbers and are also palindromes?

(CLUE: The answers are more than 100, but less than 1000)

Tricky

Challenge: can you find 2 square numbers that add together to make another square number?

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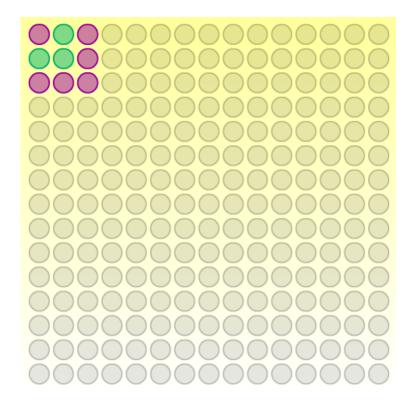
Challenge: can you find 3 square numbers that add together to make another square number?

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Easier

Find the square numbers by following the pattern.

Use 2 different colours to make the square bigger:

Odd number	Square number	Pattern
+1	1	1X1=1
+3	4	2x2=4
+5		
+7		

Answers

2 square numbers that add to make a square number

- 9 + 16 = 25
- 36 + 64 = 100
- 81 + 144 = 225

Square numbers that are palindromes

- 121
- 484
- 676

3 square numbers that add to make a square number

- 4 + 9 + 36 = 49
- 1 + 16 + 64 = 81
- 16 + 25 + 400 = 441