Stage Five – Summer Two

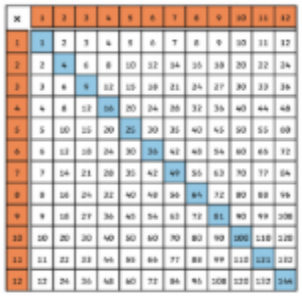
KIRF: I can recall square numbers up to 12^2 and their square roots.

Square numbers have an odd number of factors and are the result of multiplying a whole number by itself.

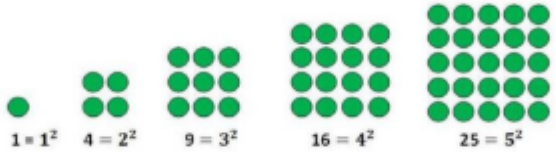
The aim is for children to recall square numbers up to 12^2 instantly.

What can this look like?

Concrete:



Concrete and Pictorial:



Abstract:

1²	1 x 1	1
2²	2 x 2	4
3²	3 x 3	9
4²	4 x 4	16
5²	5 x 5	25
6²	6 x 6	36
7²	7 x 7	49
8²	8 x 8	64
9²	9 x 9	81
10²	10 x 10	100
11²	11 x 11	121
12²	12 x 12	144

Questions to ask at home

What is 8 **squared**?
What is 7 **multiplied by itself**?
What is the **square root** of 144?
Is 81 a **square number**?

Key vocabulary

Notation- A symbol. The notation ^{2} means squared e.g. 5^2 is 5 squared, $5 \times 5 = 25$

Square number- The result when a number has been multiplied by itself.

Square root- A square root of a number is a value that, when multiplied by itself, gives the number. e.g. the square root of 9 is 3

Things to try

Around the clock- think of a clock face. What are each of the numbers a square root of? E.g. 12: 12 is the square root of 144.

What are each of the numbers squared?

Dice roll- whatever the number lands on, square it

Cards- turn a card over, square it and call out the answer. Can you say the answer quicker than your partner?

Websites-

https://www.topmarks.co.uk/maths-games/hit-the-button

https://mathszone.co.uk/using-applying/puzzles-and-logic-problems/splat-square100-primary-games-3/

https://wordwall.net/resource/9919606/maths/whack-square