



Key Instant Recall Facts

Year 5 - Spring 2

I can recall square numbers up to 12×12 and their square roots.

By the end of this half term children need to be able to instantly recall the following facts

$1^2 = 1 \times 1 = 1$	$\sqrt{1} = 1$
$2^2 = 2 \times 2 = 4$	$\sqrt{4} = 2$
$3^2 = 3 \times 3 = 9$	$\sqrt{9} = 3$
$4^2 = 4 \times 4 = 16$	$\sqrt{16} = 4$
$5^2 = 5 \times 5 = 25$	$\sqrt{25} = 5$
$6^2 = 6 \times 6 = 36$	$\sqrt{36} = 6$
$7^2 = 7 \times 7 = 49$	$\sqrt{49} = 7$
$8^2 = 8 \times 8 = 64$	$\sqrt{64} = 8$
$9^2 = 9 \times 9 = 81$	$\sqrt{81} = 9$
$10^2 = 10 \times 10 = 100$	$\sqrt{100} = 10$
$11^2 = 11 \times 11 = 121$	$\sqrt{121} = 11$
$12^2 = 12 \times 12 = 144$	$\sqrt{144} = 12$

Key Vocabulary

- What is 8 squared?
- What is 7 multiplied by itself?
- What is the square root of 144?
- Is 81 a square number? How do you know?
- What is a squared number?
- What is a cubed number?

Things to try

- Cycling Squares - At <http://nrich.maths.org/1151> there is a challenge involving square numbers. Can you complete the challenge and then create your own examples?
- Songs and Chants - Listen to fun multiplication songs and chants online such as: <https://www.youtube.com/watch?v=aJXnJ2aOAOE> You could even create your own song! If your child creates their own song, this can make the times tables even more memorable.
- Play games - Play 'hit the button'. Available for free online or as a paid app. <https://www.topmarks.co.uk/mathsgames/hit-the-button>
- Use TTR to support times tables knowledge.

Top tips

The secret to success is practising little and often .

Use your time wisely.

Can you practise these KIRFs while walking to school or during a car journey?