



# Key Instant Recall Facts

## Year 5 – Spring 1

**I can recall square numbers and cube number.**

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

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

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

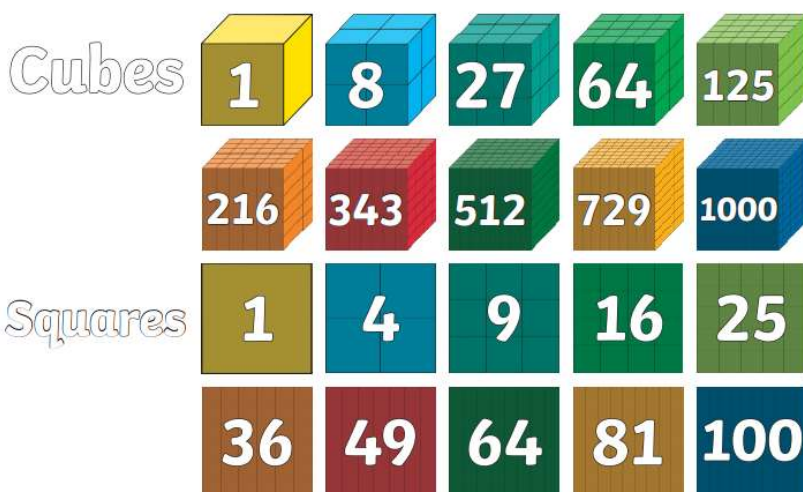
### Key Vocabulary

What is 8 **squared**?

What is 7 **multiplied by itself**?

What is the **square root** of 144?

Is 81 a **square number**?



Children should also be able to recognise whether a number below 150 is a square/ cube number or not.

### Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.

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?