

# Key Instant Recall Facts

## Year 6 Summer 2

We believe that the rapid recall of key facts underpins the success and progress of all in maths. Children will be introduced to their key facts at the beginning of each half term and then practise them regularly in class. Children will also be expected to practise these key facts at home.

The key fact this half term is  
To find the square root of a number

### Key Facts

$$1^2 = 1 \times 1 = 1$$

$$2^2 = 2 \times 2 = 4$$

$$3^2 = 3 \times 3 = 9$$

$$4^2 = 4 \times 4 = 16$$

$$5^2 = 5 \times 5 = 25$$

$$6^2 = 6 \times 6 = 36$$

$$7^2 = 7 \times 7 = 49$$

$$8^2 = 8 \times 8 = 64$$

$$9^2 = 9 \times 9 = 81$$

$$10^2 = 10 \times 10 = 100$$

$$11^2 = 11 \times 11 = 121$$

$$12^2 = 12 \times 12 = 144$$

$$\sqrt{1} = 1$$

$$\sqrt{4} = 2$$

$$\sqrt{9} = 3$$

$$\sqrt{16} = 4$$

$$\sqrt{25} = 5$$

$$\sqrt{36} = 6$$

$$\sqrt{49} = 7$$

$$\sqrt{64} = 8$$

$$\sqrt{81} = 9$$

$$\sqrt{100} = 10$$

$$\sqrt{121} = 11$$

$$\sqrt{144} = 12$$

### Key Vocabulary

What is 10 squared?

What is 12 multiplied by itself?

What is the square root of 144?

Is 77 a square number?

What is 13 the square root of?

A **square root** of a number is a value that, when multiplied by itself, gives a **square number**

### MAKE IT FUN

Draw a square with sides bigger than 15cm.

This is a classroom. Can you fit in square furniture? Can you do it in such a way that there are no gaps and that the pieces of furniture are different sized squares?

<https://nrich.maths.org/2275>

How do you find the sum of consecutive odd numbers quickly?

Can you make square numbers by adding two prime numbers together?

### MAKE IT LINK

<http://www.math-play.com/square-root-game.html>

<https://nrich.maths.org/2283>

<https://nrich.maths.org/2280>

### DEEPEN IT

Is it always, sometimes or never true that when you square an even number, the result is divisible by 4? Explain your answer.

<https://nrich.maths.org/1119>

<https://nrich.maths.org/8065>

