



Key Instant Recall Facts

Year 5 – Spring Term 2

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **with speed and accuracy**:

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

Children should know the following square numbers and their square roots:

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

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

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

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

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

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

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

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

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

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

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

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

$$\sqrt{1} = 1$$

$$\sqrt{4} = 2$$

$$\sqrt{9} = 3$$

$$\sqrt{16} = 4$$

$$\sqrt{25} = 5$$

$$\sqrt{36} = 6$$

$$\sqrt{49} = 7$$

$$\sqrt{64} = 8$$

$$\sqrt{81} = 9$$

$$\sqrt{100} = 10$$

$$\sqrt{121} = 11$$

$$\sqrt{144} = 12$$

Key vocabulary

What is 7 squared?

What is 7 multiplied by itself?

What is the square root of 144?

Top tips

The secret to success is practising *little* and *often*. Use time wisely. Can you practise this KIRF whilst walking to school or during a car journey? You do not need to practise all aspects of the KIRF all at once; perhaps you could have a fact of the day, or a few facts per week to practise? If you would like more ideas, please speak to your child's teacher.

Practical resources and ideas

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?