



KEY INSTANT RECALL FACTS

STAGE: 5

SPRING: 2

I can identify prime numbers up to 20. I can recall square numbers up to 12^2 and their square roots.

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

A prime number is a number with no factors other than itself and one.

The following numbers are prime numbers: 2, 3, 5, 7, 11, 13, 17, 19

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

$$\sqrt{1} = 1$$

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

$$\sqrt{4} = 2$$

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

$$\sqrt{9} = 3$$

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

$$\sqrt{16} = 4$$

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

$$\sqrt{25} = 5$$

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

$$\sqrt{36} = 6$$

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

$$\sqrt{49} = 7$$

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

$$\sqrt{64} = 8$$

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

$$\sqrt{81} = 9$$

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

$$\sqrt{100} = 10$$

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

$$\sqrt{121} = 11$$

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

$$\sqrt{144} = 12$$

Key Vocabulary

prime number

composite number

factor

multiple

What is 8 squared?

What is 7 multiplied by itself?

What is the square root of 144?

Is 81 a square number?

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. If you would like more ideas, please speak to your child's teacher.

Make a set of cards for the numbers from 2 to 20. How quickly can your child sort these into prime and composite numbers (not prime)? How many even prime numbers can they find? How many odd composite numbers?

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?