



Key Instant Recall Facts

Year 5 - Summer 1

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

I can recall square numbers up to 12^2 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 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 number or not.

Top Tips

- 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?



Key Instant Recall Facts

Year 5 - Summer 2

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

I can find factor pairs of a number.

Children should now know all multiplication and division facts up to 12×12 . When given a number in one of these times tables, they should be able to state a factor pair which multiply to make this number. Below are some examples:

$$24 = 4 \times 6$$

$$24 = 8 \times 3$$

$$56 = 7 \times 8$$

$$54 = 9 \times 6$$

$$42 = 6 \times 7$$

$$25 = 5 \times 5$$

$$84 = 7 \times 12$$

$$15 = 5 \times 3$$

Key Vocabulary

Find a **factor** of 28.

Find two numbers whose **product** is 20.

I know that 6 is a **factor** of 72 because 6 **multiplied** by 12 equals 72.

Top Tips

- Think of the question - One player thinks of a times table question (e.g. 4×12) and states the answer. The other player has to guess the original question.
- Use memory tricks - For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.