



Fluency Facts

Target 5-5

To know square numbers up to 12^2 and cube numbers up to 5^3

By the end of this half term, you should know the following facts. The aim is to recall these facts **instantly**. You should also be familiar with using the key vocabulary.

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

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

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

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

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

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

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

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

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

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

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

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

$$1^3 = 1 \times 1 \times 1 = 1$$

$$2^3 = 2 \times 2 \times 2 = 8$$

$$3^3 = 3 \times 3 \times 3 = 27$$

$$4^3 = 4 \times 4 \times 4 = 64$$

$$5^3 = 5 \times 5 \times 5 = 125$$

Key Vocabulary

Square number

Square root

Squared

Cube number

Cubed

Multiply

Divide

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

Top Tips!

- Practise little and often. Use your time wisely – could you practise on the way to school or while waiting in a queue at the supermarket?
- 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?
- Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.
- Revisit – You may think you know your target facts after one week, but if you don't practise regularly, you'll soon forget! Keep revisiting old facts regularly to keep them locked in your head!