## Quick Recall Facts

## Year 5 - Summer 1

## I can recall square numbers up to $1 \mathbf{2}^{\mathbf{2}}$ and their square roots.

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

$$
\begin{array}{rrr}
1^{2}=1 \times 1=1 & \sqrt{1}=1 \\
2^{2}=2 \times 2=4 & \sqrt{4}=2 \\
3^{2}=3 \times 3=9 & \sqrt{9}=3 \\
4^{2}=4 \times 4=16 & \sqrt{16}=4 \\
5^{2}=5 \times 5=25 & \sqrt{25}=5 \\
6^{2}=6 \times 6=36 & \sqrt{36}=6 \\
7^{2}=7 \times 7=49 & \sqrt{49}=7 \\
8^{2}=8 \times 8=64 & \sqrt{64}=8 \\
9^{2}=9 \times 9=81 & \sqrt{81}=9 \\
10^{2}=10 \times 10=100 & \sqrt{100}=10 \\
1 I^{2}=11 \times 11=121 & \sqrt{121}=11 \\
12^{2}=12 \times 12=144 & \sqrt{144}=12
\end{array}
$$

## 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?

Use memory tricks - For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

## Quick Recall Facts

## Year 5 - Summer 2

## I can find factor pairs of a number.

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

Children should now know all multiplication and division facts up to $12 \times 12$. 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:

$$
\begin{array}{ll}
24=4 \times 6 & 42=6 \times 7 \\
24=8 \times 3 & 25=5 \times 5 \\
56=7 \times 8 & 84=7 \times 12 \\
54=9 \times 6 & 15=5 \times 3
\end{array}
$$

## Key Vocabulary

Can you 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. $4 \times 12$ ) 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.

