



Maths Key Fluency Facts

Year 3 – Autumn 1

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

- 1) I know number bonds to all numbers to 20
- 2) I know the multiplication and division facts for the 3 times table

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

$2 + 9 = 11$

$3 + 8 = 11$

$4 + 7 = 11$

$5 + 6 = 11$

$3 + 9 = 12$

$4 + 8 = 12$

$5 + 7 = 12$

$6 + 6 = 12$

$4 + 9 = 13$

$5 + 8 = 13$

$6 + 7 = 13$

$5 + 9 = 14$

$6 + 8 = 14$

$7 + 7 = 14$

$6 + 9 = 15$

$7 + 8 = 15$

$7 + 9 = 16$

$8 + 8 = 16$

$8 + 9 = 17$

$9 + 9 = 18$

Example of a fact family

$6 + 9 = 15$

$9 + 6 = 15$

$15 - 9 = 6$

$15 - 9 = 6$

Examples of other facts

$4 + 5 = 9$

$13 + 5 = 18$

$19 - 7 = 12$

$10 - 6 = 4$

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

$3 \times 1 = 3$

$1 \times 3 = 3$

$3 \div 3 = 1$

$3 \div 1 = 3$

$3 \times 2 = 6$

$2 \times 3 = 6$

$6 \div 3 = 2$

$6 \div 2 = 3$

$3 \times 3 = 9$

$3 \times 3 = 9$

$9 \div 3 = 3$

$9 \div 3 = 3$

$3 \times 4 = 12$

$4 \times 3 = 12$

$12 \div 3 = 4$

$12 \div 4 = 3$

$3 \times 5 = 15$

$5 \times 3 = 15$

$15 \div 3 = 5$

$15 \div 5 = 3$

$3 \times 6 = 18$

$6 \times 3 = 18$

$18 \div 3 = 6$

$18 \div 6 = 3$

$3 \times 7 = 21$

$7 \times 3 = 21$

$21 \div 3 = 7$

$21 \div 7 = 3$

$3 \times 8 = 24$

$8 \times 3 = 24$

$24 \div 3 = 8$

$24 \div 8 = 3$

$3 \times 9 = 27$

$9 \times 3 = 27$

$27 \div 3 = 9$

$27 \div 9 = 3$

$3 \times 10 = 30$

$10 \times 3 = 30$

$30 \div 3 = 10$

$30 \div 10 = 3$

$3 \times 11 = 33$

$11 \times 3 = 33$

$33 \div 3 = 11$

$33 \div 11 = 3$

$3 \times 12 = 36$

$12 \times 3 = 36$

$36 \div 3 = 12$

$36 \div 12 = 3$

Key Vocabulary

1) Key Vocabulary

What do I **add** to 5 to make 19?

What is 17 **take away** 6?

What is 13 **less than** 15?

How many more than 8 is 11?

What is the **difference** between 9 and 13?

2) Key Vocabulary

What is 3 **multiplied by** 8?

What is 8 **times** 3?

What is 24 **divided by** 3?

Challenges:

- 1) This list includes the most challenging facts but children will need to learn **all** number bonds for each number to 20 (e.g. $15 + 2 = 17$). This includes related subtraction facts (e.g. $17 - 2 = 15$).
- 2) They should be able to answer these questions in any order, including missing number questions e.g. $3 \times \bigcirc = 18$ or $\bigcirc \div 3 = 11$.

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.

1)

Buy one get three free - If your child knows one fact (e.g. $8 + 5 = 13$), can they tell you the other three facts in the same fact family?

Use doubles and near doubles – If you know that $6 + 6 = 12$, how can you work out $6 + 7$? What about $5 + 7$?

Play games – There are missing number questions at www.conkermaths.com. See how many questions you can answer in just one minute.

2)

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Buy one get three free – If your child knows one fact (e.g. $3 \times 5 = 15$), can they tell you the other three facts in the same fact family?

Warning! – When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.

E.g. $3 \times 12 = 36$. The answer to the multiplication is 36, so $36 \div 3 = 12$ and $36 \div 12 = 3$