



Supporting Your Child with Maths

Year 3

Booklet 2: February

These booklets have been designed to help you support your child as they build and develop their skills on a **strong foundation** of key mathematical concepts.

The maths curriculum covers a wide range of concepts but is built on **confidence and fluency of key facts**. When a child is fluent with these facts and skills their confidence grows and they are more able to **apply** them to a range of problems.

The booklets include specific guidance for your child's year group on skills and methods used as well as ideas for games to play and ways to practise key ideas.

Wherever we can, we want to make this practice **fun** and **practical**. Lots of opportunities to **talk** about the maths and to show that we, as adults, **enjoy** it too.

Did you know?

- Parents' maths knowledge has **no** impact on how successful their children will be
- Parents' attitude towards maths has a **pro-found** impact on their children's success

Did you know?

Mathematical understanding has a bigger impact on success in adulthood than reading and writing

If you have any questions or would like to know more, please contact your child's teacher or Mrs Gibbons, the maths leader.



Learn-Its

Year 3 – Phase 2 (Nov- Feb)

I know the multiplication and division facts for the 3 times table.

By the end of this phase, 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

What is 3 **multiplied by** 8?

What is 8 **times** 3?

What is 24 **divided by** 3?

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 Learn-Its 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 family of the day.

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 $36 \div 12 = 3$



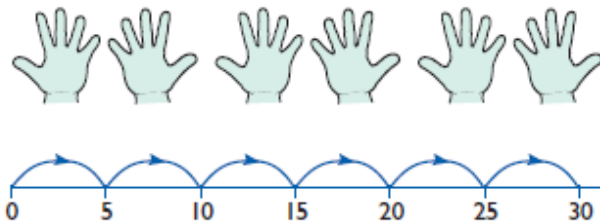
Practise It

Year 3 - Phase 2 (Nov-Feb)

I can use numberlines to help me multiply.

Children learn to use numberlines throughout their time at primary school. Although initially a written method, these will become a mental strategy as they become more skilled.

Children begin to understand multiplication as repeated addition.



$$5 + 5 + 5 + 5 + 5 + 5 = 30$$

$$5 \times 6 = 30$$

5 multiplied by 6

6 groups of 5

6 hops of 5

As they begin to learn their times tables, children will use a variety of ways to support their counting.

They often begin with their fingers e.g.

5 jumps of 3

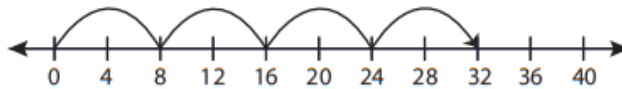


This only works if children are very accurate with their counting as its difficult to see where a mistake has been made.

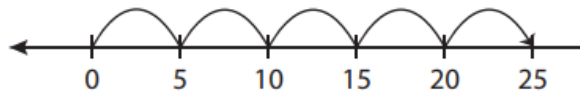
Unstructured numberlines are more useful and can also be used when looking at dividing .

e.g.

4 jumps of 8



5 jumps of 5

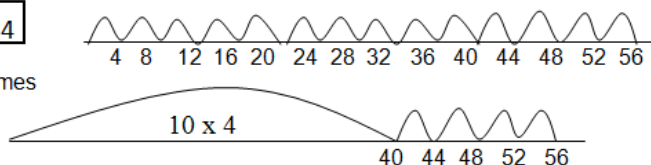


This allows children to keep track of where they have got to and then go back and count the jumps.

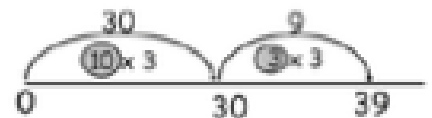
As they become more confident, we look at how to adapt to multiply bigger numbers. This will include making bigger jumps to make it more efficient.

$$14 \times 4$$

Becomes



$$13 \times 3 = 39$$





Try It!

Year 3 - Phase 2 (Nov- Feb)

Try these

Complete the multiplication equation that describes each model.

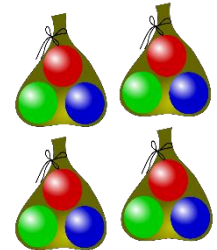


$$\square \times 5 = 20$$



$$9 \times \square = 63$$

Draw a multiplication numberline to represent this:



Solve these by drawing a multiplication numberline:

Word Problems

- 1) Mary goes fishing with Sandy. Mary catches 7 trout. Sandy catches twice as many trout as Mary. How many trout did Sandy catch ?
- 2) Fred has 6 five dollars bills. How much money does he have ?
- 3) Mary has 9 orange balloons. Sam has 3 times more orange balloons than Mary. How many orange balloons does Sam have now ?
- 4) Tim was at the beach for five days and found 8 seashells every day. How many seashells did Tim find during the beach trip ?

Draw a multiplication numberline and use it to solve these:

$$\square \times 2 = 6$$

$$6 \times \square = 42$$

$$9 \times \square = 54$$

$$3 \times \square = 24$$

$$\square \times 6 = 48$$

$$7 \times \square = 21$$