



# Supporting Your Child with Maths

Year 5

## 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 5 – Phase 2 (Nov-Feb)

### I can find factor pairs of a number.

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

Use What You Already Know!  
**Times Table Facts**

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:

$$\begin{aligned}24 &= 4 \times 6 \\24 &= 8 \times 3 \\24 &= 12 \times 2 \\24 &= 24 \times 1\end{aligned}$$

**So 1, 2, 3, 4, 6, 8, 12 are all factors of 24**

#### 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

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 of the day. If you would like more ideas, please speak to your child's teacher.

Play games - There is an activity at [www.conkermaths.org](http://www.conkermaths.org) to practise finding factor pairs

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](http://www.multiplication.com) has some strange picture stories to help children remember.



# Practise It

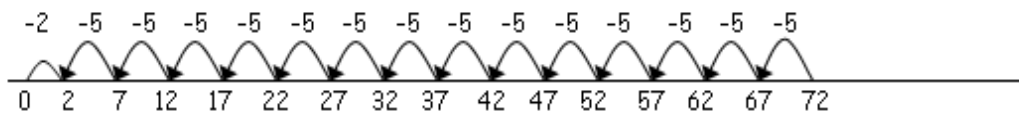
Year 5 – Phase 2 (Nov - Feb)

## I can use an informal chunking method to divide by a 1-digit number.

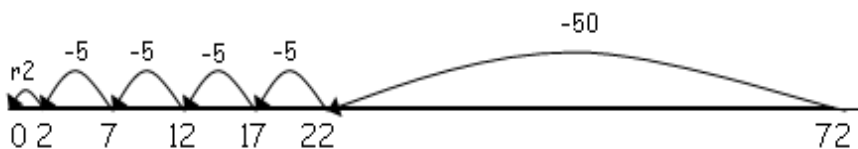
Chunking is a useful division method based on the idea of repeated subtraction. Although at this stage it is recorded as shown below, this technique becomes a useful mental method.

Division begins by counting jumps on a number line. As the numbers get bigger, we realise we can use bigger jumps or chunks to get to the answer quicker.

$$72 \div 5$$



Becomes:



Then onto the vertical method:

**Short division TU  $\div$  U**

$$72 \div 3$$

$$\begin{array}{r} 3 \overline{) 72} \\ \underline{- 30} \\ 42 \\ \underline{- 30} \\ 12 \\ \underline{- 6} \\ 6 \\ \underline{- 6} \\ 0 \end{array}$$

Answer: 24

A vertical oval on the right side of the calculation contains the numbers 10x, 10x, 2x, and 2x, with an arrow pointing down from the bottom of the oval to the number 24.

### Top Tips

- Know your times tables
- Remember to find the answer you count the chunks you have taken away
- Make sure your subtracting is accurate

This vertical layout helps us keep track of how many chunks we have taken away.



# Try It

Year 5 – Phase 2 (Nov - Feb)

Try these Factor and Multiples Tasks:

## Mystery Matrix



Can you fill in the multiplication square?

The numbers 2 to 12 were used to generate it, with exactly one number used twice.

x						
	32			40		
					49	
			22			
		15				27
			24			
					42	

## Factors and Multiples Game

### How do you play?

- You'll need an adult to play with. You'll also need a grid of numbers from 1 to 100.
- The grown-up chooses a positive even number that is less than 50, and crosses it out on the grid.
- You then choose another number to cross out. The number must be a factor or multiple of the first number.
- Take it in turns to cross out numbers, at each stage choosing a number that is a factor or multiple of the number just crossed out by the other player.
- The first person who is unable to cross out a number loses.
- Try playing again with you going first.

Do you have any winning strategies?  
Are there any numbers you shouldn't go to?

An interactive version of this game is available at [rich.maths.org/10080](http://rich.maths.org/10080)

## What Is Ziffle?

There's a planet out in space called Zargon .....

On this planet there are numbers that are called ziffles.

These numbers are ziffles 56,105,28,63,49

These numbers are not ziffles: 100,18,65,9,76

Only **two** of these numbers are ziffles: 16,14,57,24,70

So what is special about the ziffles?

The solution can be found at [rich.maths.org/951](http://rich.maths.org/951)