



YEAR 3

Maths at home for parents and carers



THIS SHORT LEAFLET COVERS SOME OF THE CORE CONCEPTS AND IDEAS THAT YOUR CHILD WILL NEED TO KNOW THIS YEAR. YOU WILL FIND SUGGESTIONS FOR GAMES TO PLAY, ACTIVITIES TO COMPLETE AND WEBSITES TO ACCESS TO SUPPORT YOU, AS YOU SUPPORT YOUR CHILD..

Equipment

Many of the activities included in this helpful leaflet will not require any special equipment. If you have access to online resources this will be useful but not essential when supporting your child.



Websites

 https://nrich.maths.org/13788 Multiplication and division games	 Times Tables Games for 7 to 11 year olds (topmarks.co.uk) Times tables games	 https://www.timestables.co.uk/speed-test/ Times tables speed test	 https://phet.colorado.edu/sims/html/fractions-intro/latest/fractions-intro_en.html exploring fractions	 https://nrich.maths.org/8939 fraction challenges
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Maths words and phrases

Repeated addition is **adding equal groups together**. It is also known as multiplication. If the same number is **repeated** then, we can write that in the form of multiplication.

Commutativity is the **order** in which we multiply numbers and it **does not change the answer** e.g. $4 \times 5 = 20$ or $5 \times 4 = 20$

An **array** is an arrangement of objects, numbers or pictures in columns or rows. The **purpose of an array** is to help children understand multiplication and division .

Numerator is the **top number in a fraction** and shows how many **parts** we have.

Denominator is the **bottom number in a fraction** and shows how many **equal parts** the item is **divided** into.

Unit fraction is any fraction with 1 as its numerator (top number), and a whole number for the denominator (bottom number)

Non-unit fraction is a **fraction** where the numerator (the top number) is **greater than 1**. The denominator (the bottom number) can be any whole number.

Whole: When we divide a **whole** into equal parts, each part is a **fraction** of the **whole**.

Key Learning 1– Multiplication and Division

Count in 2, 4, 5, 8 and 10

Solve multiplication and division problems

Games and Ideas

Practise times table as often as you can: 2's, 4's, 8's, 5's, 10's.

Ask your child to write them out and look for patterns within 2/4/8 and 5/10.

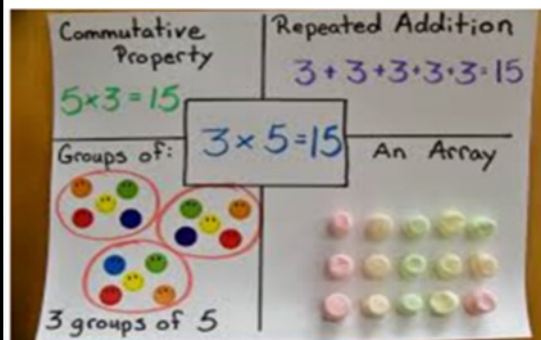


Sam is planting onions in the vegetable plot in his garden. He arranges the onions into rows of 4 and has two left over. He then arranges them into rows of 3 and has none left over. How many onions might he have had?

Explain your reasoning.



Encourage your child to make images like the one below using different multiplication calculations.



$$\square \square \times \square = ?$$

Putting the digits 1, 2 and 3 in the empty boxes, how many different calculations can you make?

Which one gives the largest answer?

Which one gives the smallest answer?



Look for arrays at home in trays of eggs, cupcake tins etc. How many arrays can you spot? Draw them. What calculations can you write about them? Can you draw a bar model that represents the array?



It's my party!

You are having a party and can invite 23 friends. That means there will be 24 of you there! Can you work out how many items you will need in the table below?

Item	How many in each pack?	How many I will need?
 Cupcakes	2	
 Party hat	8	
 Crisps	12	
 Party bags	6	



Key Learning 2 – Fractions

Recognise, find, name and write simple fractions of numbers

Add and subtract fractions with the same denominator, within 1.

Games and Ideas

Have a look in your kitchen cupboards for different containers. They could be jugs, cups, drinking bottles, etc.



Can you fill them up so they show:

$\frac{1}{2}$ $\frac{1}{4}$ Now label them to show the fractions.

Now try these fractions too:

$\frac{1}{3}$ $\frac{1}{5}$ and $\frac{1}{10}$



Fraction hunt around your home! Can you find and draw something that is in your house that shows these fractions $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{8}$ $\frac{1}{10}$

Here are some examples:



$\frac{1}{4}$ of a pizza



$\frac{1}{2}$ are white



Picnic time! You are preparing a picnic for 5 people. How many of each will they get?



20 Sandwiches



55 crisps



10 cupcakes



Using the pictures above, ask your child to write a fraction story that involves adding and subtracting fractions with the same denominator.

For example: At the party Lisa ate $\frac{2}{8}$ of the cake and Sam ate $\frac{3}{8}$
How much was left?

