

ASPECTS OF THE YEAR 4 MATHS CURRICULUM THE CHILDREN CAN PRACTISE AT HOME

The bank of websites you were given when the schools closed should provide some resources for most of these aims. Also, math drills and Twinkl (<https://www.math-drills.com>) (<https://www.twinkl.co.uk>) have lots of free worksheets and PowerPoints available, NRIC (<https://nrich.maths.org/primary>) has fabulous investigation type tasks and BBC Bitesize (<https://www.bbc.co.uk/bitesize/levels/zbr9wmn>) has lots of great video clips and other resources to help explain different concepts and methods. White Rose has teaching aids and activities which are really useful (<https://whiterosemaths.com/homelearning/year-4/>).

Aim: Learn your times tables from 0x0 to 12x12 and associated division facts

$$12 \times 3 = 36 \quad 3 \times 12 = 36 \quad 36 \div 3 = 12 \quad 36 \div 12 = 3$$

- Use times table rockstars <https://play.ttrockstars.com/auth/school/teacher>
- BBC supermovers <https://www.bbc.co.uk/teach/supermovers/times-table-collection/z4vv6v4>
- Math Drills <https://www.math-drills.com/multiplication.php>
- Arrays

Aim: Count backwards through 0 to include negative numbers

$$10 - 12 = -2$$

- Practise subtraction questions which have a negative number for an answer (as above)
- Look at a thermometer and think about minus temperatures in winter. What is the difference between $-4 \cdot c$ and $5 \cdot c$?

Aim: Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s and 1s)

5643 This number has 5 thousands, 6 hundreds, 4 tens and 3 ones

- Write four digit numbers and ask the children to tell you the value of each digit.
- Roll a dice four times. What is the largest number they can make with digits? Smallest number? How do they know?

Aim: Add and subtract four digit numbers using the column method

- Roll a dice to create the numbers.
- Practise with 5 or 6 digit numbers.
- Do the inverse, for example, $9359 - 5893 = 3466$
- Create word problems that require the children to use these to work out the answers

- Math Drills https://www.math-drills.com/addition/addition_all_regrouping_4digit_001.php
https://www.math-drills.com/subtraction/subtraction_multi_digit_all_regrouping_05_04_001.php

	3	4	6	6
+	5	8	9	3
	9	3	5	9
	1	1		

	8 7	4 3	13	5
-	4	8	5	3
	3	5	8	2

Aim: Multiply two-digit and three-digit numbers by a one-digit number using formal written layout

- You guessed it, roll a dice to create your numbers!
- Create word problems that require children to use this method.
- Practise with 5 or 6 digit numbers.
- It helps if you know your times tables!
- Math Drills https://www.math-drills.com/multiplication2/multiplication_long_no_tseparator_0301_001.php

	5	4	8	
x			5	
	2	7	4	0
	2	4		

Aim: Formal written method of division (bus stop method) three digits by one digit

- To create questions the children can answer without remainders multiply a two digit number by a one digit number and use the inverse. E.g. $71 \times 5 = 355$ so $355 \div 5 =$

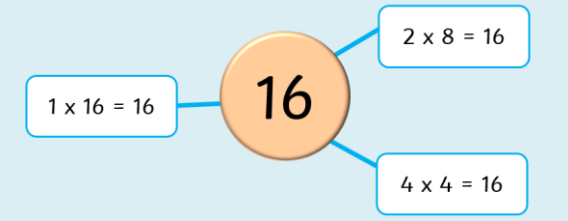
	0	7	1
5	3	5	5

This is helpful if your child is ready to move on to division with remainders

<https://www.bbc.co.uk/bitesize/topics/z36tyrd/articles/zgxdfcw>

Aim: Recognise and use factor pairs

Pairs of numbers that **multiply** to make a particular number are called **factor pairs!**



Factor rainbows show us the different factor pairs for a number in a fun way!

1. Write out the factor pairs in numerical order.
2. Join the factor pairs back up with each other using the colours of the rainbow.

Factors of 28



We have not covered factors at all in class yet, here are some useful video clips explaining what they are.

<https://www.bbc.co.uk/bitesize/topics/zfq7hyc>

Aim: Recognise and show, using diagrams, families of common equivalent fractions

Alfie, Fatima and Laura make some fraction walls with small grids.

Using a small piece of squared paper (8 x 3 squares), make a fraction wall to show equivalent fractions of halves, quarters and eighths.

$\frac{1}{2}$				$\frac{1}{2}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$	
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

Try to make other fraction walls for:

- halves, thirds, sixths
- halves, fifths, tenths

Think about the size grid you will need.

$\frac{1}{2}$			$\frac{1}{2}$		
$\frac{1}{3}$		$\frac{1}{3}$		$\frac{1}{3}$	
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

$\frac{1}{2}$					$\frac{1}{2}$				
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$	
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$

Aim: Add and subtract fractions with the same denominator

Draw a fraction bar to represent $\frac{3}{8}$.

Add $\frac{4}{8}$ so that your fraction bar shows $\frac{3}{8} + \frac{4}{8}$.

so $\frac{3}{8} + \frac{4}{8} = \frac{7}{8}$.

Draw fraction bars to solve each of these calculations:

$\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$

$\frac{3}{8} + \frac{3}{8} = \frac{6}{8}$

$\frac{4}{6} + \frac{2}{6} = \frac{6}{6}$ or 1

How could you show $\frac{7}{8} - \frac{4}{8}$ using a fraction bar?

How many of the equal pieces need to be coloured in?
How many of the pieces need to be taken away?
How many eighths are left?

$\frac{7}{8} - \frac{4}{8} = \frac{3}{8}$

<https://www.bbc.co.uk/bitesize/topics/zhdwxnb/articles/z9n4k7h>

Aim: Recognise and write decimal equivalents of any number of tenths or hundredths

<https://www.bbc.co.uk/bitesize/topics/zsjqtfr/articles/zsbd7p3>

How would you write $\frac{8}{100}$ as a decimal number?

Hundreds	Tens	Ones	tenths	hundredths
		0	0	8

Place holders 8 hundredths

$0.7 = \frac{7}{10}$	$0.5 = \frac{5}{10}$
$0.01 = \frac{1}{100}$	$0.07 = \frac{7}{100}$
$0.86 = \frac{86}{100}$	$0.6 = \frac{60}{100}$
$0.4 = \frac{40}{100}$	$0.54 = \frac{54}{100}$

Aims: * Convert between different measurements. *Estimate, compare and calculate different measures. *Perimeter and area.

- Measure the length of different objects in your house. Estimate before you measure, were you accurate? How big are they? Convert this into millimetres, centimetres and metres.
- Measure the capacity of different liquids using a measuring jug. Convert into millilitres and litres. Add two different capacities together, how much is there now? E.g. 255ml of water and 25ml of squash = 280ml of liquid.
- Make a cake (or similar) and add together the mass of all the ingredients. Convert into milligrams, grams and kilograms.
- Measure the sides of different books (children may need to round the number to the nearest whole number especially when working out the area) and work out the perimeter and area of each book. Does having a large perimeter mean the book also has a large area?
<https://www.bbc.co.uk/bitesize/topics/zqr4jxs/articles/zmynnrd>
<https://www.bbc.co.uk/bitesize/topics/zs7mn39/articles/zv677nb>
- Play shops with pretend (or real!) money. Add price tags to toys and add items together to get a total. Work out how much change you will get from a £5, £10 or £20 note.

Aim: Properties of shape

- Lots of interesting clips here: <https://www.bbc.co.uk/bitesize/topics/zs7mn39>
- Create a poster telling people about different triangles and their features.
- Find different shapes around the house. What are they? What types angles do they have? Are they symmetrical? How many lines of symmetry do they have? Do they have any parallel lines?

Aim: Statistics

- Loads more questions/resources available here <https://wrm-13b48.kxcdn.com/wp-content/uploads/2019/06/Year-4-2018-19-Summer-Block-4-Statistics.pdf>

Complete the table using the information in the bar chart.

Transport	Number of children
Car	
Walk	
Bus	
Bicycle	

What is the most/least popular way to get to school?
 How many children walk to school?
 Produce your own table, bar chart or pictogram showing how the children in your class travel to school.
 Represent the data in each table as a bar chart.

Team	Number of house points
Sycamore	
Oak	
Beech	
Ash	

= 20 points

Day	Number of tickets sold
Monday	55
Tuesday	30
Wednesday	45
Thursday	75
Friday	85

Halifax City Football Club sold the following number of season tickets:

- Male adults - 6,382
- Female adults - 5,850
- Boys - 3,209
- Girls - 5,057

Would you use a bar chart, table or pictogram to represent this data?
 Explain why.

Here is some information about the number of tickets sold for a concert.

Day	Number of tickets sold
Monday	55
Tuesday	30
Wednesday	45
Thursday	75
Friday	85

Jack starts to create a bar chart to represent the number of concert tickets sold during the week.

What advice would you give Jack about the scale he has chosen?
 What would be a better scale to use?
 Is there anything else missing from the bar chart?