



## Supporting your child with Mathematics and Numeracy

While schools are closed, teachers will be making sure that you have advice and support on how to help your child with mathematics and numeracy skills. Your child's teacher will be the best source of advice. Many of the learning opportunities provided will be about practicing what your child has learned in school. So where do you start? The easiest way to do this is to work out what your child CAN do and then help them to practice these skills at home.

Each phase in this guidance represents a significant period in your child's learning journey so it is important that they take time to practice and apply the skills in different situations within the phase.

An important part of children's learning in mathematics involves applying what they know to everyday problems and situations: this is numeracy. Help at home can boost numeracy skills. Encouraging children to practice their numeracy skills in daily life will help them to become more confident in recognising and using numbers in the world around them.

Schools teach children to work with number and carry out calculations using different methods. Share the different methods that you and your child use to answer a question and take time to learn from each other.

The most important thing that you can do now is encourage and support your child to practice what they know about numbers, patterns and shapes around them and talk about how they use number skills every day.

### Top tips

**Make it fun** - Use games, Lego, cards, balls etc. to have fun exploring with numbers, patterns, measures and shapes. Take the learning outside and be creative.

**Be positive** about doing number work. Say things like, "Come on let's try together," or "Let's explore these numbers and give it a go."

**Look for numbers, patterns, shapes and measures in everyday life** - Include your child in activities involving money, cooking, playing games and exercising.

**Make the learning enjoyable** – Look for crazy world records to attempt. Make this a household challenge! Try to beat the records below.

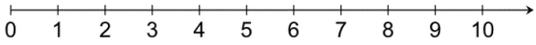
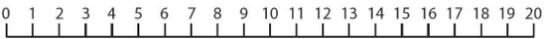
Take it further - Attempting any of these records will help develop the skill and accuracy in counting and measuring. You could then collect results for those in your home or family and friends who you are connecting with online. You can put the results into a table of results or used to draw graphs.

The longest 2p coin spin	25.71 seconds
The furthest blow of a dried pea with a single breath	7.51 metres
The record for the most soft toys caught by a blindfolded person in a minute	25 soft toys
Most socks put on one foot in 30 seconds	28 socks

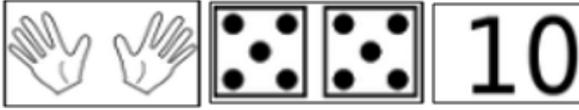
## Starting out

Young children are naturally curious about counting, shapes and measuring and it is important at this early stage that they are encouraged to use their maths skills in everyday life, such as when they are playing games, tidying up and eating. Using mathematical words as your child is playing helps in the early development of their understanding of maths, e.g. "over", "under", "first, second, third", "round", "through", "before", "after".

Here are some ways you can help your child to practice:

If your child is:	You can help them by:
Able to listen to and join in with rhymes, songs, stories and games with numbers, counting and time	Singing songs together, e.g. Five little fishes went swimming one day ..., Ten green bottles... Playing games when preparing food, "Two for me, two for you".
Sorting and matching everyday objects	Collecting everyday items like toy animals or cups and bowls. Talk about which are similar and which are different. Sort objects that go together e.g. big and small objects. Playing 'Snap' and matching pairs.
Able to copy and continue different patterns	Spotting and talking about patterns, e.g. stripes on clothing, clapping, shapes on the curtains. Making patterns using everyday objects, e.g. counters red, blue, blue, red, blue, blue... or stick, leaf, stick, leaf...
Counting forwards and backwards to 5 	Making sets of 2, 3, 4, or 5 objects and count them together. Count with numbers to 5 whenever possible, e.g. when walking up the stairs, counting cutlery. Counting on fingers is an important first step.
Counting forwards and backwards to 10 	Playing board games and moving counters on. When playing at launching a rocket, start the countdown ... and let them complete it!
Counting forwards and backwards to 20 	Saying numbers up to 20, forwards and backwards, and from different starting points. Asking your child to find these numbers around the home. Draw your own number line. Talk about the biggest and smallest number.
Able to say 'one more' and 'one less' than a number in their play	Choosing a card from a set of 1-10/20 and saying the number that is 'one more' or 'one less'. Show on a number line.
Able to say the number facts that make 10 and 20. e.g. 10 is 2 and 8, 3 and 7 makes 10, 18 and 2 makes 20.	Talking about numbers that make 10/20 using everyday objects, e.g. toys, shoes, cutlery. Show number facts to 10 using fingers.

Noticing, reading and writing numbers from 0 10 and beyond  
 Matching a number to the quantity



16 spoons

Able to talk about money

Using 1p, 2p, 5p and 10p coins to pay for items in a pretend: café, shop, garden centre, ice cream parlour, garage, hairdressers or toy shop.

Describing objects in different ways, e.g. how long, tall or heavy they are

Talking about various household objects and putting them in order from: longest to shortest, heaviest to lightest or which holds the most liquid.

Talking about time, lunch time, bed time etc.

Talk about the order of things in the day.  
 Describing how long tasks and activities take, e.g. how many times can you jump up and down in one minute?

Talking about the shapes of everyday objects

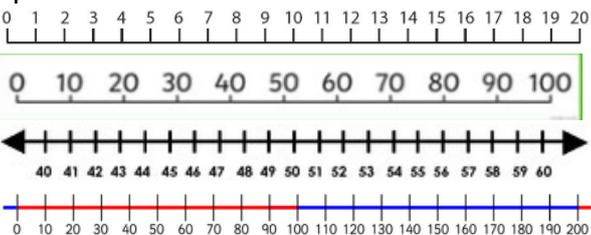
Naming 2D shapes and talking about them: triangle, square, rectangle and circle. Describing the shapes they see.

Finding collections of objects and sorting them

Looking in the toy box or cutlery drawer and drawing a picture to show the different groups of objects.

## Moving on

In this phase, children will be practicing their understanding and confidence in calculating with numbers up to 100 and beyond. It is important that they are able to use numbers in everyday life so that they can ask and answer questions. Encourage your child to show their workings out and draw the patterns and shapes they see around them. Using paint, crayons, felt pens etc. helps them to be creative with their maths.

If your child is:	You can help them by:
Counting forwards and backwards to 100	Talking about numbers you see around the home and counting up to and back from 100.
Saying number facts that make 20, for example: 2 and 18 or 15 and 5	Talking about numbers that make 20 using everyday objects e.g. forks and spoons.
Finding differences within 100	Working out the change from a hundred pence. Talking about numbers that make 100, e.g. 20 and 80.
Reading, writing and talking about numbers up to 1000 	Looking for numbers on objects, clothes and packets in your home. Talk about the numbers, "Which is largest, which is smallest, which is heaviest, which is lightest?"  Counting with larger numbers, start at 997, 998, 999, 1000, 1001, 1002. Draw and label different number lines. Place the numbers that you find around your home in the right place on the line. Here are a few examples of number lines that you might draw.
Comparing, rounding and estimating with numbers up to 100	Rounding amounts of money to the nearest pound or £10. Estimate the amount of Lego in the box, e.g. 86 blocks, rounded to the nearest ten is 90 blocks.
Counting in steps, e.g. in twos, in fours, in threes, in sixes etc. and recognise odd and even numbers	Counting a collection of items in 2s, 5s or 10s is a more efficient strategy than counting one at a time, e.g. piles of coins or tiles on the wall.
Partitioning numbers in different ways to help make calculations easier  	Partitioning numbers using their place value to split a number into hundreds, tens and units. e.g. 118 is one hundred, 1 ten and 8 units/ones. $118 = 100 + 10 + 8$ .  Another way to partition is to split the number into smaller numbers, e.g. $175 = 100 + 50 + 25$ , to find easier ways to add, subtract, multiply or divide.
Adding and subtracting numbers and using one to check the other	Making a shopping list and adding the prices to find the total. Calculate the change from £20. Check your answer by adding the total and the change.
Talking about halves and quarters when describing amounts	Looking for numbers around your home, talk about half of the number, for example half of the 30g chocolate bar. Sharing sweets or biscuits into halves and quarters.

	Gather a pile of objects and share them into quarters (between four people).
Halving and doubling two digit numbers, e.g. double 26, half of 84	Halving and doubling two digit numbers in the kitchen, e.g. half of 50 tea bags.  Halving and doubling amounts of money and different measures (4 pints of milk, £54, 60g)
Saying the 2, 3, 4, 5 and 10 times tables Learning the 6, 7, 8 and 9 times tables  Using times tables to solve multiplication and division problems	Practicing the times tables that your child already knows. Asking questions about real life situations where multiplication and division is useful, e.g. There are 12 mini eggs in the cupboard, there are 3 of us in the home, how many mini eggs can we have each?
Using money to pay for items costing up to £2 and £10. Work out the change	Using a supermarket receipt to work out the total and prices of different items. Order the items by price.
Using non-standard units to measure the length, capacity or heaviness of everyday things	Measuring using everyday objects, e.g. find out how long the sofa is using spoons, compare with other objects.
Using standard units of measure: Length: use cm or metres Weight/ mass: use grams or kg Capacity: use ml or litres Temperature: Using a thermometer in degrees Celsius or centigrade	Talking about the different measures that are on packaging in your home, for example: Using a 5ml teaspoon to measure the capacity of different containers or mugs. Temperature – read the temperature on the dials on the oven and on food packets for cooking guidance.
Understanding the idea of the passing of time, daily, weekly and through the year  Telling the time using o'clock, half past, quarter past and quarter to using both the round clock face (analogue) and digital time	Talking about things that are planned throughout the day, e.g. time for lunch, time to spend exercising, sleeping. Refer to the clock, ask questions, e.g. How long until it's time for bed?  Making a diary of one day or one week, recording the time taken for different things
Discussing the properties of two-dimensional and three-dimensional shapes	Noticing shapes and patterns, e.g. in magazines, on the carpet or tiles on the wall.  Using cardboard to make their own shapes.
Collecting information, sorting it and drawing pictures or graphs, e.g. bar chart, line graph. Talking about information in charts, timetables, diagrams and graphs	Drawing pictures and graphs to show collections of everyday things, e.g. all the toys in the bedroom. Using Top Trump cards to pick out important information.

## Moving on and gaining independence

In this phase, children will be working with numbers up to 1 million and will be practicing their calculation skills with addition, subtraction, multiplication and division. They will be using and applying their times tables and will make links with fractions, decimals and percentages. They will be practicing their skills with number, measures, money and time using problem solving in everyday life.

If your child is:	You can help them by:
Estimating by rounding to the nearest 10, 100, 1000 or whole number	Practicing rounding using real life numbers in the news or in magazine articles.
Using simple fraction, decimal and percentage	When cutting pizza or cake use the fractions and encourage the use of all three terms, e.g. half or 50% or 0.5. I would like 0.25 of the pizza. What is that as a fraction? Noticing the amount of battery life on a phone.
Using mental strategies to recall multiplication tables up to 10 x 10 and use to solve division problems	Practicing times tables, e.g 6 x 4, 7 x 2, 5 x 9. Use them in everyday life.
Halving 3-digit numbers in the context of number, money and measures	Halving numbers when in a context will help develop number confidence, e.g. the recipe asks for 300g of flour, how much would we need if we make half as much?
Adding and subtracting totals less than £100 using correct notation, e.g. £28.18 + £33.45	Providing real life examples when ordering online. Asking your child to calculate the totals or add on delivery charges.
Managing money, comparing costs from different retailers and determine what can be bought within a given budget	Looking for the best value products online, holidays, phones etc. and comparing the cost of items. Adding on delivery costs develops other skills above, either accurately, e.g. Add on £2.49 delivery or by rounding.
Reading and using analogue and digital clocks	Encouraging the use of clocks and timers around the house adding on time in minutes and hours. Practicing the terms 'past' the hour, e.g. Quarter past 2 and 'to' the hour, e.g. Ten to 4. Use the 24 hour clock in giving alternatives, e.g. 2.40 pm <b>OR</b> 20 to 3 <b>OR</b> 14:40.
Timing events in minutes and seconds	Develop accuracy in timing, from short events to longer events, e.g. Timing the length of a garden sprint to timing the length of some baking.
Using and interpreting calendars, timetables and schedules to plan events and activities	Supporting your child to use online train timetables and calendars by reading across the rows and down the columns. Plan a trip to a venue in Wales and work out how long it would take.
Converting metric units of length to smaller units, e.g. cm to mm, m to cm, km to m	Measuring household and garden objects will help them improve measuring skills and will provide an opportunity to convert into another unit, e.g. The table is 2 metres long or 200cm.

## Successfully independent

In this phase, children will be working with numbers of any size and with fractions, decimals and percentages. They will be applying their number skills in real life situations using their problem solving skills.

If your child is:	You can help them by:
Working confidently with numbers up to and beyond one million Making estimates and approximations of calculations with +, -, x and ÷	Practicing and estimating using real life calculations for shopping, electricity bills etc.
Calculating a percentage increase or decrease	Looking at offers online and calculating percentage discounts.
Reading and interpreting scales on a range of measuring instruments  Using rough metric equivalents of imperial units in daily use	Finding as many measuring instruments around the home such as jugs, tape measures, weighing scales and using them to measure lengths, masses and volumes during everyday tasks.  Talk about imperial/metric measurements, e.g. km and miles.
Able to collect their own data for a survey, e.g. through designing a questionnaire	Design a questionnaire about a topic that you could email to friends and family to complete. Based on the responses, think about how suitable your questions were or whether they could they be slightly altered to improve the clarity or preciseness of answers.
Using ratio and proportion including map scales	Using recipes, 1 egg uses 100g of flour, how many eggs are needed if I use 600g of flour?
Understanding the advantages and disadvantages of using bank accounts, including bank cards  Talking about the basic principles of budgeting, saving and borrowing	Looking at web sites for different banks and money information services and discussing the pros and cons and the risks involved with spending, borrowing and saving. Making decisions about how best to manage money.  Looking for the best value products online.



Ein Rhanbarth ar Waith  
Education through Regional Working

