



Buckingham Park

Church of England Primary School

Excellence, through God who strengthens us

Using mathematics at home

Ideas for parents

Maths at home

There's lots of maths in your home

Try playing number games with playing cards, dominoes and board games. Children can have hours of fun making their own games too, but you'll need to encourage them by joining in yourself. Make sure you have lots of dice and counters (pennies, uncooked pasta or building bricks will do fine) for counting.

Play some simple games

Children can practise their maths by:

- sorting the washing and matching pairs of shoes and socks
- finding the patterns in everyday things like adding up 2p, 5p or 10p coins, or reading the house numbers as you go along your street.

If your child is not good at working things out in their head at first, don't worry! Be positive. Praise them for what they can do and keep on working with them.

Phone number sums

What do all the digits of your phone number add up to? For example, 01296 415687 adds up to 48. Ask your child to find ten phone numbers in your local phone book with the same total as your own phone number.

Where would you like to go today?

Get out a road atlas and find the chart that shows distances between towns and cities. Find where you live and choose five places round the country you would like to visit.

Which is the furthest from where you live and which is the nearest?

If you were travelling at about 30 miles an hour (that's one mile every two minutes), roughly how long would it take you to get to each place from your home?

Learn your tables while at the shops!

Count things that come in sets of the following.

- Two: twin packs of orange juice, yoghurts, socks.
- Three: bars of soap, packs of sandwiches, packs of biscuits.
- Four: packs of bread rolls, chicken pies, fingers on a chocolate bar.
- Five: slices of meat or cheese.
- Six: eggs, jam tarts, cans of cola.
- Seven: now there's a challenge! Can you find anything that comes in sets of seven?
- Or how about sets of eight or nine?

Less than, more than, same as

Check round the house or the shop for things that weigh exactly 1kilogram(kg). Feel the weight of a 1kg packet. Use the 1kg packet to find things which are: less than 1kg; more than 1kg; equal to1kg.

It's a bargain

What would the shopping items in your trolley be worth if their prices were cut by:

- 50%;
- 25%;
- 10%;
- 20%; or
- what if they were all two for the price of one?

Maths on time

We need to know more than just how to tell the time. Every day we use timetables, calendars and diaries to make life easier.

A diary of events

Buy your child a pocket diary and help them plan out a daily timetable for their week at school. Write in the times on days of the week they have after-school clubs, PE, games etc. You can use colour codes to highlight them.

We're all going on a summer holiday!

Don't miss your flight!

Your flight to Spain leaves at 10:50. Is that day or night?

You need to be at the airport two hours before your flight leaves.

What time is that?

What time will you need to leave your house to get to the airport?

The flight takes three hours: 11:50, 12:50, 13:50.

So, you arrive in Spain at 13:50, which is ten minutes to two in the afternoon.

Now, your return flight leaves Spain at 15:30.

What time do you need to be at the airport? What time will you arrive home?

The one-minute challenge

What can your child do for exactly one minute?

Balance on one leg?

Stare without blinking?

Count the seconds in their head?

What else can they do in one minute?

You'll need a watch or clock with a second hand to time your child.

Beat the clock

Time your child as they do one of the following.

Count back from 100 in tens.

Count back from 75 in fives.

Starting at six, count up in tens to 206.

Starting at 39, count up in twenties to 239.

Starting at 67, count up in thirties to 367.

Can they beat their record?

World family

You have a family all over the world. When you are having your lunch (12 noon), what are your relatives doing in:

Los Angeles (8 hours behind)

Jamaica (5 hours behind)

India (5 1/2 hours ahead)

Hong Kong (8 hours ahead)

Maths takes shape

We need to be aware of the shapes and spaces all around us. They affect how we dress, arrange the furniture, decorate our homes and build the world around us!

Orange peel

Peel an orange (or a satsuma) then do the following.

- Divide it into segments.
- Count the segments.
- Eat one segment. That's one segment out of how many?
- Eat half of all the segments. How many segments was that?
- What other fruits have segments?

From 3D to 2D

Get an empty cereal box (a three-dimensional shape), and carefully take it apart at the seams by undoing the edges. Flatten the box out and see its shape as a two-dimensional shape. This is called a 'net'.

Look at the nets of other box shapes.

Shape of the day

Choose a shape that you can look out for when you go to the shops. You might choose triangles, squares, cubes, pyramids and so on. How many shapes can you see in your shopping trolley?

Imagine this

Close your eyes and imagine that in front of you there is a cube. Can you see it in your mind?

- What shape is one side (or face) of a cube? (It's a square)
- How many sides (or faces) has it got? Remember to keep your eyes closed!
- How many corners has it got?
- How many edges has it got? Seeing the shapes in your head is very important in maths.
- Try this with other solid shapes.

Maths in play

Playing games will help your child to get better at maths. Play games like snakes and ladders, ludo or dominoes. Or, you can make up your own maths games.

Dominoes down

Spread a set of dominoes face down on the table. Each player chooses a domino at the same time. Add the two numbers on your domino together. Whoever has the largest number keeps both dominoes. The person who ends up with the most dominoes wins! You can change the game by:

- subtracting the two numbers on your domino from 12; or
- multiplying the two numbers on your domino.

I've got a number in my pocket!

My number is less than 100 but what is it? Try to find out what it is in 20 questions. A guess is wasted so ask questions that remove groups of numbers.

- Is it odd or even?
- Is it more or less than 50?
- Can you divide it by five?

Top of the table!

Your football team is unbeaten in the first ten games of the season: WWDWDDWWD, where a win(W) is 3 points, a draw(D) is 1 point, and a loss(L) is 0 points. How many points has your team got?

Car number games

Look at the three digits (numbers) on a car, for example 562:

- The biggest number you can make by rearranging them is 652.
- The smallest number you can make is 256.
- Add the numbers together ($5+6+2 = 13$).
- Multiply them ($5 \times 6 \times 2 = 60$).
- Count up in tens (562, 572, 582, 592, 602 and so on).
- Count down in tens (562, 552, 542 and so on).
- Count up in hundreds (562, 662, 762, 862, 962, 1062 and so on).
- Count down in hundreds (562, 462, 362, 262, 162, 62).
- Subtract the numbers ($5-6-2 = -3$).
- Divide it by tens (562, 56.2, 5.62, 0.562, 0.0562 and so on).
- Multiply by ten (562, 5,620, 56,200, 562,000 and so on).

Striker!

Your favourite football striker is scoring in every game! His record for the first ten games of the season is: 2, 1, 1, 2, 3, 1, 2, 3, 1, 4. What's his average number of goals in each game? Clue: Add up all the goals and find the total number scored, then divide this number by the number of games played. That's your average!

Maths and people

Maths is all about people. People are measured by their height, their weight, the size of their feet and the size of their clothes.

Hands up!

First, let your child draw around one of their hands and then let them draw around yours.

Next, place 1p coins inside the outline of the hands and draw around them so you don't leave any spaces.

Add up the value of the coins. How much is their hand worth? How much is your hand worth?

Is it worth twice as much if you do the same with 2p coins? Try it with other coins too.

How much is it worth using 5p coins?

Are you as long as you are wide?

Stretch your arms out and measure the length from the fingertips on one of your hands to the fingertips on your other hand. This gives you your arm span. Then, compare the width of your arm span to the length of your body. Do it with other members of the family and what do you find?

(It is usually about the same!)

How many days old are you?

Before you start to work this out using a calculator, try to guess. Have a good guess, not a wild one! Here are a few tips to start you off.

- Take your age in years and multiply it by 365 (but remember it's 366 for each leap year).
- Count the number of days since your last birthday.
- Add them all together. Too easy? If so, work out how many minutes old you are.

Scaling the weights

Weigh your child on the bathroom scales. Weigh them again while they are holding the family pet. Can they work out how much heavier they are? Can you find two things heavier than your child and two things lighter than your child around the house?

Maths and money

It's in our pockets, it's down the back of the sofa, it's everywhere. Whether we're buying a pint of milk or sorting out rent or a mortgage it's part of everyday life for us and our children. Here are a few ideas that can help your children learn about money.

Pizza please!

Your pizza costs £3.60. Cut it into six equal slices. How much does each slice cost? The answer is that each slice costs 60p.

- How much is half a slice?
- How much do two slices cost?
- How much does half ($1/2$) of the whole pizza cost? What if you cut your pizza into four equal slices (quarters)?
- How much does one slice ($1/4$) cost now?
- How much does half cost now? Is it the same, more or less than above?

'Supercalifrajalisticexpealidoutius'

To get your children started let them count the letters in the word above.

How many letters has it got?

If the vowels cost 5p and the consonants cost 10p, how much would that be?

In the same way, how much is your child's name worth?

How many words can you write for one pound?

Money! Money! Money!

Spread your change out on the table.

Find the biggest coin. Is it worth the most?

Find the smallest coin. Is it worth the least?

Put them in order of value.

Calculator costs

Use your calculator to find the cost of one sweet.

Clues:

1. Enter the cost of the packet of sweets on the calculator display, for example 35(pence).
2. Press the divide button.
3. Count the number of sweets in the packet, and enter this number on the calculator, for example 42(sweets).
4. Press the equals = button.
5. The answer is 0.833(pence), which is less than 1p for each sweet.

Now use your calculator to find the cost of:

- one stick of chewing gum;
- one finger of a chocolate bar;
- one segment of a tangerine;
- one mint; and so on.