

## Maths at HOME

Games- Try playing number games with playing cards, dominoes and board games. Let children make their own games too- you can encourage them by joining in! Make sure you have lots of dice and counters (eg pennies or pasta) for counting. Younger 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 $2 p$ coins or reading the house numbers in your street

Phone number sums- what do all the digits of your phone number add up to? Find ten other numbers in your phone book which total the same amount.

Where would you like to go today? Find the chart in a road atlas that shows the distances between towns and cities. Choose five places you would like to visit.

- Which is the furthest from where you live and which is the nearest?
- If you were travelling at 30 miles per hour, how long would it take to get to each place from home?

Learn your tables at the shops! Count things that come in sets of the following:
TWO: twin packs of orange juice, yoghurts and socks
THREE: bars of soap and packs of biscuits
FOUR: packs of bread rolls and fingers on a Kit Kat
FIVE: slices of meat and cheese
SIX: eggs and cans of Coke
SEVEN: now there's a challenge! Can you find anything that comes in sets of seven?

Less than, more than and same as... Check round the house or the shop for things that weigh exactly 1 kg . Use the 1 kg pack to find things less than 1 kg , equal to 1 kg and more than 1 kg
It's a bargain What would the shopping items in your trolley be worth if their prices were cut by

- $50 \%$
- $25 \%$
- $10 \%$
- 20\%
- What if they were all two for the price of one?


## Maths on TIME

We're all going on a summer (winter?) holiday.
Share your holiday plans with your child, asking questions like:

- Our flight is at 10:50 (24 hour clock.) Is that day or night?
- We need to be at the airport two hours before our flight leaves. What time do we need to be there?
- What time will we need to leave 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?

Beat the clock- Time your child as they do the following:

- Count back from one hundred 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- imagine you have a family all over the world. When you are having lunch at 12 noon, what are your relatives doing in:

- Los Angeles (8 hours behind)
- Jamaica (5 hours behind)
- India ( $5 \frac{1}{2}$ hours behind)
- Hong Kong (8 hours ahead)
- Sydney (10 hours ahead)


## Maths takes SHAPE

Orange peel- Peel an orange (or Satsuma!) and do the following:

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

3d to 2d - Get an empty cereal box (a 3d shape) and carefully take it apart at the seams by undoing the edges. Flatten the box out and see its shape as a 2d object- this is called a net.

Shape of the day - Choose a shape to look for in the shops. You might choose triangles, squares, cubes, pyramids and so on. How many of your shape can you see in your shopping trolley?

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

- What shape is one side (or face) of your cube?
- 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?

You can try this activity with any 3d shape- choose familiar packages in your kitchen to start with.


## Maths in PLAY

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 with the most dominoes wins!
You can change this game by:

- Subtracting the two numbers on your domino from 12
- Multiplying the two numbers on your domino

Top of the league! Your football team is unbeaten in the first ten games of the season. Their results were: WWDWDDDWWD (a win (W) is 3 points, a draw (D) is 1 point and a loss $(\mathrm{L})$ 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.

- What is the biggest number you can make by rearranging them?
- What is the smallest number you can make by rearranging them?
- Add the digits together
- Multiply the digits together
- Count up from the number in tens (eg $562,572,582,592 \ldots$ )
- Count down in tens (eg 562,552,542,532...)
- Count up or down from the number in hundreds
- Subtract the numbers (5-6-2=-3)
- Divide it by tens (562, 56.2,5.62, 0.562 etc)
- Multiply by ten (562,5620,56200 etc)


## Striker

Your child's favourite striker is scoring in every game! His record forthe first 10 games of the season is 2, 1,1,2,3,1,2,3,1,4.
What is his
average number of goals in each game?


## Maths and PEOPLE

## Hands up!

1. Let your child draw around one of their hands and then let them draw around yours.
2. Place 1 p coins inside the outline of the hands and draw around them so you don't leave any spaces.
3. Add up the value of the coins. How much is their hand worth? How much is your hand worth?
4. Is it worth twice as much if you do the same with $2 p$ coins? Try it with other coins too.
5. 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 fingertip son 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. What do you find? (It is usually approximately the same!)

How many days old are you? -Before you start to work this out using a calculator, try to guess. Here are some tips:

- Take your age in years and multiply by 365 (remember it is 366 for a leap year)
- Count the number of days since your last birthday
- Add them all together.

Too easy? Work out how many MINUTES old you are!!!!
Scaling the weights - Weigh your child on the bathroom scales. Weigh them again holding the family pet. Can they work how much heavier they are? Can you find two things heavier than your child and two things lighter than your child in the house?

## Maths and MONEY!

Pizza please- Your pizza costs £3.60.
Cut it into six equal slices. How much does each slice cost? How much is half a slice? How much for two slices? How much does half of the whole pizza cost? What if you cut the pizza into four equal slices (quarters)?

Supercalifrajalisticexpealidotious - How many letters in the word? If the vowels cost 5 p and the consonants 10p, how much would that be? How much is your own 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 a calculator to find the cost of one sweet, one stick of chewing gum, one segment of a tangerine or one mint. HINTS:

1. Enter the cost of the whole packet on the calculator display
2. Press the divide button
3. Count the number of sweets in the packet, and enter this number on the calculator
4. Press the equals button.

## Maths at WORK!

Taxi drivers must remember thousands of streets and the shortest route to them. Their memories are complicated mathematical structures. See if you can remember all the street names on the way to school and all the left and right turns.


Ten percent - If you wanted to tip a waiter $10 \%$ of your meal costing £24.50, how much would the tip be?

Going metric - a one kilogram (kg) bag of sugar is about 2 pounds (2lbs): 2.2lbs to be exact. Work out how many pounds the following items weigh:

1. 2 kg of apples
2. $1 / 2 \mathrm{~kg}$ of tomatoes

