## Awesome maths stuff that you can do in normal life:

## When they are really little:

- When getting them dressed, count their fingers after you put their hand through a shirt to check if there are still five, then celebrate that there are still five
- Play repetitive, anticipation games: round and round the garden (pausing slowly for one step, two steps), sneaking up and saying "boo", clapping to music
- One for me and one for you.


## As toddlers:

- Ask them to get out the cups and plates for afternoon tea without telling them how many are needed (only maximum of 3-4 people)
- Ask them to get the right number of pegs when hanging out the washing (e.g. shirts need two, socks need one)
- Talk about how things are similar and different (e.g. this one is pointy but this one is rounded), and classify the same group of objects in different ways (colours, shapes, "pointy", "rough"...)
- With two or three objects, move them around and ask how many there are now. Keep experimenting until the child realises that moving the objects doesn't make the number change - there are still the same amount.
- Don't always count things in a line or from left to right. Try a circle or just a mixed up group. Also, count mixed groups of objects (e.g. a block, a lego man and a ball) rather than always the same things. Mix up the colours too.
- Focus on understanding what changes a number and what doesn't rather than on counting to ten or twenty. Counting without understanding quantity is useless.
- Give them different sized cups to play with in the bath instead of toys. Pour water from one to the other to compare which has the most.
- When building with Duplo, talk about the blocks as "a six block" or "an eight block". Experiment with ways to cover an eight block with other smaller blocks.
- Play skittles (six plastic bottles works well). Talk about how many you knocked down and how many are left to get.
- Share groups of objects between multiple kids (fairly).
- Use digital clocks (e.g. you can get up from your rest when the clock starts with a three, you need to get ready for your bath when the clock starts with a six).


## In lower primary:

- Repeat all the toddler things, but with numbers to ten.
- Ask the kids to get numbers of items in the shop (e.g. 8 apples)
- Make "cool high fives" by using some fingers on each hand (e.g. 3 on one hand and 2 on the other). Repeat with other numbers bigger than 5.
- Cut bread in half in different ways and decide that no matter what shape it is, both halves are the same.
- Give all the toast for the whole family cut into halves on the one plate (or apples, or other fruit). Ask how many pieces of bread or fruit you started with.
- Play "what am I spying?" instead of "I spy": Describe a 3D object that you can see, one clue at a time, while the other people try to guess what it is. (e.g. My object is bigger than the TV. It has smooth sides that are rectangles. It is white. It has two doors on it. It is very cold.)
- Look at maps of where you are going and let the kids try to follow the map while you get there. Find your street on a map.
- When another family is coming to dinner ask the kids how many people there will be. So how many pieces of broccoli will we need if everyone has two?
- Work out how many pieces of pizza you need for your family and how many pizzas that would be.
- Talk about how likely things are to happen (e.g. it is very likely to rain tomorrow so we had better pack your rain coat). Consider things that are totally made up in their games or that they see on TV too - how likely is it that the dinosaur bones that David Attenborough was just looking at actually came to life and walked around the museum?
- Get them to budget their pocket money (e.g. have a money box with four categories: spending, saving, charity and gifts). Work out how many weeks it would be before they could buy a certain toy.
- Get the kids to work out how many minutes it is until something happens (e.g. how long until your swimming lesson?). Both digital and analogue clocks are great for this.


## In middle and upper primary:

- When playing board games (e.g. snakes and ladders or monopoly), use two dice. Let the kids choose if they want to move forwards by both, back by both, or forwards by one and backwards by the other.
- Let the child work out the logistics for their birthday party (or dinner, or a camping trip etc.) - how many cups, plates, packets of lollies etc. for the guests... as well as the timing (e.g. everyone will be here by 4:00 so we will play games until 4:30 and then serve cake. That will take 15 minutes. Then...)
- Arrange groups of objects into different arrays (like 12 muffins in a tin vs 12 eggs in a carton). Use existing arrays for calculations (e.g. looking at a wall of shoes in a sports shop, work out how many shoes that represents, calculate how many rooms in a hotel by counting the floors and the number of windows in each floor)
- Talk about how likely something is to happen and give your surety a numerical measure (e.g. a $50 \%$ chance of rain vs a $90 \%$ chance of rain according to the weather predictions)
- Let the kids cook - particularly recipes involving fractions of cups etc.
- Plan routes on maps. Work out the total distances involved, but also talk about the traffic and whether one route would be faster.
- When on the highway, estimate how long it would take to get to the next town given the speed limit and distance.
- Budget and save for holidays or larger items. Work out a payment plan (e.g. washing up is worth $\$ \ldots$ but mowing the lawn is worth $\$ \ldots$ ). Get them to figure out how to earn the amount of money that they want. Consider incentives (e.g. every time you save $\$ 20$ we will contribute another $\$ 5$ ) or loans (yes you can borrow the $\$ 50$ from us, but you have to pay us back $\$ 55$ ).

