

Mental Mathematics & Mathematical Language

Junior Primary

A key part of every maths session in school is mental maths and practise at home will help your child to develop and consolidate their skills. Children must get used to solving problems in their heads, rather than resorting to a calculator. This means that as well as being able to recall facts, students must also develop a range of strategies to work with numbers. Talking about what they are doing is a key part of this and developing their use of mathematical language is vital. Here are some ideas for activities to share with your child, remembering that they should be fun activities.

Activities which improve mathematical thinking

- Counting games - as you go up or down stairs, practise counting in 1's, 2's, 5's or 10's; who can spot the most red cars on the way to school?
- Guess the number of marbles, coins etc and then count them.
- Comparing amounts in glasses or bottles - young children will usually think that there is more in a long thin glass than a shorter, fatter glass, just because it is taller.
- Compare the weights of things, by estimating and then using scales.
- Estimate and compare how long objects are.
- Use simple everyday words to describe objects - a square face, an oblong side etc.
- Talk about the time - morning, afternoon, whole hours etc.

Games

- Play games with your child: throw two dice and add the numbers, then move on to adding the total of two throws to the sum of another two throws.
- Card games. Most card games require collecting totals, matching or remembering numbers that have gone before. They are excellent practice for mental arithmetic.
- Play snakes and ladders, darts, dominoes and other games that depend on numbers, counting, calculation and scoring.
- Watch and play sports that involve scoring, timing, counting, measuring.

In the kitchen

- Cooking is great for helping your child get to know simple weights and measures.

An old-fashioned set of balance scales is ideal. Reading the scale on a new set is also good.

- Count out spoonfuls of ingredients.
- Let your child help you set the timer and count down to teatime!
- Bear in mind that your child will be learning the metric system at school, so try to measure amounts in grams and kilograms.
- The kitchen also provides many opportunities to develop mathematical language:
 - Let's count the number of cups
 - Which is the biggest spoon?
 - How many spoonfuls of sugar have I put on the cereal?
 - How much orange juice in my cup?
 - Can you put two teaspoons of coffee in the jug?
 - How full is this jug?

Time

- Think about time. Look at clocks, both digital and analogue.
- Estimate how long a certain activity will take to do and see if you are right.
- Work out how long it is until the next mealtime.
- Think about calendars and dates too. Make a timeline that includes the birthdays of each member of the family and work out how far apart each one is. Use different units: months, weeks and days, even hours, minutes and seconds. Add other important events, such as a family holiday, and encourage your child to count down to the big day.

Other

- Be creative! Ask your child to look out for patterns and shapes on floors, wallpaper, plants, animals, buildings - anything from the arrangement of tiles in the kitchen to the markings on the cat.
- Draw objects made entirely of triangles, rectangles or squares.
- Make 'butterfly' pictures by painting on one half of the paper and folding it over so that the image is mirrored.
- Make mobiles by suspending objects from coat hangers and ensuring they balance.
- Talk about pocket money with your child. Help them add it up week by week, and work out whether they can afford a particular toy or treat.
- Shop using money and calculate change.