



Helping your child with maths in Primary 7

This leaflet is to give you some ideas about how you can support your child's learning in maths in small, fun, practical ways at home this year. Children's numeracy skills can be greatly boosted by help at home. We encourage you to talk about maths with your child. Little and often is a great way to reinforce learning.

I love sport, as you probably know, and this context can provide so many real life opportunities to use maths.

- How many people watched Forest play Leicester? Where was the biggest crowd in League One? How many goals were scored in the premiership altogether/before half time/in the second half?
- Fantasy Football statistics - great fun.
- Wales beat England at rugby 42 - 17. How many tries do you think were scored?
- For cricket fans, how many runs did the top 3 run scorers score? How much did the rest score?
- In darts, a player has 116 left. How will he score this to win with 3 darts?
- Snooker has a whole set of possibilities. After a break of 50, guess how many balls were potted? What is the most or least it could have been?
- In athletics/motor racing/skiing you have to read time to the decimal places. Good for ordering numbers!
- At the Olympics or at the athletics, how much higher and further did someone throw/jump than their nearest rival?
- The Winter Olympics are about to start - time zones. All the events will have a number element. Have fun discussing the difference between gold, silver and bronze. Keep a results record.

Applying the Maths - real life examples

Planning a Day Trip or holiday: Brainstorm overall plan - budget, family size, date, duration, and destination. Collect actual data - travel agents, internet.

Detail daily itinerary. Costings / savings / budgets. Complete write-up for final presentation.

Journeys: When travelling somewhere familiar, ask your child to give you directions and timings, then test their directions out. If they get something wrong, ask them to think of the best way to get back to where you want to go.

Plan an outing during the holidays. Ask your child to think about what time you will need to set off and how much money you will need to take. Ask them questions like: How many miles or kilometres have we travelled? How many are left and what time should we get to our destination? Use a bus or train timetable. Ask your child to work out how long a journey between two places should take? Go on the journey. Do you arrive earlier or later than expected? How much earlier/later? Find the nearest place to you. Ask your child to work out how long it would take to travel from this place to some other places in Scotland if you travelled at an average of 60 miles per hour, i.e. 1 mile per minute. e.g. Edinburgh to Dundee: 90 miles 1 hour 30 minutes. Inverness to Stranraer: 280 miles 4 hours 40 minutes.

Encourage your child to count in 60s to work out the answers mentally. Extend this by asking questions like "What if we travelled at 30MPH?"

Explore the local area: Ask them to guess how many people live in your town, how far to the nearest airport is etc. Ask for the reasons behind their answer and check the answers online.

TV guide: Use a TV guide. Ask your child to work out the length of their favourite programmes. Can they calculate how long they spend watching TV each day / each week?

Talk about time: For example get them to work out what time you need to leave the house to get to school on time. Look for maths on TV, newspapers, magazines and talk about it together.

Organising a party: Work together to plan a party or meal on a budget.

Do some DIY with your child: Measure shelves, lengths of rooms etc.
(As a rough guide, children measure to the nearest cm/mm.)

Car Mileage: Monday morning - note down the car's mileage. Friday - note down mileage. How far has the car travelled?

Extend to miles per litre by noting how many miles are travelled on a full tank. By the third week estimate mileage.

Shopping: Go shopping with your child to buy two or three items. Round items in the shopping basket to the nearest pound/ten pence, then estimate the cost of the shopping. Also, ask them to work out the total amount spent and how much change you will get.

Buy some items with a percentage extra free. Help your child to calculate how much of the product is free. Discuss discounts in stores and work out how much items cost after discount, e.g. 50% off is the same as half price and two for the price of one.

Cooking: Measure ingredients and set the timer together. Talk about fractions in cooking, for example ask them how many quarter cups make a cup. Discuss and explain the graduation on measuring devices such as jugs, scales, etc. Look at labels on food and drinks. Estimate quantities using kilograms (kg) and grams (g) for weight and litres (l) and millilitres (ml) for liquids.

Weather: Look at temperatures of the central heating/garden thermometer. Look at BBC weather website. Graphs and much more possibilities.

Use newspapers: Talk to your child about percentages in special offers, the probability in the weather reports, the length of TV shows and compare the salaries in the jobs section.

Talk to your child about getting a bank account: Look together at what's on offer for young people opening their first account and see which the best deal is?

Fun activities for a rainy day - One million pounds

Assume you have £1,000,000 to spend or give away.

Plan with your child what to do with it, down to the last penny!

Target 1000

Roll a dice 6 times. Use the six digits to make two three-digit numbers. Add the two numbers together. How close to 1000 can you get?

Curriculum for Excellence By the end of second level

By the end of primary 7 we are expecting our pupils to be able to do many of the following:

Number - the big targets

- demonstrate a range of mental strategies to solve problems with whole numbers
- perform short multiplication and division by a single digit number
- add/subtract decimal fractions with 3 decimal places
- multiply/divide decimal fractions with 3 decimal places by a whole number
- multiply/divide decimal fractions by 1000
- find the fraction of an amount by using multiplication and division e.g. $\frac{2}{3}$ of 15
- convert between mixed numbers and improper fractions
- reduce fractions to the simplest form
- convert between simple fractions, decimal fractions and percentages
- carry out calculations with any percentage

Real life targets

- calculate with simple fractions, decimal fractions and percentages to solve problems in everyday contexts, choose my preferred form and explain my choices
- solve real life problems involving money
- use decimals and negative numbers in the context of money
- calculate discounts
- Use budgeting skills to make responsible spending decisions.

It is tremendously important to praise what is right, and to see that mistakes are part of the problem solving journey. It allows their brains to develop more. If there has been a lot of focus on failure at maths, a child's self-esteem can be brought down and this does not help them to learn. So, encourage them to ask questions if they don't understand, and reassure them that no question is too simple to ask. They may need another type of explanation, so be ready to give that. Remind them that other people probably have the same problem, but don't have the courage to ask. If they get stuck, backtrack to the point where they did understand, and start from there. Build self-esteem by encouraging them that these are quite common experiences. The key is to celebrate what is right!

Websites <https://www.oxfordowl.co.uk/for-home/advice-for-parents/math-at-home/>

<https://garyhall.org.uk/helping-your-child-with-maths.html>