

Helping your child with maths in Year 5 and 6

REAL LIFE MATHS

Families come across all manner of everyday maths situations when they are with their children - much more so than teachers who are confined to classrooms. By doing maths in real life, meaningful situations, children are more likely to develop the idea that maths is important, maths has meaning and maths is do-able! Wherever you see maths, talk about it! Below are some ideas that can be used on a Monday morning, a Wednesday tea-time or a Saturday afternoon!

Shapes and Area	<p><i>What shapes are these paving stones?</i></p> <p><i>Can you estimate the area of this room? Perimeter mm/cm/m ml/l (squared)</i></p> <p><i>What patterns can you see in this wrapping paper?</i></p> <p><i>Fractions of amounts.</i></p>
Cooking	<p><i>If this recipe is for 4 people, but we need to make it for 6 people, how much flour do we need?</i></p> <p><i>Converting different units of measure (e.g. g to kg, ml to l).</i></p> <p><i>Using and converting imperial measurements (e.g. pints).</i></p> <p><i>Estimating amounts - rounding.</i></p>
Time	<p><i>If your programme is 55 minutes long, what time is it going to end?</i></p> <p><i>We need to pick Auntie up at 5.20pm, it's going to take us half an hour to get there so what time should we leave?</i></p> <p><i>The train is going to take us 45 minutes. If we catch the 14.07, what time will we get there?</i></p> <p><i>Reading a train or bus timetable.</i></p> <p><i>Reading analogue and digital times throughout the day.</i></p> <p><i>Using a 12 hour and 24 hour clock.</i></p>
Money	<p><i>Let's add up as we go round the shop to see roughly how much it's going to cost. Can we use rounding to estimate the total cost? We can see if we're right at the till!</i></p> <p><i>How much change are we going to get from this £20 note?</i></p> <p><i>If the DVDs are 'buy 2, get 1 free', how much do we save?</i></p> <p><i>Percentages - This item has 20% off, how much will it cost now?</i></p> <p><i>Fractions- Today, we save 1/3, how much will it cost now?</i></p>
Measures	<p><i>How much water do you think is in the dog's bowl? Can we check?</i></p> <p><i>How much taller than your brother do you think you are? Can we check?</i></p> <p><i>How long will it take us to walk to the shops?</i></p> <p><i>Converting measures e.g. Mile to km.</i></p>
Number calculation	<p><i>Play '21'/'Pontoon' with a deck of cards.</i></p> <p><i>Playing games - darts, snooker,</i></p> <p><i>Spending vouchers.</i></p>

Times Tables

It is very useful for children to know their times tables fluently. Chanting and singing the tables when you're in the car, bath or park all help! Have a look for times table songs on YouTube.

[Click here](#) for a range of times table cover songs to support your child to learn the times tables.

[Click here](#) for a range of times table dance videos.

It is also helpful to understand the times tables, and not just learn the parrot-fashion. Have you noticed these things?

Times table	Patterns and links
x0	Multiplying a number by 0 gives 0. Zero lots of 2 is zero. Zero lots of 7 is zero.
x1	Multiplying a number by 1 gives the same answer. One lot of 2 is still 2. One lot of 7 is still 7.
x2	The ones digits repeat in this pattern; 2,4,6,8,0 All the numbers are even. Multiplying by 2 is the same as doubling.
x3	The numbers alternate odd, even, odd, even...
x4	All the numbers are even. You can double and double again to multiply by 4.
x5	All the numbers end in a 5 or a 0. The numbers alternate odd, even, odd, even.
x6	All the numbers are even. You can multiply by three and then double.
x7	The numbers alternate odd, even, odd, even. You can multiply by 5 and then add two lots.
x8	All the numbers are even. You can double, double and double again to multiply by 8.
x9	As the tens digit goes up by 1, the ones digit goes down by 1. You can x10 and then subtract one lot.
x10	All the numbers end in zero. The tens digit goes up by one each time.
x11	The tens digit and the ones digit are the same. They both go up by one each time. The numbers alternate odd, even, odd, even. You can x10 and then add one more lot.
x12	All the numbers are even. You can x10 and then add two more lots. You can multiply by six and then double.

Maths Games

Playing maths games with children is also a great idea! It develops positive attitudes, mental maths strategies (which are very important), and is a good way of keeping them away from the TV!

The games below are designed to be adapted and varied. Learn the basic rules and then change them up as you want – let the children decide what to do!

BINGO

Draw one 3x3 grid for each player which they fill with numbers up to 100, for example:

77	1	16
42	24	81
96	56	48

The caller calls a multiplication or division fact. If the player has the answer, they cross it off their grid.

i.e. If the caller says 6×7 , any player can cross off 42 as $6 \times 7 = 42$

The first player with 3 in a line calls BINGO!

Playing against brothers, sisters, cousins, aunties, grandmas can be competitive and fun.

This can be played with lots of variations:

- Doubling numbers
- Halving numbers
- Number bonds to 100 etc.
- Mental addition and subtraction
- Multiply by 10, 100, 1000

WHAT'S THE ANSWER?

Decide on the answer e.g. 30. Each player has think of as many questions as they can for which 30 is the answer e.g. half of 60; $27+3$, double 15.

After 1 minute, unique questions only get a point and the player with the highest point score wins.

COUNTDOWN

Throw a dice 5 times to create 5 numbers. Decide upon a total. Players have to try to reach the total; they can use + - x ÷ as many times as they like, but they can only use each number once. The player nearest to the total wins that round.

To make it harder/easier, change the number of numbers, decide that every number has to be used once and only once, change the total, put players in pairs to play etc.

You can generate your own countdown by [clicking here](#).

WHAT NUMBER CAN YOU MAKE?

Cut out twenty pieces of paper and write one 0-9 digit on each twice:

0	1	2	3	4
5	6	7	8	9

Turn the cards face down.

Decide on a target. It might be an:

- The largest number
- A number in the 3 times table
- A number greater than 6,000 but less than 10,000

Take it in turns to take a card, turn it over and put it in a place value grid:

TTh	Th	H	T	O

The digit can't be moved once it's been placed!

Whoever gets the target number wins!

You could change your grid to make it HTO, ThHTO, HThTThHTO etc.

You could also like this to prime numbers, square numbers and cube numbers.

CARD GAMES

[Click here](#) to find a range of cards games to play with your child.

HOW MANY WAYS?

Throw the dice 4 times to generate a 4-digit number. Players then have 3 minutes to make as many different calculations with the target numbers as an answer.

(e.g. If a 3, 2, 1 and 6 were thrown, this would give a target number of 3216. The players could create an addition calculation, e.g. $1568 + 1648 = \mathbf{3216}$, or a subtraction calculation, e.g. $4536 - 1320 = \mathbf{3216}$. Another example would be a calculation involving fractions, e.g. $\frac{1}{2}$ of $6432 = \mathbf{3216}$).

(Third Space Learning 26 KS2 Maths Games For School And Home: Fun, Free Maths Activities For Year 3 to Year 6, 2021)

FREE USEFUL LINKS

National Numeracy is a nationwide charity which is dedicated to improving everybody's numeracy skills. They have produced a Families' Toolkit which has lots more great ideas for things to do to help your children. [Click here](#) to go to it; scroll down to the 6-9 and 10-13 year olds section.

The **NRich** website has got absolutely loads of investigations and games that will challenge parents and children alike. [Click here](#) to have a go at some of their games, and [click here](#) to have a go at some of their investigations.



We use **Sumdog** to support children in maths for years 1 – 6. Sumdog is a fantastic website (and APP) that uses motivating games to encourage children to practise their mental maths skills.

It's simple to use Sumdog. Either log in through your browser, or download the app for iPad & iPhone, Android or Kindle. Your child can practise anytime, anywhere! As children play, they answer questions. Sumdog personalises the questions for each one, and tracks their progress through the school curriculum. [Click here](#) to login.



We are also extremely passionate about learning and embedding our times tables. The pupils in years 2 – 6 have their own **TT Rockstars** account and earn coins for their own rockstar by concentrating on different times tables each week and consolidating the ones they learn by revisiting them each half-term. The children can enter the garage, studio, arena or a festival! [Click here](#) to login.

There is a range of free, engaging and interactive maths games on **Top Marks**. [Click here](#) to access them.

Maths Frames has more than 200 interactive maths games children can play at home. [Click here](#) to access them.

More exciting games can be found on **Third Space Learning** by [clicking here](#).