

Maths at home



Activities and advice to help your child with Maths at home.

Maths - Out and About

When you are out and about during the evenings, weekends and holidays think of all of the possibilities to include Maths through discussion and activities.

You could:

- Add up shopping items and create a shopping list whilst out shopping. Older children could work out how much change they should be given, different amounts it could come in (10p, 20p, £2 etc)
- Whilst driving in a car you could see how many coloured cars you can spot (how many yellow cars etc)
- Working out the time that you spent out and about
- Discuss the different times of the day
- Discuss what was achieved at school that day - how long do they think they spent writing, colouring, playing etc.
- Playing games would can throw the ball into the air and count the number of times they catch it without dropping it for example. Who can jump the most number of times on the trampoline without having to stop for a break?
- Discuss about how long it takes to make dinner etc, how long to eat it, how long to get ready for bed - what time do you have to get up in the morning to be ready and at school on time?
- Look at a map and decide on quickest routes, can they find different landmarks on a map.



Maths Websites

These websites contain a variety of online games that your child can play at home. They cover a range of maths topics and will enable your child to practise and consolidate maths skills taught in school.

<http://www.bbc.co.uk/bitesize/ks1/maths/>

<http://www.sesamestreet.org/browse/gamesbysubject>

<http://www.bbc.co.uk/schools/laac/menu.shtml>

<http://www.bbc.co.uk/schools/ks2bitesize/maths/>

<http://www.bbc.co.uk/learningzone/clips/primary/maths/>

<http://www.bbc.co.uk/schools/numbertime/>

<http://www.bbc.co.uk/schoolradio/subjects/mathematics>

<http://www.bbc.co.uk/schools/starship/maths/index.shtml>

<http://www.bbc.co.uk/education/dynamo/parents/gameidea/index.shtml>

<http://www.bbc.co.uk/schools/digger/>

<http://www.ictgames.com/resources.html>

<http://www.crickweb.co.uk/ks1numeracy.html>

<http://www.mathszone.co.uk/>

<http://www.coolmath4kids.com/>

<http://www.woodlands-junior.kent.sch.uk/maths/>

<http://www.sheppardsoftware.com/math.htm>

<http://www.mathplayground.com/games.html>

<http://www.softschools.com/math/>

Maths in the Kitchen

When making dinner at home, or cakes, or even just drinks, try involving your children in the measuring process.

Put an assortment of measuring implements on the table or counter. Encourage your child to line up the measuring cups and spoons from smallest to largest or vice versa. You can extend this activity to practice ordinal numbers by asking your child to place an item in the first, second or third cup, using as many ordinal numbers as there are cups.

Measuring/Estimation Math Games

Show your child all the different types of measuring tools in the kitchen, from the smallest measuring spoon to the largest measuring cup. Explain and explore the markings on the tools and how they are used to make sure the ratio of ingredients is correct when you cook.

Ask your younger child to estimate how the different measurements relate to each other. A good way to make this concrete is to give them water and flour to measure and transfer from tool to tool. That way if you ask how many tablespoons are in a cup she can try it out to confirm her estimation.

Multiplication/Percentages Math Games

Have your child help you double or triple the ingredients in a recipe. If she is unable to multiply fractions yet, have her show you the correct measurement, using cups and spoons.



Maths in Food

- Make an egg-weight cake. Balance an egg first with flour, then with butter, then with sugar. Mix all of these together and add enough milk to make a cake mixture. Cook for 20mins in a moderate oven.
- Weigh a pumpkin on bathroom scales. Work out how many pumpkins weigh the same as you.
- Sort out a collection of groceries weighing 1kg
- Estimate, then find out how many potatoes you can fit into a saucepan of water before it overflows.
- Set up a market stall with real or play vegetables.
- Food taste different fruits or vegetables. Do a survey of people's favourite and least favourite. Draw up a chart of your findings.
- Collect food packets and identify their shapes. Make giant replicas or miniature ones.
- Investigate the melting point of chocolate; research the maths involved in finding out what it is. Learn to read thermometer scales, then start the experiment.
- Research the type of food we eat and where it comes from. Make a chart of your findings.
- Set up role play areas; a restaurant, a pizza parlour, a supermarket or an internet food delivery service.
- Design a nutritious and balanced menu for a main meal. Now design an unhealthy, unbalanced meal. What is the difference in nutrition, in cost, in preparation, in preference?
- Examine your favourite breakfast cereal. How is it packaged? What volume of cereal is contained in the packet? Design and make a packet that holds the same amount but takes up less space.
- Make bread.
- Prepare three squash drinks with different amounts of squash/water. Do a tasting survey. What type does each person like best?
- Write a shopping list for a party; 1 birthday cake, 2 packets of crisps, 3 tubs of ice cream, 4 loaves of bread etc. Give children a price list so they can calculate a final cost.

Maths at Story Time

There are many stories which you can read to your child, which focus on key maths skills and vocabulary. Children enjoy stories and they provide a fun and relaxed atmosphere for learning to take place.

Below is a list of popular books which you should be able to find at a local library that will help your child with different areas of maths.

Peace at Last by Jill Murphy - This book could be used to explore time.

Encourage children to use the language: night, day, morning, afternoon, evening,

night, midnight, now, soon, early, late, clock etc. You could talk about different

ways of telling the time and how you know when it's night or day.

Mr Wolf's Pancakes by Jan Fearnley - A good book to begin talking about addition, subtraction and division. Children could practise weighing out ingredients to make something in the kitchen and also practise using money to buy items at a shop.

The Very Hungry Caterpillar by Eric Carle - Whilst reading this book you and your child can practise counting and working out one more or one less. You could talk to your child about odd and even numbers and also days of the week.

What's The Time Mr Wolf? By Colin Hawkins - A brilliant story to begin focussing on using a clock with your child.

Flat Stanley by Jeff Brown - Can you and your child make your own Flat Stanley that can be posted through your letter box?

365 Penguins by Jean-Luc Fromental and Joelle Jolivet - A popular book with children which helps them to count to 365 and lends itself to talking about shapes and patterns.

Katy Morag and the Birthdays by Mairi Hedderwick - A useful book as a starting point for talking about the months of the year and calendars.

The Great Pet Sale by Mick Inkpen - Lots of opportunities to work with money.

One Is A Snail, Ten Is A Crab by April Pulley Sayre - This book concentrates on counting feet and will help children count to 100.

Handa's Surprise by Eileen Brown - Good for talking about ordinal numbers (first, second, third etc) and also introduces subtraction to your child.

Maths For Mums and Dads by Rob Easterway and Mike Askew - One for you! This book is very useful for those of you that would like to know a little more about the maths that children do in school and includes lots of ideas for how you can share maths together at home.



Making and Doing Maths

Maths in the Garden

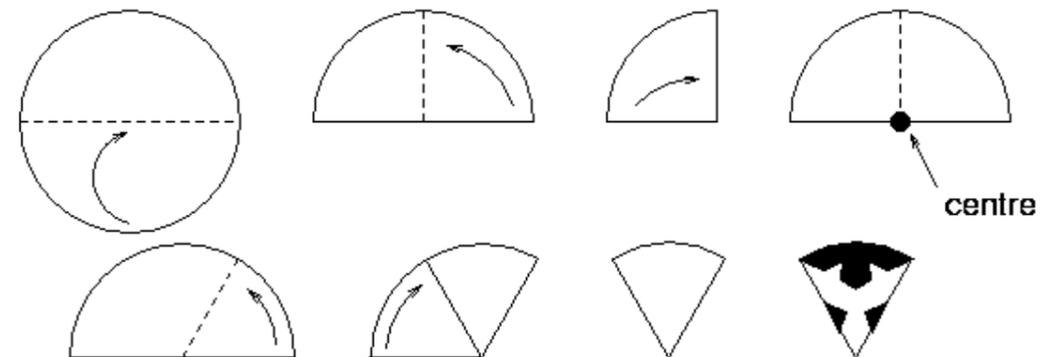
When you are out in the garden there are lots of opportunities to talk about maths and encourage your child to participate in fun maths activities.

- Look for shapes in the garden. Talk about the shapes - What can you tell me about this shape? How do you know this shape is not a square? I'm thinking of a shape. It has 3 corners. Can you see the shape I might be thinking of?
- Measuring in the garden. Estimate and measure how tall plants are using feet or hands or centimetres and metres. Plant some seeds and measure their growth over time.
- Create a tally of the different types of plants you can find in the garden.
- Have a scavenger hunt in the garden, can you find 10 leaves? 5 snails?
- Angle treasure hunt, can you find examples of obtuse, acute, reflex, right angles... in the garden?
- Bird watching- keep a tally of the birds you see in the garden each day.
- Record the temperature in the garden. Keep a temperature diary and look at how the temperature changes at different times of the day and different times of the year.
- How many leaves does clover have? Search for 4 leaf clover. How many clovers are there in a square meter, how many clovers can you look at in a minute, an hour, a day? How many lucky clovers can you expect to find in a day?
- Write numerals using chalk, paintbrush and water, in the sand. Make numbers out of twigs, leaves and petals.
- Investigate patterns- create a pattern using leaves, flowers and stones. Can your child continue the pattern? Can they talk about the pattern?
- Talk to your child about the garden using words that describe position and direction, e.g. above, below, next to. Give directions to your child about how to move around the garden, using word such as left, right, forwards and backwards.



There is the opportunity to talk about maths a great deal whilst cutting sticking and doing! Here are some examples of what you could try together at home.

- Cut different lengths of bamboo sticks and string them together to make wind chimes. Hang as many as possible outside to make a gigantic wind chime.
- Challenge your child to make a box using lego which holds just 20 marbles or 20 pencils.
- Cut some vegetables open and draw what you can see. Using paint make some vegetable prints and describe the shapes you can see.
- Try some origami!! make some gift boxes using paper to hold some biscuits you have baked together.
- Make some collages using different shapes; you could make a collage that just uses 2D shapes such as triangles, rectangles and squares, make a collage of circles, ovals and curves on round paper or make a collage that just uses triangles on a piece of triangular paper.
- Make a paper snowflake by drawing around a circle and folding it in half and then half again. Open it back out to half a circle. Now fold the half circle into three parts. Cut away pieces from the folded sides, and from the curved edge as well. Open it out - and there's a snowflake. Maybe you could add some glitter to make them sparkle.



- Using paper and a crayon or colouring pencil make some rubbings. Collect some leaves and make rubbings of those. Talk about the shapes of leaves; are they symmetrical? How many points do they have? Which is the largest/smallest? Or try making rubbings of coins and talk about the different coins that we use as well as their size.