

Improving children's maths skills

A brief overview of Mathematics

Learning skills in mathematics can be just as difficult as learning to read and write for some children. This could be due to the fact that the language used in maths is so different. There can be different ways to solve problems in mathematics and this too can be very hard for children to remember.

Tips for parents:

A child having difficulties with maths may:

Counting

- ❖ have difficulty using a number line (both forwards and backwards)
- ❖ find it hard to count in steps of two, five or ten
- ❖ find it hard to count and can lose their place easily

Memory

- ❖ have issues with organisation
- ❖ find it hard to accurately re-call number facts
- ❖ need to constantly re-learn and re-cap number facts
- ❖ have trouble learning the language used in maths

Number

- ❖ have difficulty with place value
- ❖ struggle with e.g. placing dates or events in the correct order




Measures

- ❖ have difficulty with handling money and working out change
- ❖ have problems understanding ideas such as speed and time
- ❖ struggle to read a map
- ❖ confuse their left from right




Calculations

- ❖ struggle to transfer information e.g. $3+5=8$ therefore $5+3=8$
- ❖ lack confidence in their answer

Menu of activities to support learning

<p>Cooking:</p> <p>Make learning real e.g. follow a recipe together (helps with learning measures)</p> 	<p>Bubble blowing</p> <p>Count the bubbles and make subtraction sums along the way</p> 	<p>Learn songs and rhymes</p> <p>5 little monkeys jumping on the bed...</p> <p>Ten in a bed.....</p> <p>5 current buns in a bakers shop.....</p> <p>1, 2, 3, 4, 5 once I caught a fish alive...</p>
<p>Play Games</p> <ul style="list-style-type: none">❖ Number snap❖ Skittles -practise adding and taking away. Talk about odd and even numbers❖ Race/ball games - discuss first, second, third. Count and add scores. Time race games.❖ Shape hunts - search for flat 2D and 3D shapes in the environment	<p>Outside Fun</p> <ul style="list-style-type: none">❖ Obstacle course games - collect numbers or work out number problems along the way❖ Water pistol games- knock over plastic cups and add numbers or make a tally❖ Build a clock face using stones - tell the time❖ Count steps - double/halve them❖ Find objects outside e.g. stones/shells/sticks/leaves-make a picture on the ground with them or sort and estimate how many you have collected.	<p>Role play shops and restaurants</p> <ul style="list-style-type: none">❖ McDonalds❖ Pizza Express❖ Chocolate shop❖ Tesco's <p>Write menus and price up items for sale</p>  <p>Can add using calculators, use real money, add scales, rulers, egg timers, paper and pens.</p>

More ideas.....

<p>Watch Number Blocks on CBeebies (good explanation of concept of number)</p>  An illustration of six colorful number blocks from the CBeebies show 'Numberblocks'. They are numbered 1 to 6 and are standing in a line on a green field under a blue sky. The blocks are: 1 (red), 2 (orange), 3 (yellow), 4 (green), 5 (light blue), and 6 (purple).	<p>Glove counting</p> <p>Fill 2 plastic gloves with sand and use for counting e.g. bend fingers down and work out which two numbers make ten - number bonds!</p>	<p>Play with objects like buttons/stones</p> <p>Group into sets, count and sort by colour or shape - add dice and play adding and taking away games</p>  A photograph of several dice of different colors (red, green, purple, blue) scattered on a dark surface.
<p>Sensory play ideas Put talcum powder, rice or sand in a tray or an old biscuit tin (you can put the lid on and use again later!) Trace numbers and practise number formation. Chalk numbers on the ground outside</p>	<p>Write wrist bands To support memory write multiplication sums on strips of card and turn into wrist bands.</p>	<p>Use Lego</p> <ul style="list-style-type: none">❖ Measure items around the house using Lego bricks❖ Stack and make number towers❖ Use to write simple number sentences❖ Use to make clocks❖ Use to help number bonds e.g. a '4' brick and '6' brick to make 10  The LEGO logo, which is the word 'LEGO' in white capital letters on a red rectangular background, surrounded by several colorful LEGO bricks (red, yellow, blue, black) arranged in a circular pattern.
<p>Write book marks</p> <p>Support the memory and write maths facts on card and use as book marks. Maths facts could include: multiplication facts/fractions/number symbols/measure.</p>	<p>Number hunts</p> <p>Hide numbers around the house to find, for a greater challenge the clues could be calculations and they have to find the answer e.g. $12 + 9 =$</p>	

To further help your child you could...

- ❖ Try to understand the difficulties - is it e.g. directional difficulties, sequencing word skills or memory?
- ❖ make sure your child understands mathematical language e.g. plus, add, sum of, difference
- ❖ use and encourage the skill of estimation - ask your child to check their answers against a question e.g. is the answer possible, sensible or just crazy?
- ❖ when your child is completing a sum in their head, ask them to jot down the key numbers and the appropriate number sign from a question
- ❖ encourage your child to talk through number problems
- ❖ teach your child how to use times tables squares
- ❖ teach your child how to use a calculator
- ❖ write key words on cards index cards/post it notes and place inside your child's books/around the house
- ❖ rehearse mathematical vocabulary with your child
- ❖ put decimal points in red ink to help make them more visual
- ❖ make real life links in learning and encourage your child to help when shopping/cooking
- ❖ support in a multi-sensory way e.g. make it active and fun
- ❖ use visual aids to support learning e.g. 100 square/counting objects
- ❖ always repeat and go over learning again and again!



Useful weblinks and resources:

<http://www.bbc.co.uk/cbeebies/shows/numberblocks> - Sing along and learn all about numbers

<https://www.education.com/activity/math> - A range of engaging maths activities to help your child to master key math skills.

<http://www.oxfordowl.co.uk/maths-owl/maths> - Oxford Owl includes a range of activities, top tips and eBooks to help your child with their maths at home.

<http://www.maths4mumsanddads.co.uk/index.php> - This website explains some of the milestones children make between the ages of 3 and 11 years old.

<http://nrich.maths.org/frontpage> - A range of maths games, problems and articles on all areas of maths. Parents of Key Stage 1 children should select 'stage 1' and parents of Key Stage 2 children should select 'stage 2'.

Websites for your child to access:

<http://amathsdictionaryforkids.com/>

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

<http://www.bbc.co.uk/bitesize/ks2/maths/>

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

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

<http://www.mathsisfun.com/index.htm>

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

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

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

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

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