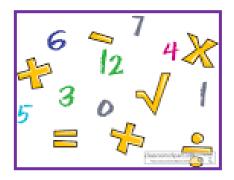


Top tips for helping your child with maths

Thinking is at the heart of Mathematics and therefore should be at the heart of mathematical teaching and learning.

There are lots of ways to help to build your child's confidence in maths. There are many fun games and activities you can do with your child that practise maths skills. Most children love playing games and it's an easy way to support their learning.





Counting ideas

- Practise chanting the number names. Encourage your child to join in with you. When they are confident, try starting from different numbers - 4, 5, 6, 12
- Sing number rhymes together there are lots of commercial t apes and CD's available.
- Give your child the opportunity to count a range of interesting objects (coins, pasta shapes, buttons etc.). Encourage them to touch and move each object as they count.
- Count things you cannot touch or see (more difficult!!). Try lights on the ceiling, window panes, jumps, claps or oranges in a bag.
- Play games that involve counting (e.g. snakes and ladders, dice games, games that involve collecting objects).
- Look for numerals in the environment. You can spot numerals at home, in the street or when out shopping.

Practising number facts

- Find out which number facts your child is learning at school (addition facts to 10, times tables, doubles etc.). Try to practise for a few minutes each day using a range of vocabulary.
- Have a 'fact of the day'. Pin this fact up around the house. Practise reading it in a quiet, loud, squeaky voice. Ask your child over the day if they can recall the fact.
- Play 'ping pong' to practise complements with your child. You say a number. They reply with how
 much more is needed to make 10. You can also play this game with numbers totalling 20, 100 or
 1000. Encourage your child to answer quickly, without counting or using fingers.
- Throw 2 dice. Ask your child to find the total of the numbers (+), the difference between them (-) or the product (x). Can they do this without counting?
- Use a set of playing cards (no pictures). Turn over two cards and ask your child to add or multiply the numbers. If they answer correctly, they keep the cards. How many cards can they collect in 2 minutes?
- Play Bingo. Each player chooses five answers (e.g. numbers to 10 to practise simple addition, multiples of 5 to practise the five times tables). Ask a question and if a player has the answer, they can cross it off. The winner is the first player to cross off all their answers.





- Give your child an answer. Ask them to write as many addition sentences as they can with this answer (e.g. 10 = 6 + 4). Try with multiplication or subtraction.
- Give your child a number fact (e.g. 5+3=8). Ask them what else they can find out from this fact (e.g. 3+5=8, 8-5=3, 8-3=5, 50+30=80, 500+300=800, 5+4=9, 15+3=18). Add to the list over the next few days. Try starting with a x fact as well.
- Cut out numerals from newspapers, magazines or birthday cards. Then help your child to put the numbers in orders.
- Make mistakes when chanting, counting or ordering numbers. Can your child spot what you have done wrong?
- Choose a number of the week e.g. 5. Practise counting to 5 and on from 5. Count out groups of 5 objects (5 dolls, 5 bricks, 5 pens). See how many places you can spot the numeral 5.

Fluency Using a pack of cards

- Remove the face cards
- Sort into pairs which equal 10
- Shuffle the pack and place face down. Play like snap, turning over a card each and the first to call the total gets the cards.
- Other versions: first to call the difference, first to multiply the two numbers.
- Set up challenges only the child calls the answer and he/she tries to beat their personal time.
- Beat the clock focus on a multiplication table e.g. x7. Use two suits. Against the clock turn over a card and multiply by 7. Try to beat previous times.

• Practice to deepen knowledge using a pack of cards

- Use the digits 7, 5, 3, 4, 1. Choose two digits.
- •What's the largest total you can make?
- What's the smallest?
- What totals between these can you find. Put the totals in order.
- What's the largest even total you can make? What's the smallest?
- What's the largest odd total you can make? What's the smallest?





Calendar activities

- Mark off days
- What day is it today? Yesterday was.... Tomorrow will be....
- How many days until the weekend?
- •Who has a birthday this week? How many days until Jack's birthday?
- How many school days left this month?
- What fraction of the month is either a Monday or Tuesday?
- Include rhymes/songs about days of the week, months of the year, seasons, weather....
- https://www.youtube.com/watch?v=3tx0rvuXIRg

Geometry and measures

- Choose a shape of the week e.g. cylinder.
- Look for this shape in the environment (tins, candles etc). Ask your child to describe the shape to you (2 circular faces, 2 curved edges ...)
- Play 'guess my shape'. You think of a shape. Your child asks questions to try to identify it but you can only answer 'yes' or 'no' (e.g. Does it have more than 4 corners? Does it have any curved sides?)
- Hunt for right angles around your home. Can your child also spot angles bigger or smaller than a right angle?
- Look for symmetrical objects. Help your child to draw or paint symmetrical pictures / patterns?
- Make a model using boxes/containers of different shapes and sizes. Ask your child to describe their model.
- Practise measuring the lengths or heights of objects (in metres or cm). Help your child to use different rulers and tape measures correctly. Encourage them to estimate before measuring.
- Let your child help with cooking at home. Help them to measure ingredients accurately using weighing scales or measuring jugs. Talk about what each division on the scale stands for.
- Choose some food items out of the cupboard. Try to put the objects in order of weight, by feel alone. Check by looking at the amounts on the packets.





- Practise telling the time with your child. Use both digital and analogue clocks. Ask your child to be a 'timekeeper' (e.g. tell me when it is half past four because then we are going swimming).
- Use a stop clock to time how long it takes to do everyday tasks (e.g. how long does it take to get dressed?). Encourage your child to estimate first

Real life problems

- Go shopping with your child to buy two or three items. 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.
- 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.
- 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?
- 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?
- Help your child to scale a recipe up or down to feed the right amount of people.



• Work together to plan a party or meal on a budget.

In the street

- Recognising bus numbers
- Number plate hunt. Who can find a 7? Add the numbers up.
- Comparing door numbers
- Counting how many lampposts on the way to school?

Doing the washing

- Counting in 2s matching shoes
- Sorting by colour and size.
- Matching/pairing up socks.
- Find four shoes that are different sizes. Can you put them in order.









Time

- What day is it yesterday, today, tomorrow?
- Use timers, phones and clocks to measure short periods of time.
- Count down 10/20 seconds to get to the table/into bed etc.
- Recognising numbers on the clock. If you cover a number, what number was missing?

Food!

- Can you cut your toast into 4 pieces? Can you cut it into triangles?
- Setting the table. Counting the right number of plates etc. How many more do we need?



- Can you make shapes/ patterns out of the knives and forks.
 Can you put them in the right place in the drawers?
- Helping with the cooking by measuring and counting ingredients.
- Setting the timer.
- Positional language at dinner time: what is on the rice, where are the carrots etc?

Going shopping

- Reading price tags
- Counting items into the basket
- Finding and counting coins
- Comparing weights which is heavier





Measuring

- Are you taller than a ...?
- Marking height on the wall.
- Cut hand shapes out of paper. How many hands long is the couch? How long is the table? Which is longer?
- Who has the biggest hands in our family?
- How many steps from the gate to the front door?





Shapes

- Cut a potato into shapes (circles, triangle etc). Use with paint to make pictures and patterns.
- Cut out shapes from coloured paper/ newspaper and arrange into pictures.
- Shape hunt: Can you find a square in your house (windows etc), a circle ...

Playdough

Here's a simple recipe:

1 cup of plain flour

1 cup of water

1 tablespoon cooking oil

2 teaspoons cream of tartar

Half a cup of salt

food colouring and essences (optional)

Put all ingredients in a large saucepan, and heat slowly, stirring all the time until it forms a ball. Keep it wrapped in cling film or in a covered tub to stop it drying out.

Then:

- Make numerals and shapes
- Sort shapes into groups, or order by size
- Make long and short wiggly snakes.



- Putting cards into piles
- Jigsaws (you can make your own by cutting up a magazine picture)
- Snap (matching pairs) or Happy Families (collect 4 of a kind)



- Snakes and ladders or other simple dice games.
- Adding numbers on two dice.
- Bingo, with numbers or shapes
- Hopscotch



Number rhymes and songs

Eq: 5 little monkeys jumping on the bed One fell off and bumped his head Mummy called the doctor and the doctor said "No more monkeys jumping on the bed!" 4 little monkeys jumping on the bed ...









Your child can teach you lots more or try this website which has the words and sings it for you: http://www.nurseryrhymes4u.com/NURSERY RHYMES/COUNTING.html

Props around the home

- A prominent clock- digital and analogue is even better. Place it somewhere where you can talk about the time each day.
- •A traditional wall calendar-Calendars help with counting days, spotting number patterns and
- Board games that involve dice or spinners-helps with counting and the idea of chance
- A pack of playing cards- Card games can be adapted in many ways to learn about number bonds, chance, adding and subtracting
- •A calculator- A basic calculator will help with maths homework when required, there are also many calculator games you can play, too.
- •Measuring Jug-Your child will use them in school, but seeing them used in real life is invaluable. Also useful for discussing converting from metric to imperial
- Dried beans, Macaroni or Smarties- for counting and estimating
- •A tape measure and a ruler- Let your child help when measuring up for furniture, curtains etc
- A large bar of chocolate (one divided into chunks)- a great motivator for fractions work
- Fridge magnets with numbers on- can be used for a little practice of written methods
- •Indoor/outdoor Thermometer- especially useful in winter for teaching negative numbers when the temperature drops below freezing
- •Unusual dice- not all dice have faces 1-6, hexagonal dice, coloured dice, dice from board games all make talking about chance a little more interesting
- A dartboard with velcro darts- Helps with doubling, trebling, adding and subtracting.

Calculations

The maths work your child is doing at school may look very different to the kind of 'sums' you remember. This is because children are encouraged to work mentally, where possible, using personal jottings to help support their thinking. Even when children are taught more formal written methods they are encouraged to use these methods to support the calculations they cannot solve in their heads.

When faced with a calculation problem, encourage your child to ask...

- Can I do this in my head?
- Could I do this in my head using drawings or jottings to help me?
- Do I need to use a written method?

Also help your child to estimate and then check the answer. Encourage them to ask is the answer sensible?





Developing maths

- Prompting thinking & questioning
- Providing opportunities to manipulate, experience and see (use of resources)
- Develop thinking through investigation
- •Reasoning and making connections
- •Engaging in talk
- •Enabling learning through drawing attention to
- •Encouraging children to make links and generalise

Maths is about spotting patterns, making links and understanding how pieces of knowledge fit together. NOT purely memorising facts and procedures by rote.

Useful websites

http://www.bbc.co.uk/bitesize/ks1/maths/ http://www.familylearning.org.uk/online math games.html www.sesamestreet.org www.mymaths.co.uk www.nrich.co.uk



