

Top Ten Tips to help your child with Maths

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Over the course of the Maths Week Ireland 2016 one of the most frequent questions asked by parents was: 'How can I help my child with maths at home?' This article aims to give you the top ten tips on how you can best help your child with maths:

1. **Be encouraging!**

Remember your child is on a learning journey and they do not have to reach the end of this journey today or tomorrow. Encourage an inquisitive mind by asking questions about how they solved something or if it could be done in a different way (which it always can be). Ensure puzzles and stimulating activities are on hand for when boredom sets in.

2. **Making a mistake is great!**

Research has recently shown that the brain actually grows when a mistake is made. Celebrate this and do not put the emphasis on getting the correct answer all of the time - sure it is important but how they got there is far intriguing! To read more about this visit <https://www.youcubed.org/think-it-up/mistakes-grow-brain/>.

3. Rote learning can be a foreign language to your child if your child does not understand what they are learning. **They key to memorisation is understanding.** If your child is learning the addition/multiplication tables they should understand exactly what each fact looks like, for example, $8 \times 5 = 40$. That might be eight groups of five, five groups of eight, eight added five times or five added eight times (or many other options). The key is that they understand and can show you what it is. They also know that they do not need to learn $5 \times 8 = 40$ because multiplication is commutative. This then means that you do not have to learn each table up to 12×12 - if you know that $3 \times 9 = 27$ then you also know a fact from your nine times table: $9 \times 3 = 27$. Ensure your child sees these connections with multiplication and addition.

4. **Do not emphasise speed.**

Some (most) of the great mathematicians in this world are great because they think about the maths **slowly** and deeply. Completing activities with a time pressure can cause anxiety and create a negative impression of what it is to succeed in maths.

5. **Maths is not a gene** and your child can achieve at it.

Do not share your own mathematical failures with your child - they will start to believe that it is their failure also and become a self-fulfilling prophecy. Develop a [Growth Mindset](#) about maths - a positive can do attitude that you can succeed in maths.

Say This	Not That
"I can see you worked so hard on this!"	"You are so smart!"
"It seems like it's time to try a new strategy."	"It's okay. Maybe you're just not cut out for this!"
"I like watching you do that."	"You're a natural at that!"
"It looks like that was too easy for you. Let's find you something challenging so your brain can grow."	"That's right! You did that so quickly and easily; great job!"
"That's not right. You don't understand this yet. What strategies can you try to understand it better?"	"That's not right. Are you paying attention in class? It seems like you're not even trying."
"That was really hard. Your effort has paid off! Next time you'll be ready for this kind of challenge!"	"That was really hard. I'm so glad it's over and you don't have to do that again."
"You've worked hard to become a good writer. You should challenge yourself with an advanced class, and learn something you don't know how to do yet."	"You have a real talent for writing. You should take a creative writing class because you're so good at it."

Image 1: Taken from <https://www.mindsetworks.com/parents/growth-mindset-parenting>

6. It's okay not to know the answer.

A critical learning opportunity for children is to see that even adults do not have all the answers. Children should realise that learning never stops. It is what you do next then that is really important - do you walk away because you don't know the answer or do you try to problem solve and figure out it out?

7. Play with them!

Board games are a great way to spend time with your children and choosing the right board game can provide hours of fun, challenge and learning. Strategy and logic are key elements of maths: beating your child at a board game every night for a week will develop resilience and problem solving skills that will encourage them to think strategically about how they can beat you the next time.

8. Speak 'maths' with them.

Using the correct mathematical vocabulary with your child will expose them to the language that you are expecting them to have. If a 4/5 year old child can learn the names of all the dinosaurs and say them correctly then no mathematical word is too 'long' or 'complicated'. Very often children will say 'I did it in my head' but not know how to explain it. This is because they more than likely do not have the language to do so and/or have never been asked to explain it before. Have high, realistic language expectations for them when doing maths.

9. Speak to the teacher.

The biggest insight a parent can have about their child's attainment in maths can come from the class teacher. Speak to him/her and find out what areas would be beneficial to focus on at home.

Be conscious also that less can often be more and doing maths with your child every day after school can become exhausting for everyone involved. Keep it fun and remember it is a journey -not a race.

10. Look for the maths around you.

Children very often leave school with the impression that maths is what happens during maths class and with a maths book. Maths is so much more than that - make them aware of the maths that is taking place around them on a daily basis on so many different levels, for example, a carpenter fitting a stairs in a house - what measurements might be needed? A sales assistant balancing the tills in the evening - how will they know if it balances? Parking a car involved spatial awareness - is there enough space for my car there? Why/why not?

Useful websites and resources for parents:

- www.mathsweek.ie
- www.youcubed.org
- www.mindsetworks.com
- http://www.ncca.ie/en/curriculum_and_assessment/parents/primary/
- www.nrich.maths.org