EKN Home School Support Fact Sheet

Supporting your child with primary mathematics

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Learning maths during lockdown

Maintaining your child's engagement and supporting their mathematics and numeracy learning during this extended period of lockdown can be a challenge. However, there are strategies that you can put in place to support them in completing their schoolwork and provide hands-on, fun mathematical experiences.

Many people openly claim they don't like maths or they're not good at it, unintentionally conveying the message that this is okay. Unfortunately, this can have a detrimental effect on the children who hear these messages. In my research on student engagement, children whose parents made similar comments often used the same comments as mathematics became more challenging during the high school years. During lockdown, it's critical that mathematics learning time is enjoyable for everyone – including you!

As a parent, be conscious of displaying positive attitudes towards mathematics, even when it's challenging. Adopting a 'growth mindset' allows children (and parents) to acknowledge that mathematics is challenging, but not impossible. Rather than saying "I can't do it" or "it's too hard", encourage statements such as "I can't do it yet" or "let's work on this together". If you're struggling with the mathematics yourself, and finding it difficult to support your child, there are options such as free online courses like Jo Boaler's YouCubed website, apps such as Khan Academy, or you can seek help from a professional.

How do I help my child with schoolwork?

When in doubt, ask!

Some of the strategies taught in contemporary classrooms are very different to those you might have learned at school. It's important to support the strategies that your child is learning rather than confuse them with yours, so make sure you seek assistance from your child's teacher.

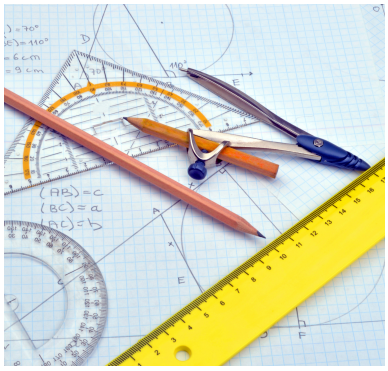
What mathematics should my child be learning? If you're unsure of the level of mathematics or need to understand the level of difficulty your child should be reaching, you can check the curriculum. The syllabus is a useful document that articulates the fine detail of the mathematics taught at each level of schooling. This can help parents who may have unrealistic expectations of what their child should know and be able to do, and will also help them understand that mathematics is not just about numbers or learning the multiplication tables.

It's not just about content

The mathematics curriculum covers content and processes. All students need to know how to do the mathematics and how to apply the mathematics, and it's important to encourage your child to explore, investigate and problem solve whenever possible. Ask them questions like 'How do you know?', 'Can you solve this a different way?', or 'Can you explain how you worked it out?'.

Bring maths into daily conversations and activities with your child

After all, there's maths in everything we do. For example, if you're cooking you might ask your child to help you measure out ingredients. If you're shopping, you could have a little competition to see who can make the best estimation of the total grocery bill or perhaps ask your child to work out the amount of change (this may be challenging given that we use credit cards most of the time).



How do I keep my child interested during lockdown?

Games

If your child likes to play digital games, download some maths apps so they can use their screen time to learn while having fun at the same time. Alternatively, traditional games can provide opportunities to talk about maths and help your child. Games that use dominoes and playing cards are great for young children as are board games such as Snakes and Ladders, Monopoly or Mabble. Even non-numerical games such as Guess Who? have benefits for mathematics because they promote problem solving and strategic thinking which are important mathematical skills.

Maths-based children's literature

There are many great picture books that promote mathematical ideas. Use these books to start conversations about mathematics with your child or to spark curiosity and perhaps some mathematical investigation. Here are some websites that list children's literature suitable for use in mathematics teaching and learning:
http://everydaymath.uchicago.edu/teachers/k/literature-list/
http://literacy.kent.edu/Oasis/Resc/Educ/mathkidslit.html
http://www.the-best-childrens-books.org/math-for-kids.html

Problem-solving activities

If you're looking for some interesting mathematical problems for your child to explore, the NRich site has an excellent range of problems and investigations for students of all ages. Best of all, the site provides information for teachers (or parents) to support students. Although the site is based in the UK, the levels are very similar to the NSW curriculum.

Taking the maths outside

There are lots of activities that allow you and your child to get outside and do some maths. The following are some easy suggestions:

- Play a game of hopscotch, or any game that requires counting/scoring.
- Take an iPad or camera outside and go on a treasure hunt for numbers/shapes/objects/angles. Use the photos in combination with a screencasting app to annotate/label/explain what was found in the treasure hunt.
- Design a maths trail where your child poses and then solves mathematical questions/problems in your backyard, at the local playground or in your neighbourhood.

These are only a few suggestions of activities that can help support your child with mathematics. For more ideas, visit engagingmaths.com