Boosting your own number confidence (for adults)

Thinking about your feelings around maths

Imagine a situation where you need to complete a problem involving maths.
How does this situation make you feel?
What words would you use to describe your feelings?

The words that best describe how I feel about maths in this situation are:

However you feel about maths, you're not alone. Take a look at what some other people say:

I kept thinking back to high school – **I got nervous.** My anxiety went through the roof. **My hands are getting clammy just thinking about it!** With the right support I was actually able to enjoy it and it helped my baking.

Maryam, Edinburgh

When I found out about a maths requirement at work I was **mortified**. I felt **terrified**, I didn't think I would be able to do it. I learnt though that I actually could.

Jade, Brighton

I am petrified of maths, **panic** sets in, if we're in a workshop and maths comes up I feel **anxious** and a big **block comes down**.

Jane, Blackpool

Remember – these feelings about maths are not only common, but come about for understandable reasons, which aren't always a true reflection of our ability or potential. For example, you may have had negative experiences in school, feel under pressure, have focussed on skills you're more passionate about, or not had the support you needed.

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Tips for easing maths anxiety

Talk about the way you feel about maths: It is often helpful to speak about your anxieties (but take care not to express negative thoughts about maths in front of children).

Reduce pressure
Try to learn in your own space and time. Remember everyone's journey is unique and you can work at the pace that suits you. Be kind to yourself when setting targets.

Challenge your own beliefs
Ask yourself whether your thoughts about your maths ability are justified and helpful, or instead are holding you back.

Try not to compare yourself to others
Learning is about improving from where you are – it is not a competition. You will reach your own potential in your own time.

Some level of anxiety is OK
Remember some level of anxiety can be helpful – it often shows we are motivated to do the maths and get it right.

Challenging your beliefs quiz

Have a go at our short quiz on some of the myths about maths. For each question, look at the three statements. Two of them are myths, one of them is true. Identify which you think is true and make a brief note of why you think this way.

You can find the answers on p6

1

a) Maths is only important while you're at school.
b) Lots of jobs don't involve maths.
c) Everyone uses maths every day, often without thinking about it.

Which one do you think is true and why?

2

a) Some people have a "maths brain", others do not.
b) Being good at maths isn't something you inherit.
c) If you are good with words, you are unlikely to be good with numbers.

Which one do you think is true and why?

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3

a) It's always best to work out maths problems in your head.
b) We still need maths even if we have calculators.
c) Technology means we don't need maths anymore

Which one do you think is true and why?

4

a) It's normal to make mistakes in maths, and these are learning opportunities.
b) Getting things wrong means you're bad at maths.
c) It's always important to be right the first time.

Which one do you think is true and why?

5

a) Men are usually better at maths than women.
b) Practising more helps you improve.
c) People who are creative can't be as good at maths.

Which one do you think is true and why?

6

a) If I've found maths hard so far, it's unlikely I will be able to improve.
b) Struggling with maths is something I should be ashamed of.
c) Everyone can improve their maths skills with effort.

Which one do you think is true and why?

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Growth mindset and being persistent

So, what if you're just not a maths person? The truth is that we can all improve our skills – even if we have different starting levels, learning styles and pick things up at different speeds.

Our abilities are not set in stone or as a result of natural talent. The skills we have are learned and are a result of hard work, practice and keeping going when it's difficult. Recognising these things is known as a "growth mindset" and helps us when overcoming challenges.

This is opposite to the way we sometimes think about maths. Often people think of maths as a naturally occurring skill, that mistakes prove we are not good at it, and it's something that can't be improved beyond school. Thinking this way implies having a "fixed mindset."

Do you employ a growth mindset when faced with maths challenges?

Statement	Is this something you believe about maths? (tick)	Is this growth mindset? (tick)
Mistakes are learning opportunities.		
My school maths results prove whether I am a maths person.		
Getting it wrong a lot proves I am bad at maths.		
I'll never get better at maths, no matter how hard I try.		
The reason some people are better at maths than others is because of their learning experiences, not natural ability.		

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Thinking about any areas where your beliefs don't match growth mindset, how could you think differently to help you learn?

Thinking about other places you have needed a growth mindset is a useful technique – what things have you achieved that felt difficult to start with, but you were able to get there with persistence despite making mistakes and struggling along the way?

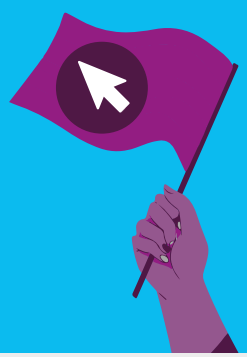
Possible examples might be learning to drive, learning to get to grips with computers or playing a musical instrument:

Think about how you can use the mindset you used in your example to help with maths learning.

Boosting your number confidence and skills: try the National Numeracy Challenge

One way you can practise is by **clicking here to try the National Numeracy Challenge.** The resource is designed specifically for adults with low confidence. By registering and taking a quick check, we can provide you resources to help you improve which are at the right level for you based on your weaknesses. The check is not a test, there are no time limits and you can take your learning journey at your own pace, with no pressure.

It's really helpful for us to get feedback on our work so that we can make sure we are helping people in the best way. You can tell us how Number Confidence Week helped you by **clicking here to complete this short survey.**



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Challenging your beliefs quiz answers

Question 1:

Correct statement: c) "Everyone uses maths every day, often without thinking about it." There are many examples from the real world of things that everyone does that involve maths, such as planning journeys. Refer back to examples from the previous activity.

Myths: "Maths is only important while you are at school and lots of jobs won't involve maths". It is impossible to think of a career path which involves no maths at all and we need it to navigate everyday life. Sometimes the maths needed is quite simple, but we need to be able to apply these skills to complex life situations.

Question 2

Correct statement: b) "Being good at maths isn't something you inherit." There is very little scientific evidence to back up the idea of there being a "maths gene" – most of our abilities are affected by environmental factors – for example the amount of practise we do, the support available and our attitudes towards maths.

Myths: "Some people are maths people, others are not" is only true if a "maths person" is interpreted to mean somebody who enjoys maths. It's true that people reach adulthood with varying levels of ability, but this is not because they were born with or without the ability to do maths. The true reasons for people's differing abilities are environmental. Similarly, the idea that if you are good with words you are unlikely to be good with numbers, is not supported by evidence. It is possible to learn both skills with practice; they are not mutually exclusive.

Question 3

Correct statement: b) "We still need maths even if we have calculators." because we still need to know what to put in to the calculator to solve the problem we have. We also use estimation skills to ensure that we have a reasonable answer.

Myths: "It's always best to work out maths problems in your head" is not true in the real world. When thinking about using maths in our everyday lives, using technology or a pen and paper to help is OK, as long as we are confident we can find the answer. Importantly, using a calculator to help doesn't make a person bad at maths. "Technology means we don't need maths any more" is a myth for the same reasons given for the correct statement.

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Question 4

Correct statement: a) "It's normal to make mistakes in maths, and these are learning opportunities." This is a commonly held view for other skills, but often people think that if they get things wrong in maths, they are simply not good at it or stupid. Maths can be thought of in the same way as other skills, such as learning to drive: you expect to have difficulties and get things wrong!

Myths: "Getting things wrong means you're bad at maths" and "it's always important to be right the first time" are the opposite sentiments to those explained above.

Question 5

Correct statement: b) "Practising more helps you improve at maths." As maths ability does not occur naturally, we all need to learn the skills. This may take different amounts of time for different people, but the more we do something, the more able we become.

Myths: "Men are usually better at maths than women" is not true. People of all genders are equally able to learn maths skills. "People who are creative are unlikely to be good at maths" is also untrue. This segmentation of skills is unhelpful. Again, anyone has the ability to learn a whole range of skills including maths, and this has nothing to do with a natural ability or a person's brain being "wired" in a particular way.

Question 6

Correct statement: c) "Everyone can improve their maths skills with effort." This has been mentioned before in the workshop but should be reiterated here as it is the most important takeaway message. With motivation, growth mindset and persistence anyone can improve, even if some people find it harder than others.

Myths: "If I've found maths hard so far, it's unlikely I will be able to improve" is a belief associated with a fixed mindset. Even if everyone has different levels now, there is no reason why they cannot make progress from that level. "Struggling with maths is something I should be ashamed of" is also not true – many people struggle with numbers and it should not be embarrassing. Acknowledging it is the first step to learning and improving.