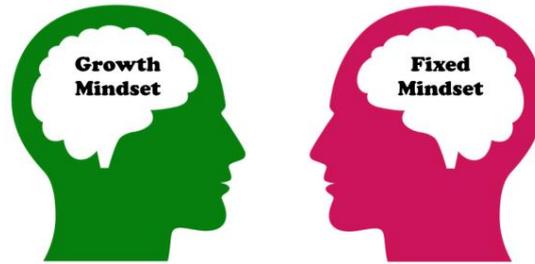


Growth Mindset and Positive thinking.

The way we approach maths can take one of two pathways:



I can learn anything I want to.	I'm either good at it or not.
If I can't do it, I persevere.	If I can't do it I give up.
Mistakes are ok because I learn from them	If I can't do it, I'm a failure.
I don't understand yet but I need to keep going.	I don't get it. I'm never going to get it.
Effort is the path to success.	Effort is a waste of time.
I'm going to see what she does and try to learn from it.	I'm never going to be as good as her.
I embrace challenges.	I avoid any kind of challenge.

Maths makes some people feel anxious, leading them to avoid situations where they may have to use mathematics (Chinn, 2012).

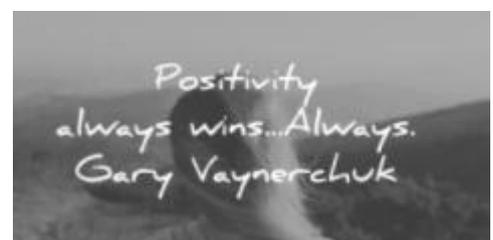
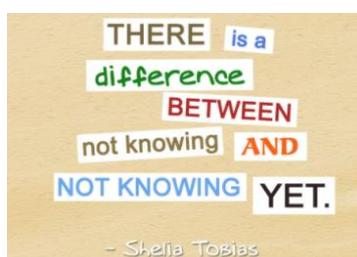


However, with support and a positive, growth mindset what seemed impossible suddenly becomes possible.

Source: Challenge Pilot participant data, 2013.

Changing our words can have a huge impact.

Instead of	Try
I was never good at Maths.	Let's try and learn this together
This maths is really hard.	This is more challenging. How can we work through it step by step?
I don't know how to do it. I was never good.	Tell me what you do know. Let's work through it together.
You should know how to do this.	Keep going. You will get there.
Didn't you listen to your teacher?	What did your teacher say?



PIECE is an acronym used to identify the key elements that can help to develop a Growth Mindset. Focusing on each one in turn can help to develop a positive attitude to learning.

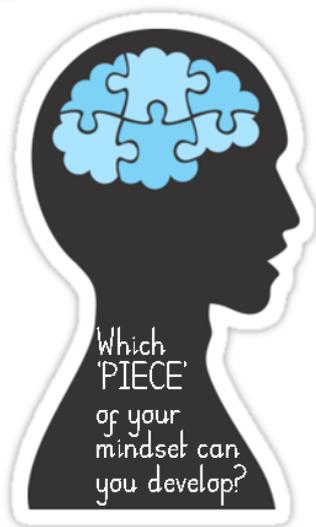
E Embrace challenges

I 
Inspired by others

C 
Criticism is helpful

P 
persist

E 
Effort is essential



When working on maths challenges at home, pick a letter from PIECE to be the focus for the task.

Children with growth mindset:

When I'm doing my maths I escape to my own world of numbers. I know it's ok if I don't get it yet because I know I'll get there in the end if I keep trying. (TP Age 10)

I really like maths because it helps me embrace challenges and gets the brain buzzing. (OS Age 9)

I find some things tricky....I keep practising and then I get better. (TY Age 10)

I learn from my mistakes so that I don't make the same mistake again. (JC Age 9)

