Problems and the growth mind set

Problems

Building the ability to tackle questions without teaching how to answer the question

What is the Growth mindset

Growth Mindset Maths is an approach to teaching mathematics which believes that mindset is more important than initial ability in determining the progress made by pupils in their mathematical understanding. Pupils with a growth mindset will make better progress than pupils with a fixed mindset.

Pupils with a growth mindset:-

- Believe that talents can be developed and great abilities can be built over time
- View mistakes as an opportunity to develop
- Are resilient
- Believe that effort creates success
- Think about how they learn

Why are we interested in Growth Mindset? Our most successful students embody the growth mindset

Our least successful don't believe they can be successful learners

Carol Dweck

https://www.youtube.com/watch?v=NWv1VdDeoRY

When faced with a maths problem, how often do you hear yourself thinking

> l can't do this...



I can't do this yet...

Or... how often do you hear yourself thinking

I'm no good at this...

Tell yourself I can become better at this...

In your Maths lessons, pupils often think

What level did I get?

Ask instead

What can I do to improve...

There is no such thing as a Maths person. Everyone can become a better learner in Maths

What could you say when they are stuck?



l'm confused, oh wait, maybe l'm not.

Getting pupils unstuck....

Do Say	Don't Say
What am I missing?	I'm so stupid.
I seem to be on the right track.	I'm awesome at this.
I'm going to train my brain in Maths.	l just can't do Maths.
This is going to take some time.	This is too hard.
I'm going to work out how he / she's doing it.	She / He's so smart, I wish I was as smart.
What can I do to improve?	My answer is fine the way it is.
That's an interesting idea for improvement. How can I use that in my work?	Looking at examples and the mark scheme won't make my work any better. I just want to know what level / grade I got.

Promoting Growth

Promotes a Growth Mind-Set	Promotes a Fixed Mind-Set
Praising effort and strategies	Praising pupils for being smart
Formative comments that emphasis effort and application	Formative comments that emphasis achievement
Building robust self confidence	Praising students for achievements that come easily
Spending time developing intelligence and ability	Spending time documenting intelligence and ability
Giving pupils a strong voice in the learning process and a sense of purpose	Directing pupils to which tasks to complete
Providing constructive criticism	Placing importance on grades / levels rather than learning
Place importance on learning rather than grades / levels	

On a post-it write down one thing that you are going to take away from this session



Any Questions?