Maths Psychology

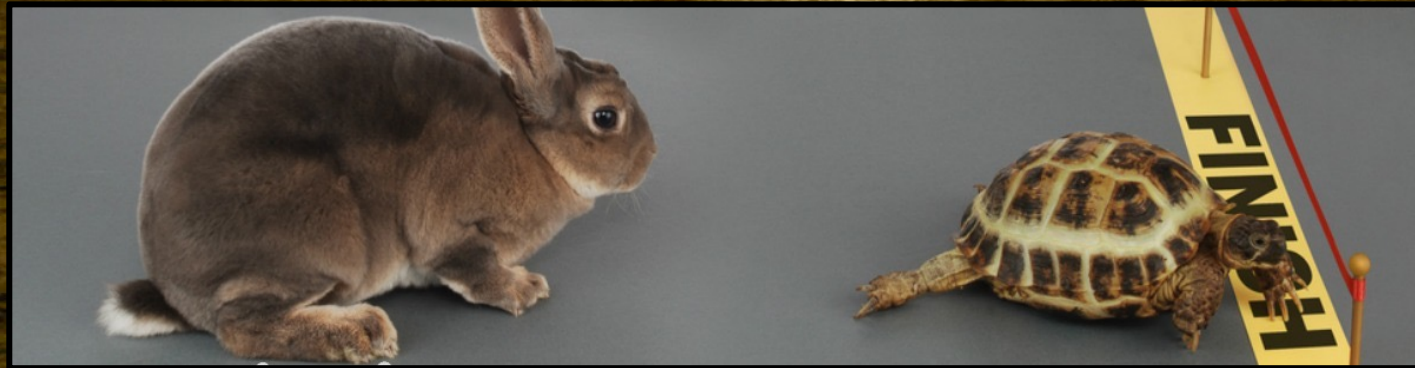## How To Achieve Mathematical Success

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Focus on <u>progress</u> not perfection.

<u>Practise</u> a little bit every day - little and often

Slow and steady wins the race.

Celebrate Success, No Matter How Small

Learn to celebrate the small victories, for they will one day become big victories

NEVER UNDERESTIMATE

THE IMPORTANCE OF SMALL STEPS

small steps

=

big changes

$(1.00)^{365} = 1.00$

$(1.01)^{365} = 37.7$

DOING NOTHING AT ALL
VS SMALL STEPS AT A TIME.

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Keep Trying – Step By Step, Day By Day

Don't expect to be good at maths or understand things straight away. Be patient and persistent.

Each day is an opportunity to improve. Aim to be that little bit better than yesterday and better tomorrow than today.

It means you're moving in the right direction and this is what matters. The rest will take care of itself!

ONE STEP AT A TIME.

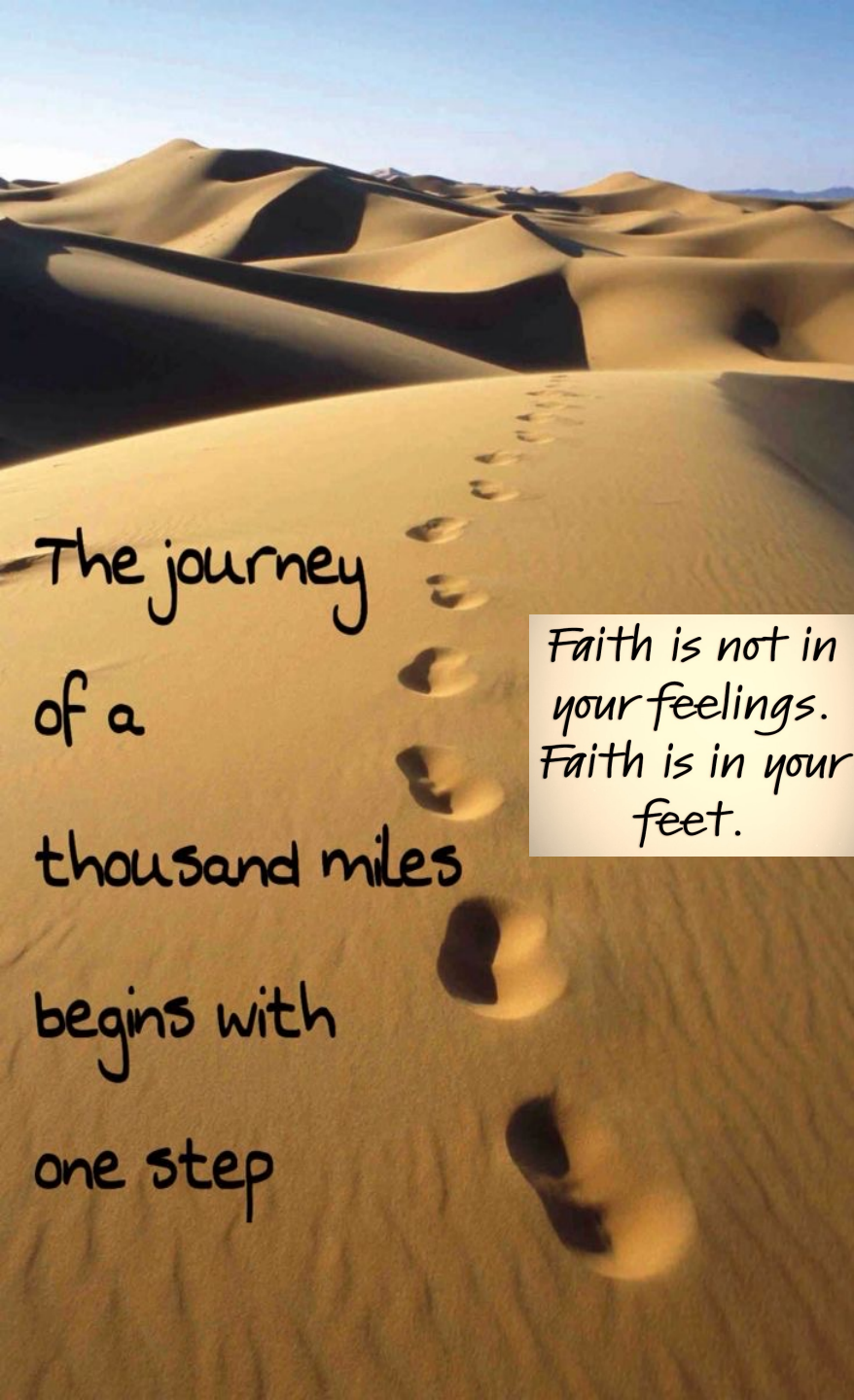ROME wasn't Built in a day, but they Worked on it Every Single Day.
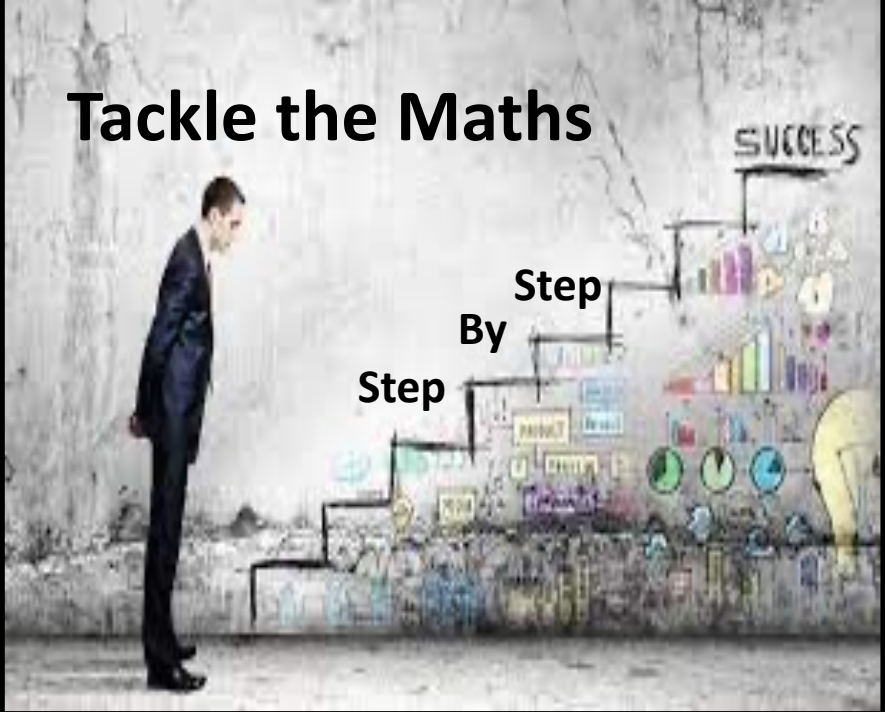- Anonymous

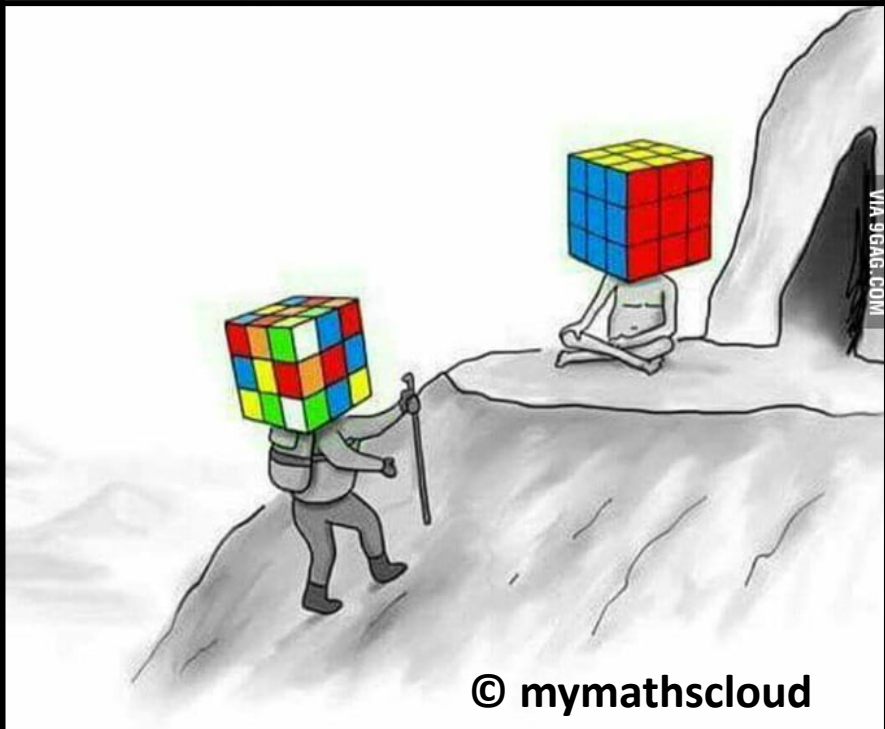Give Yourself Time

Celebrate every win, no matter how small.

The journey of a thousand miles begins with one step

Faith is not in your feelings. Faith is in your feet.

Tackle the Maths

Step By Step

SUCCESS

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Do not feel that you must understand maths immediately or be able to do everything straight away.

THE FIRST STEP IS ALWAYS THE HARDEST.

SUCCESS

STEP 1
STEP 2
STEP 3
STEP 4
STEP 5
STEP 6
STEP 7
STEP 8
STEP 9

You don't have to see the whole staircase just take the FIRST STEP

Success is a journey not a Destination
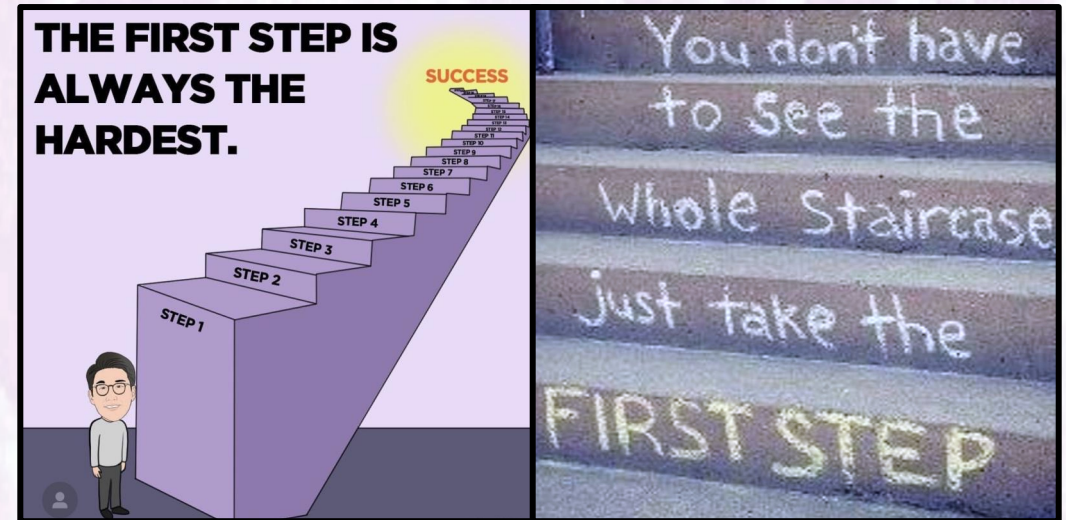
Improvement is not an overnight process.

Improvement is a journey. Travel it well.

Don't Look For Shortcuts Or The "Easy Route"

The only way to learn mathematics is to do mathematics.

We do NOT learn maths by watching others do maths or by listening to others do maths.

MATHEMATICS IS NOT A *Spectator* SPORT

MATH just do it.

KNOWING IS NOT ENOUGH; WE MUST APPLY. WILLING IS NOT ENOUGH; WE MUST DO.
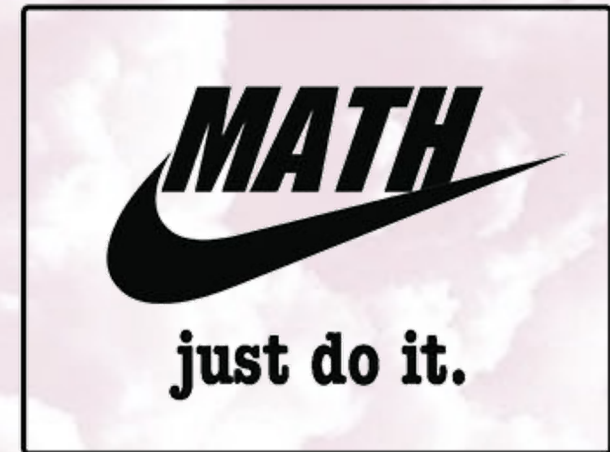
We learn maths by DOING maths. One can watch and think they understand but are often unable to replicate on their own.

Never Never Give Up

Never give up because great things take time.

It is not a question of if you will get there, but WHEN you will get there.

Remember, be patient and be persistent.

"EVEN THE HARDEST PUZZLES HAVE A SOLUTION"

If at first you don't succeed...
TRY, TRY AGAIN

Yes, I did it!
I WILL DO IT
I CAN DO IT
I'LL TRY TO DO IT
HOW DO I DO IT?
I WANT TO DO IT
I CAN'T DO IT
I WON'T DO IT

WHICH STEP HAVE YOU REACHED TODAY?

IF YOU ONLY FOCUS ON THE PROBLEM

YOU MIGHT MISS THE EASY SOLUTION

FALL DOWN SEVEN TIMES

STAND UP EIGHT

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Take a **deep breath**, pick yourself up, dust yourself off, and **start** all over **again**.

IF YOU'RE GOING THROUGH HELL, KEEP GOING!

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If we can keep on moving forward despite our biggest doubts, the reward is just around the corner.

I'm good at maths

THE TEMPTATION TO QUIT WILL BE GREATEST JUST BEFORE YOU ARE ABOUT TO SUCCEED.

TOUGH TIMES NEVER LAST, BUT TOUGH PEOPLE DO.

Don't confuse your path with your destination. Just because it's stormy now doesn't mean that you aren't headed for sunshine.

Better days are ahead...have hope, it's just around the corner.

Never let a dark chapter make you forget that better days are ahead of you. Your story is far from over.

Don't Focus On The Past

Forget about the past. You cannot change it, so why worry about it?

Stay in the present. Today is the first day of the rest of your life.

You cannot start the next chapter of your life if you keep re-reading the last one.

DO NOT DWELL IN THE PAST, DO NOT DREAM OF THE FUTURE, CONCENTRATE THE MIND ON THE PRESENT MOMENT.

Yesterday IS HISTORY, Tomorrow IS A MYSTERY, AND Today IS A GIFT, THAT'S WHY THEY CALL IT THE Present.

YOU WILL NOT MOVE FORWARD IF YOU CONTINUE TO FOCUS ON THE PAST!

Focus On The Present - Don't Allow Yourself To Get Overwhelmed

Don't worry about the future either and all that you still have to learn.

Focus on the present and tackling small bits daily and the rest will surely take care of itself. What you do in the present will dictate the future. Remember step by step, day by day.

If you have an exam and there seems like there is too much to learn, break it down into manageable chunks. Get a calendar and write a schedule to make sure you cover each topic systematically. Set long and short term <u>realistic</u> goals.

Success starts with the first step

Don't let the entire staircase overwhelm you. Just focus on that first step.

The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and starting on the first one.

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"I Had No Time" Is No Excuse

When you want something bad enough, you make the time - regardless of your other obligations. The truth is most people just don't want it bad enough. Then they protect their ego with the excuse of time.

1 hour is 4% of your day.
1 minute is 0.34% of your day.
No excuses!

Time can be an ally or an enemy. What it becomes depends entirely upon you, your goals, and your determination to use every available minute.

There is no excuse for not having had any time to do any maths. You just need to learn to use your time effectively.

Everyone can at least find a few minutes in a day. Even 5 minutes a day is better than nothing.

The minutes will add up over time and make a big difference. If you take care of the minutes, the hours will take care of themselves.

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Learn To Prioritise And Utilise Your Time 🚫💻 🚫📱

Take advantage of free periods at school. Spend a bit less less on your phone or computer each day. Getting started is the hardest part. You need motivation only till habit is formed. After that routine will take care of itself.

Don't study or cram last minute before tests. You may think you can learn everything, but I guarantee this will come back to bite you in the form of silly mistakes and underperformance.

Don't let this be you

The Day Before The Exam

2 weeks before exam. | 1 week before exam.
1 day before exam | Night before exam.

The power of reflection is the most powerful skill you'll learn

Nothing is impossible if you want it badly enough

POSSIBLE

i m

There Is No Substitute For Hard Work And Desire

Never give up, never stop believing, never stop fighting

Only if you **want something badly enough**, will you find a way to get it. You will put in the **time and effort** to make it happen and overcome the obstacles that will invariably come your way. No ifs, ands, or buts.

NO MATTER HOW BAD IT GETS YOU'RE STILL WAY AHEAD OF THOSE WHO HAVEN'T EVEN STARTED

HARD WORK beats talent when talent doesn't WORK HARD

Don't be afraid to *work* hard enough to find out how *good* you can really **be.**

Maths at school level can easily become automatic. Maths is actually a very relaxing and satisfying subject, but you have to put in the time and hard work to get to a certain level before you realise this.
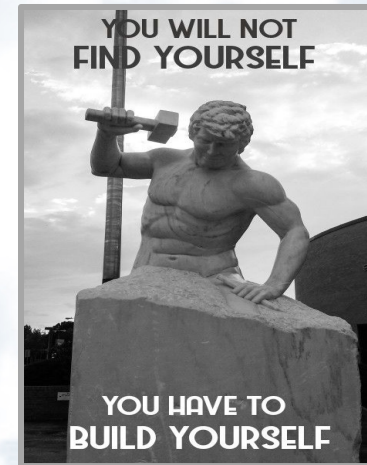
The Brain Is A Muscle - It Needs Training

Anyone can train their brain, sometimes it can take a little longer for some, but you WILL get there.

Hard work will never let you down. Hard work always pays off.

Remember, it is not a question of if you will get there, but WHEN you will get there.

HARD WORK ALWAYS PAYS OFF

Work ethic is important because, unlike intelligence, athleticism, charisma, or any other natural attribute, it's a choice.

YOU WILL NOT FIND YOURSELF

YOU HAVE TO BUILD YOURSELF

HARD WORK A TWO-WAY STREET WHERE YOU GET BACK EXACTLY WHAT YOU PUT IN

Don't Wait On A Day That Never Comes

Don't put off until tomorrow what you can do today.
If today you have no time
it means tomorrow you'll be too tired...
and the next day you'll be something else...

THERE'S NO TALENT HERE. THIS IS HARD WORK. THIS IS AN OBSESSION. YOU COULD BE ANYONE IF YOU PUT IN THE TIME.

NOBODY SAID THAT
IT'D BE EASY
THEY JUST PROMISED
IT WOULD BE
WORTH IT

There Is No Such Thing As Being Bad At Maths
...Only Bad Discipline, A Bad Attitude, Bad Habits, A Bad Work Ethic,
Bad Teachers, Bad Time Management, Procrastination and Laziness.

EVERYTHING YOU WANT IS ON THE OTHER SIDE OF FEAR

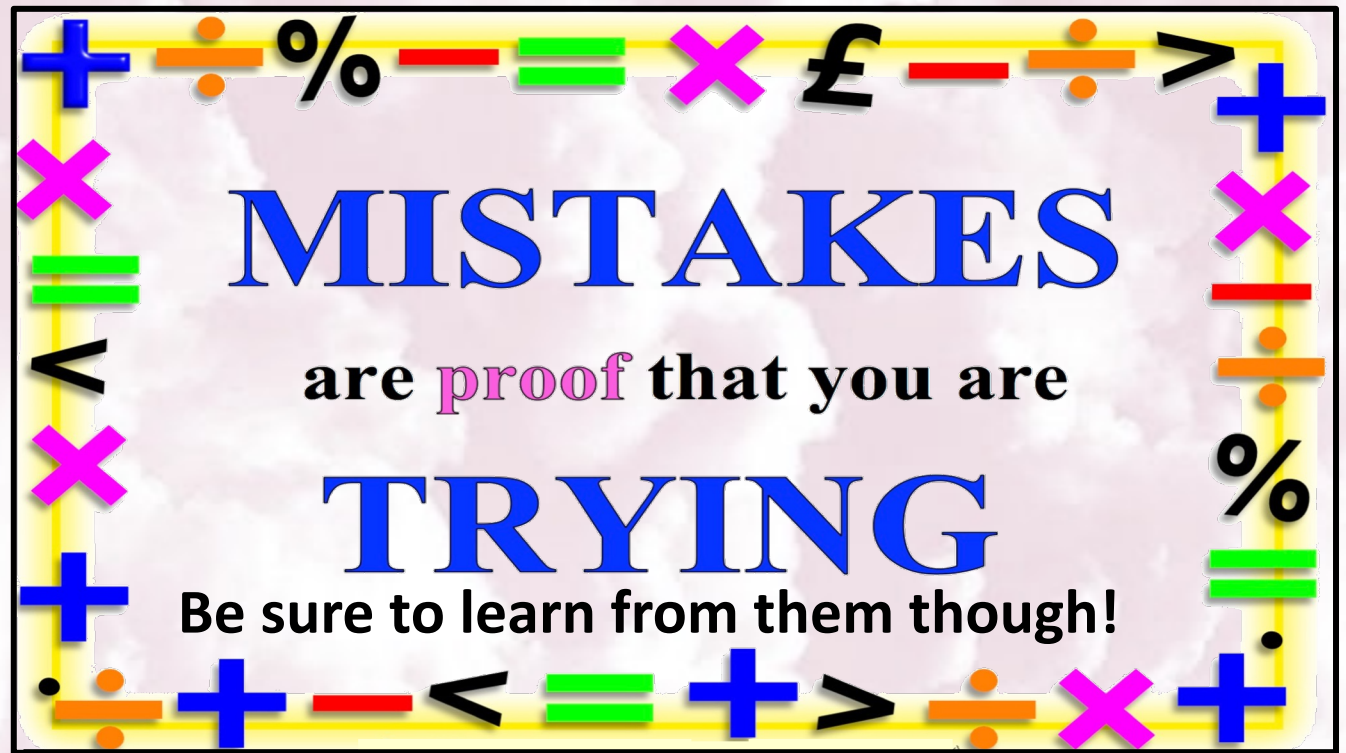The greatest mistake we make is living in constant fear that we will make one.

DON'T FEAR failure

FEAR BEING IN THE EXACT SAME PLACE AS YOU ARE NOW

we don't have to be ordinary

make your best mistakes

MISTAKES are *proof* that you are **TRYING** Be sure to learn from them though!

MISTAKES
ALLOW
THINKING TO
HAPPEN

We All Make
MISTAKES
What Matters Is
HOW WE CHOOSE
To Move Forward
FROM IT

LEARN FROM FAILURE

THE MASTER HAS FAILED MORE TIMES THAN THE BEGINNER HAS EVEN TRIED

Do Not Be Afraid To Make Mistakes

Each mistake teaches us something.
Failure is NOT your destiny. Failure is the key to success.

MISTAKES HAVE THE POWER TO TURN YOU INTO SOMETHING BETTER THAN YOU WERE BEFORE.

i make all the mistakes

it is how i grow.

I'm on my way

LEARNING FROM MISTAKES

OUCH

DANG!

OOPS

POW

BOOM

We all make mistakes. The important thing is how we respond. We must learn from them and not keep making the same mistake over and over again.
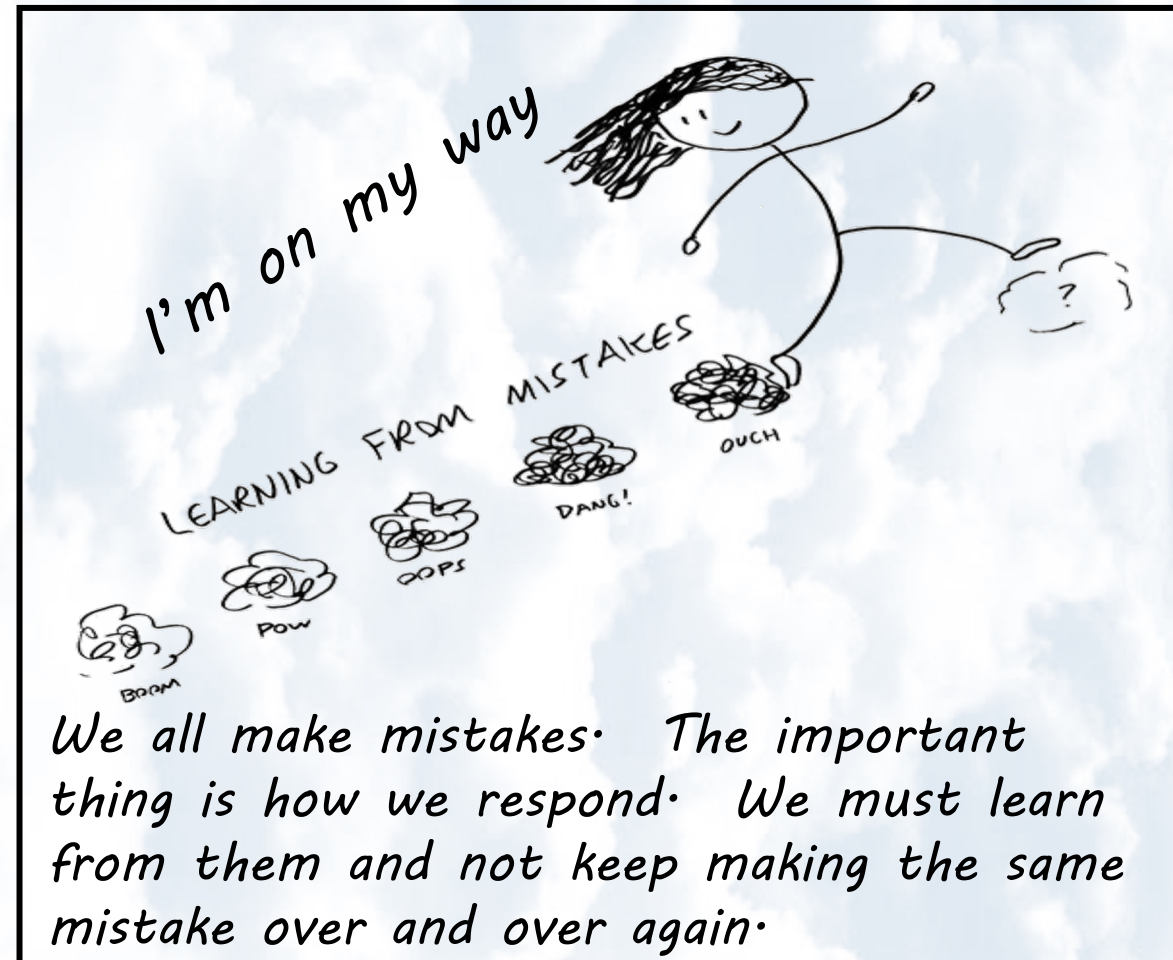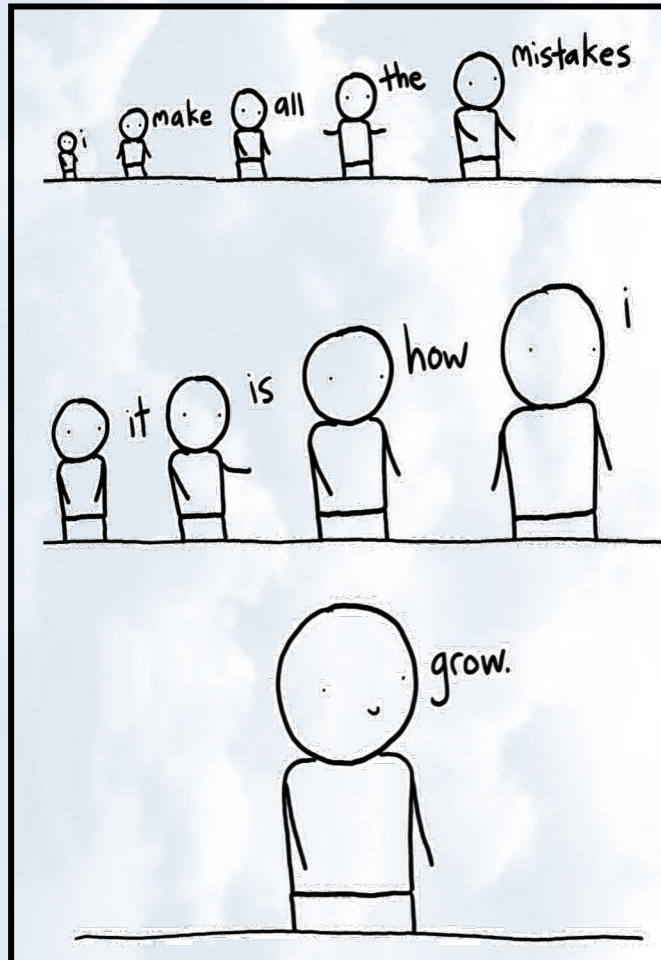
Do Not Compare Yourself To Others

Don't let the fact that others find maths easier, understand things quicker or don't have to work as hard put you off.

Don't compare yourself to others. Compare yourself to the person you were yesterday.

Don't feel you should be achieving the same results as others with the same amount of work.
Everyone is on their own journey. Often those work hard do better than the smarter pupils that don't work as hard.

No one looks the same, right? Just the same way that not everyone learns the same!

Don't Compare Yourself to Others.

Compare Yourself to the Person You Were Yesterday.

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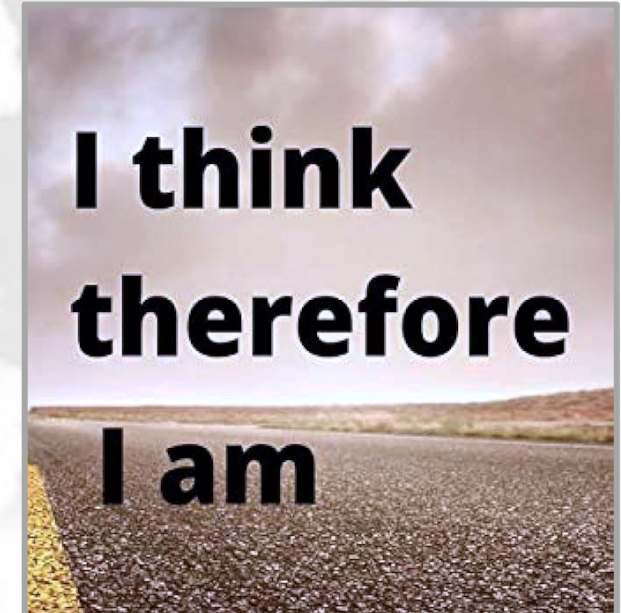
WE ALL GROW AT DIFFERENT RATES. AND THAT'S OK!

"I" not "Them"

Be the best version of you

Life is the most difficult exam.
Many people fail because they try to copy others, not realizing that everyone has a different question paper.

Believe In Yourself

There are so many people out there who will tell you that you can't. What you've got to do is turn around and say "Watch me."

DON'T EVER LET SOMEONE TELL YOU THAT YOU CAN'T DO SOMETHING. NOT EVEN ME. **YOU GOT A DREAM, YOU GOTTA PROTECT IT.** WHEN PEOPLE CAN'T DO SOMETHING THEMSELVES, THEY'RE GONNA TELL YOU THAT YOU CAN'T DO IT.

IF YOU WANT SOMETHING GO GET IT. PERIOD

I think therefore I am
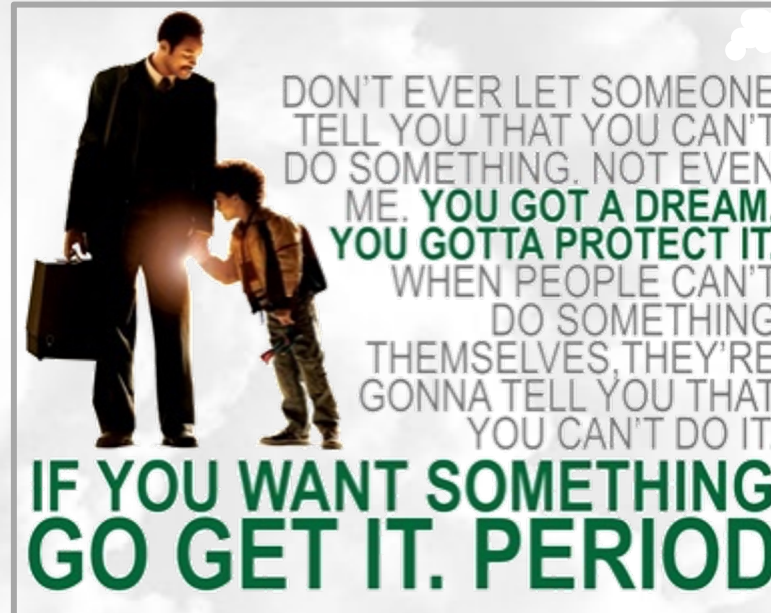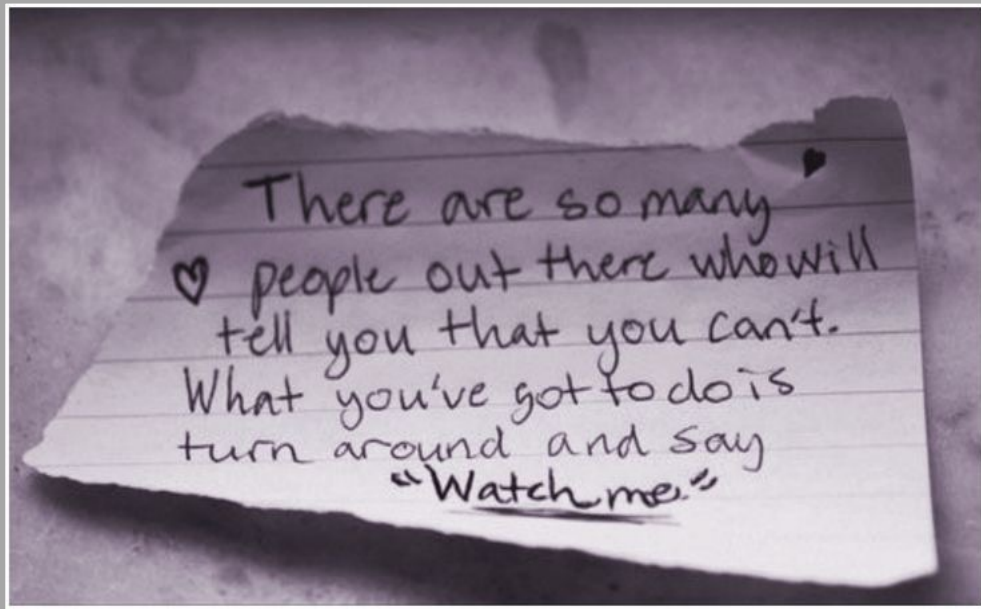
If you believe in yourself, anything is possible.

Believe in yourself

Dreams don't work unless you do.

You're as bright as the next person, just keep going until you get 'it'.

Attitude Is Everything

Attitude Is A Little thing
That Makes A Big Difference
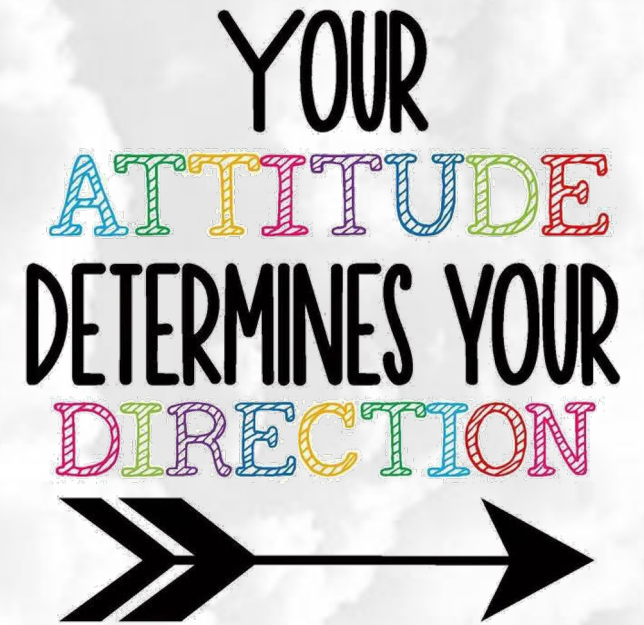
Start your maths each day with a positive mindset rather than filled with dread or anxiety.

Don't worry if you don't know everything. Even if you know one more thing than before you started, you're moving in the right direction and that is all we can ask for.

Good mathematics is NOT about how many answers you know.... It's how you behave when you don't know.

I WILL DO **BETTER TODAY** THAN I DID **YESTERDAY!**

TO **GROW** I MUST TAKE **RISKS!**
and make plenty of mistakes along the way. We learn from our mistakes.

MY **ATTITUDE** MAKES A BIG **DIFFERENCE!**

I **BELIEVE** I **CAN** AND I **WILL!**

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Do Not Fear Failure - Trust The Process
If you fail , next time fail better
Who cares what others think of us.
We learn more in failure than we ever do from success.

F A I L

[F] First

[A] Attempt

[i] in

[L] Learning

FAILURE IS NOT THE OPPOSITE OF SUCCESS, IT IS PART OF SUCCESS

If you want to SUCCEED double your FAILURE RATE.

I HAVE NOT FAILED. I'VE JUST FOUND 10,000 WAYS THAT WON'T WORK.

LEARN LIKE A
SCIENTIST

CARE ABOUT OUTCOMES
BUT FOCUS ON THE PROCESS

TAKE THE RESULTS SERIOUSLY
NOT PERSONALLY

YOU ARE THE SCIENTIST
NOT THE EXPERIMENT

START → STRUGGLE → FAIL → FIX → LEARN
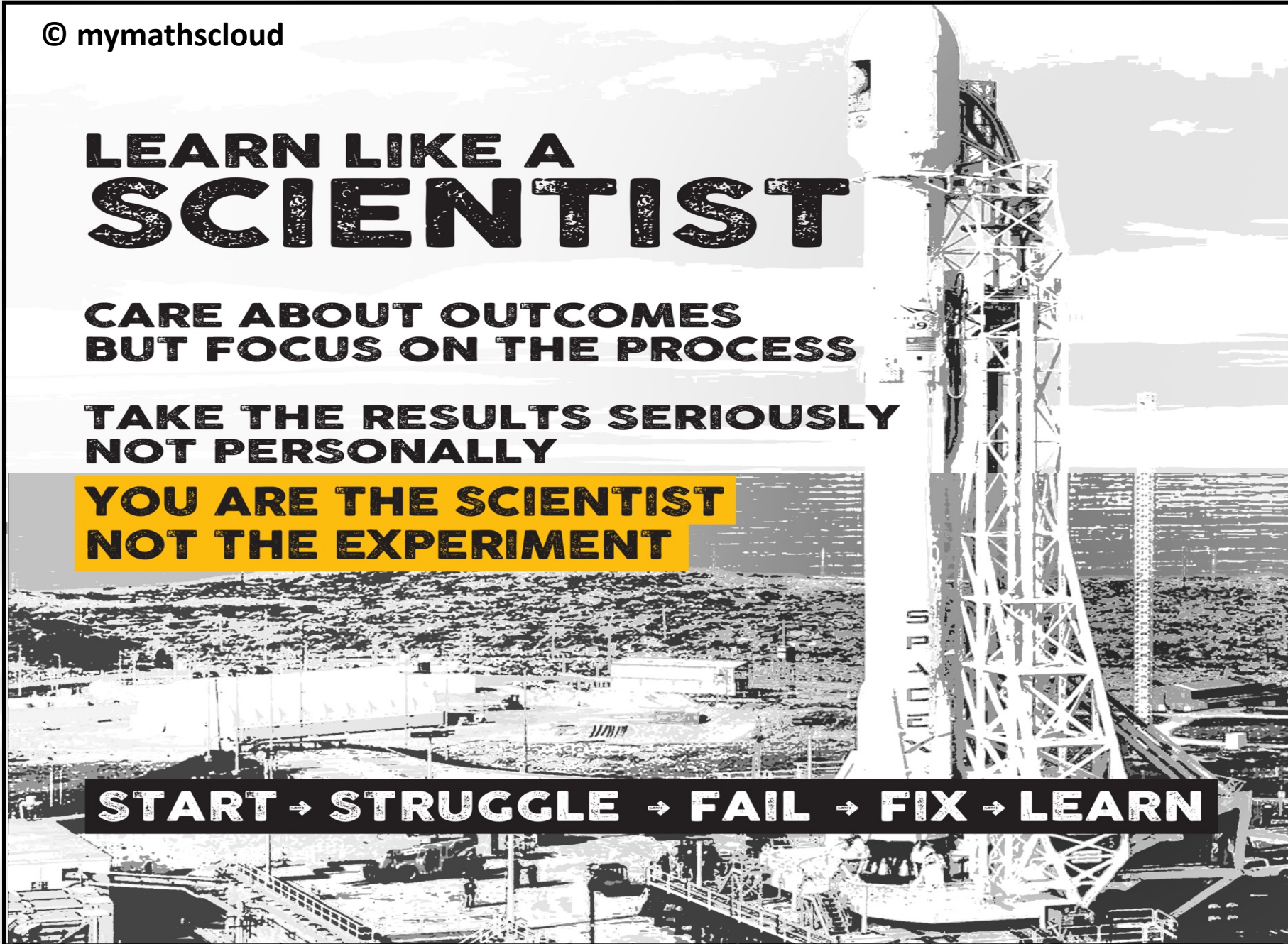
Don't Have A Fixed Mindset. Learn To Listen.

Learn to let go of your fears and become more mentally flexible.

The Zoo

The Jungle

Our fixed mindset builds our cage, fear keeps us in it.

In order to become a better learner, to spend more time in the Jungle – we need to understand these two obstacles and how to overcome them.

Once you've put in all the hard work to get to a certain level in maths you will no longer have to work as hard and can relax a bit. The hard work will not be forever, but failure might be.

In the scheme of life, a school year is such a short amount of time to sacrifice for success!

The majority of us have to go through some sort of struggle in order to become good at something.
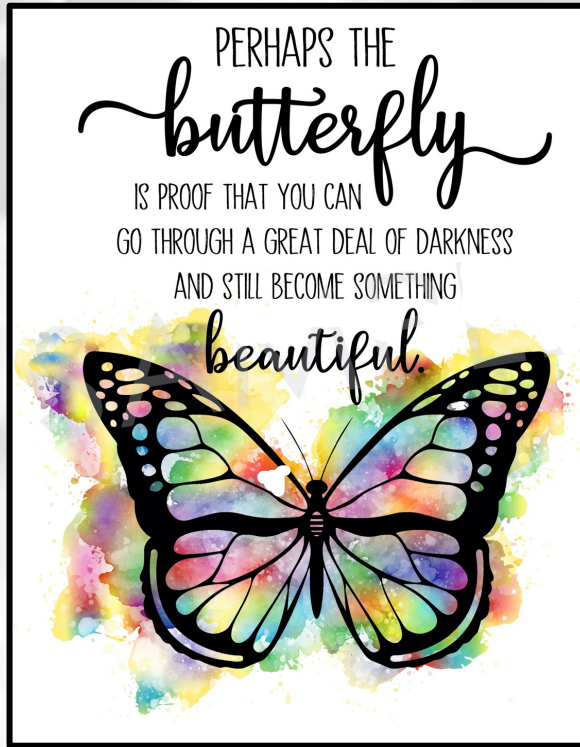
If you never jump over that "hurdle" you'll always be on the other side of finding maths difficult.

Aim high

PERHAPS THE
butterfly
IS PROOF THAT YOU CAN
GO THROUGH A GREAT DEAL OF DARKNESS
AND STILL BECOME SOMETHING
beautiful.

SUCCESS

Today's struggle is developing the strength you need for tomorrow

You'll never see the beauty of what maths can be like once you've jumped that "hurdle". You'll never get to that relaxing point of being able to do maths in your sleep without having to think and struggle anymore.

You'll never realise that everything in maths is actually linked! Once you realise and understand the links, maths is actually the easiest of subjects!

IT IS NOT BECAUSE THINGS ARE DIFFICULT THAT WE DO NOT DARE

A hero is no braver than an ordinary man, but he is braver five minutes longer.

IT IS BECAUSE WE DO NOT DARE THAT THEY ARE DIFFICULT

"Just stick with it. What seems hard now will one day be your warm-up"

Not practicing maths and expecting to be good at it is like trying to speak another language without having learnt any vocabulary or grammar.

Once you have learnt the rules and vocabulary it is a hell of a lot easier! Maths is just another language. Once you understand the rules it is simple (pre university level anyway ☺)

THE TRUTHS OF LEARNING

YOU HAVE THE CAPACITY TO LEARN ANYTHING

GROWTH COMES FROM RESISTANCE & STRUGGLE

GETTING BETTER & LOOKING GOOD **DO NOT HAPPEN AT THE SAME TIME**

WE ARE BUILT TO LEARN BY DOING

CHALLENGES LEAD TO STRUGGLE, MISTAKES & GROWTH

BELIEVE IN YOURSELF. YOU ARE A LEARNING MACHINE. WITH TIME AND HARD WORK YOU CAN GET BETTER AT ANYTHING. TRY NEW THINGS. TAKE RISKS. MAKE MISTAKES. FALL DOWN. ASK QUESTIONS. EMBRACE THE PRESSURE. FEEL THE FEAR, AND DARE GREATLY. LET IT RIP. SPEAK UP. BUST OUT OF YOUR COMFORT ZONE. ALWAYS REMEMBER THAT GETTING BETTER IS NOT PRETTY. THAT YOU ARE GOING TO BE BAD FIRST. THAT GROWTH COMES FROM STRUGGLE. THAT SKILLS ARE BUILT, NOT BORN—AND THEY ARE YOURS IF YOU EARN THEM, PERIOD. SEEK OUT CHALLENGES. APPRECIATE OBSTACLES. LEARN LIKE A SCIENTIST. DON'T EAT THE MALLOW. LOVE THE JOURNEY.

Listen And Take Advice

You can have the best teacher in the world, but this means nothing if you don't listen and take advice and work on your own after lessons. Prepare before your lessons and work in between, so that you get the most out of them. Don't work last minute right before the lesson. Stay organized with your folders and know where everything is.

"You can't hire someone to practice for you."

ALWAYS LEARN FROM PEOPLE WHO HAVE DONE IT
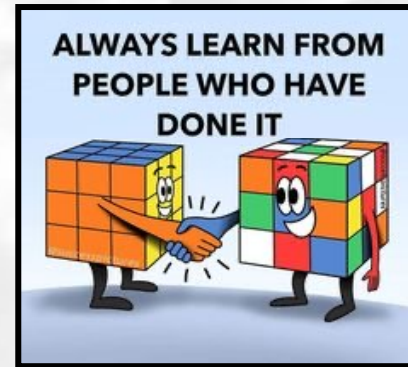
At the end of the day, it is down to you. As the saying goes :
"You can lead a horse to water, but you can't make it drink."
Always think of where you'd like to be 10 years from now. Everyone needs a goal and a dream to keep them going. And remember:
- Failure lasts forever, hard work doesn't
- It is a small sacrifice in the scheme of things
- You're only cheating and hurting yourself if you don't do the work

Play Your Part And Take Responsibility

THERE IS NO ELEVATOR TO
SUCCESS
YOU HAVE TO TAKE THE
STAIRS.

SHOWING UP IS NOT ENOUGH YOU HAVE TO GIVE IT YOUR ALL

Some students are under the impression that they can have a private lesson or two a week and that should be enough. Wrong, wrong, wrong! Having a tutor is not enough to guarantee success.

Practising in between lessons is when one gauges whether or not they have truly understood the material and when one really consolidates what has been taught. Otherwise, you'll just forget!

The only way to improve is through practise, practise and more practise! There is no substitute for hard work and there is no shortcut to success.

It is only when we do maths on our own and struggle a bit to get the answers that we truly learn and remember.

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Practise Daily, But Practise In The Right Way

Practise isn't the thing you do once you're good. It's the thing that makes you good. If you don't practise, you don't expect to do well.

Practise smart:
- Don't just practise for the sake of practicing. Practise with intention and belief.
- Don't just practise what is easy and what you like otherwise you'll never grow.

Practice smarter, not necessarily harder

Practise like you've never won. Perform like you've never lost.

TRY   FAIL   SUCCESS
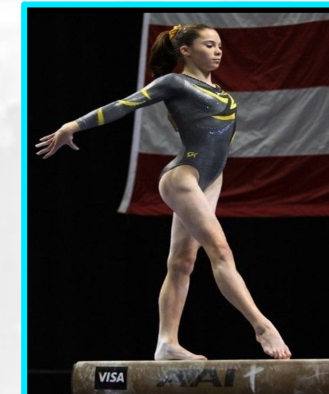
Don't practise until you get it right… practise until **YOU CAN'T GET IT WRONG.**

Smart practise doesn't necessarily make perfect though, it makes progress which in time makes permanent.

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How To Practise And What To Practise?

When you practise correctly and start to improve, you'll learn to enjoy and love that rewarding and satisfying feeling of getting a maths question correct.

Start easy and build up slowly. First of all, practise questions by topic with increasing difficulty to really hone each topic and make sure you are exposed to every possible type of question that can come up. This way there will be no surprises on the exam (all my worksheets by topic achieve exactly this).

Only by doing all different types of questions and difficulty levels and seeing all ways a question can be phrased can you say that with certainty that you understand a topic. Doing a topic well on a past paper can give a false sense of security. It doesn't necessarily mean you've understood that topic well. It just means you could do a particular type of question for that topic (which might have also been a very easy one).

Remember, don't think that because a topic seems hard or impossible at first that it will always be hard. If you practice over and over again the topic WILL become easy.

Don't class a topic as finished once you've finished or taken a test. Keep revisiting it with one or two questions a week otherwise you WILL forget it , no matter how good you were at the time.

Remember, Do Not Cram For Exams

NATURE DOES NOT HURRY, YET EVERYTHING IS ACCOMPLISHED.

Cramming will not get you very far and you won't be able to remember everything anyway. If you learn quickly, you forget quickly.

I liken this to sport where we depict whether an athlete is match fit/match tight or not. Athletes who are injured and haven't 'performed' under match conditions for a while lose to people they shouldn't.

It is the exact same thing with maths. If you haven't practiced properly don't expect to do well or to not make silly mistakes.

Going into an exam and knowing you haven't prepared properly and are not ready for whatever type of question that is thrown at you is a recipe for disaster! Remember, be consistent with your revision – little and often.

A perfect method for adding drama to life is to **wait until the deadline looms large**.

Learn To Step Outside Of Your Comfort Zone

By all means start off comfortable with easy questions to build confidence. Do one topic at a time. Give yourself time and take as long as you need to gain confidence.

The feeling of success will in turn will build the confidence that you need to progress.

Be sure to step out of your comfort zone at some point though by mixing questions from all topics and doing past papers. Work under time pressured conditions. Don't let an exam be the first time you experience these conditions!

Where the magic happens

Your Comfort Zone

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THE GREATEST ENEMY TO HUMAN POTENTIAL IS YOUR COMFORT ZONE.

It's only after you've stepped outside your comfort zone that you begin to change, grow, and transform.
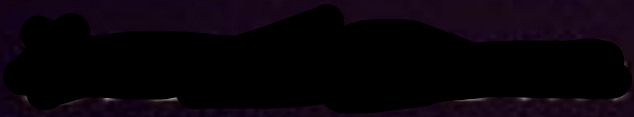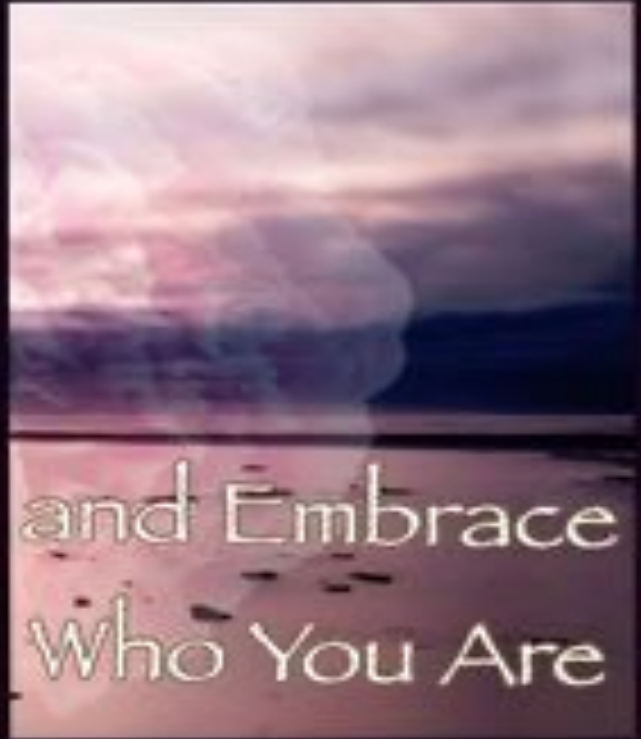
Don't Be Afraid To Ask For Help

Be pro active and do as much as you can on your own. However, don't be afraid to ask for help or fearful of looking stupid if you don't know something. Asking for help is not a sign of weakness.

Don't be afraid to ask someone to explain something again if you don't get it the first time or even the second or third time. Teachers are there to help and are more than happy to explain things over and over again. That is our job and what we actually like doing. We get satisfaction from seeing that "aha" moment on a student's face. ☺

Don't be afraid to ask questions. Don't be afraid to ask for help when you need it. I do that every day. Asking for help isn't a sign of weakness, it's a sign of strength. It shows you have the courage to admit when you don't know something, and to learn something new.

BE STRONG ENOUGH TO STAND ALONE, SMART ENOUGH TO KNOW WHEN YOU NEED HELP, AND BRAVE ENOUGH TO ASK FOR IT.

Sometimes you just have to pick yourself up and carry on

"SUCCESS IS THE SUM OF SMALL EFFORTS REPEATED DAY-IN AND DAY-OUT."

If you concentrate on small, manageable steps you can cross unimaginable distances.

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Work hard for what you want because it won't come to you without a fight. You have to be strong and courageous and know that you can do anything you put your mind to. If somebody puts you down or criticizes you, just keep on believing in yourself and turn it into something positive.

Every day is a Chance to LeaRN

THE OPPOSITE OF FEAR
IS LOVE

YOU CAN FEAR
THE CHALLENGE OR
YOU CAN LOVE IT

YOU CAN AVOID
THE CHALLENGE OR
YOU CAN LEAN INTO IT

YOU CAN HIDE OR
YOU CAN GROW

SKILLS
ARE
BUILT
NOT
BORN.

IMPOSSIBLE.
IT'S IMPOSSIBLE TO GET GOOD AT IDENTIFYING AND SOLVING PROBLEMS WHEN THERE ARE NO PROBLEMS TO SOLVE.

IT'S IMPOSSIBLE TO LEARN HOW TO DEAL WITH ADVERSITY WHEN YOU NEVER EXPERIENCE FAILURE.

IT'S IMPOSSIBLE TO DEVELOP THE ABILITY TO ADAPT AND INNOVATE WHEN YOU NEVER FACE CHALLENGES OR CHANGE.

IT'S IMPOSSIBLE TO GROW WITHOUT STRUGGLE.

PROBLEM SOLVING
DEALING WITH ADVERSITY
ADAPTABILITY
& GROWTH
→ ARE ALL
REALLY IMPORTANT SKILLS THAT WE ALL WANT
THAT WE ALL NEED

BUT WE CAN'T FORGET WHERE THOSE SKILLS COME FROM

AND WE NEED TO MAKE SURE THAT WE (AND OUR PEOPLE) FACE ENOUGH PROBLEMS, EXPERIENCE ENOUGH FAILURES, AND MAKE ENOUGH MISTAKES TO DEVELOP THEM PROPERLY

Be Honest With Yourself, Don't Make Excuses After Tests:

"Everyone else did badly"
"My score was above average"
"It was a hard test"
"I just needed more time. I'm not quick enough"
"I didn't expect to do well anyway because I didn't study. I will do well next time"
"I just made silly mistakes. I would have done well without those mistakes"
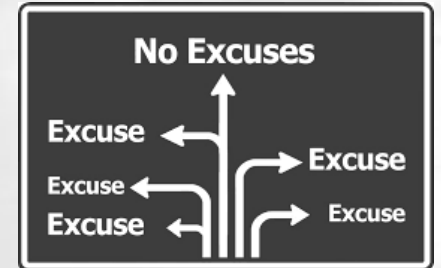
Practicing maths over and over again is the only way to improve speed, accuracy and iron out mistakes!

No Excuses

Excuse → Excuse ← Excuse Excuse → Excuse

NO EXCUSES. WORK HARDER.

I DON'T make EXCUSES. I make RESULTS.

YOU CAN HAVE RESULTS - OR - EXCUSES NOT BOTH.

IF YOU REALLY WANT TO DO SOMETHING, YOU'LL FIND A WAY. IF YOU DON'T, YOU'LL FIND AN EXCUSE.

DON'T MAKE EXCUSES! MAKE CHANGES!

Please Please Always Show Your Work
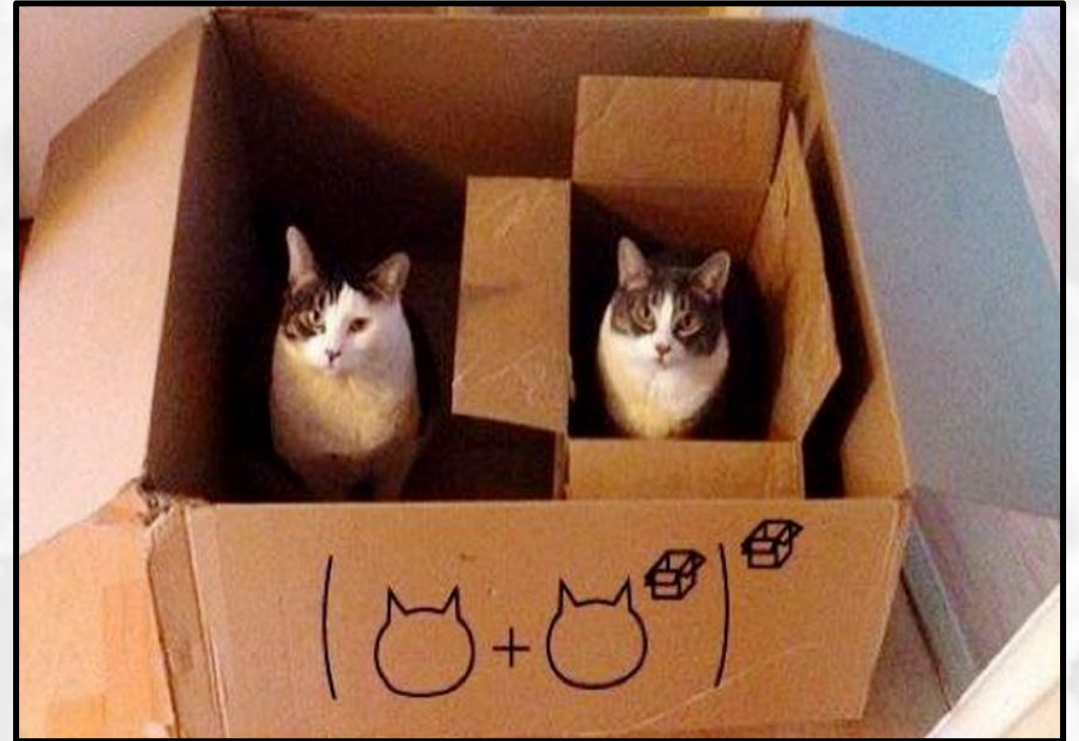
You can receive almost all marks for an incorrect answer if you have correct working. If you make a silly mistake part of the way through you can still gain follow through marks. We can't read your mind.

It is neither clever nor smart to try and do everything in your head. A good mathematician not only thinks well, but also writes maths well!

Instead Of Finding Reasons Why You Can't, Find Reasons Why You Can

Instead of making up excuses for why something is impossible, it's far better to come up with reasons why it could be possible. One reason why is more powerful than all the reasons why not.

Great things come from hard work and perseverance. No excuses.

We are all MATHS PEOPLE

How to be a Maths Person

Step 1:
Do maths
(any type)

Step 2:
Be a person

Pure mathematics is, in its way, the poetry of logical ideas.
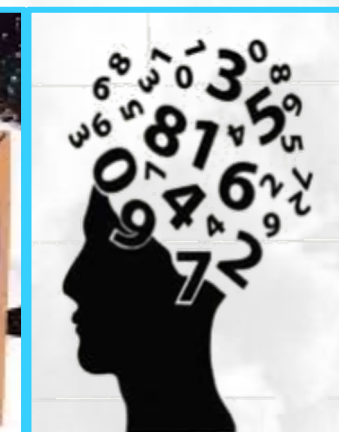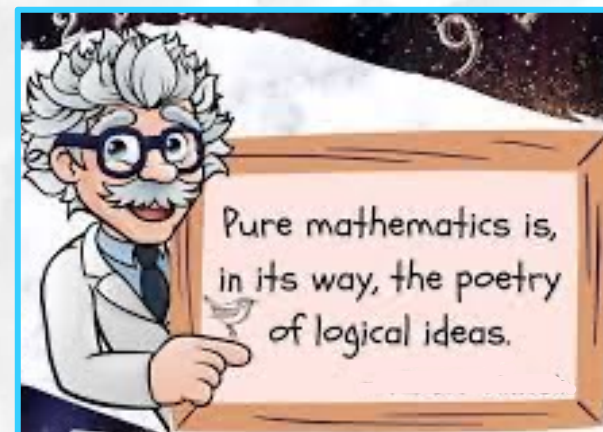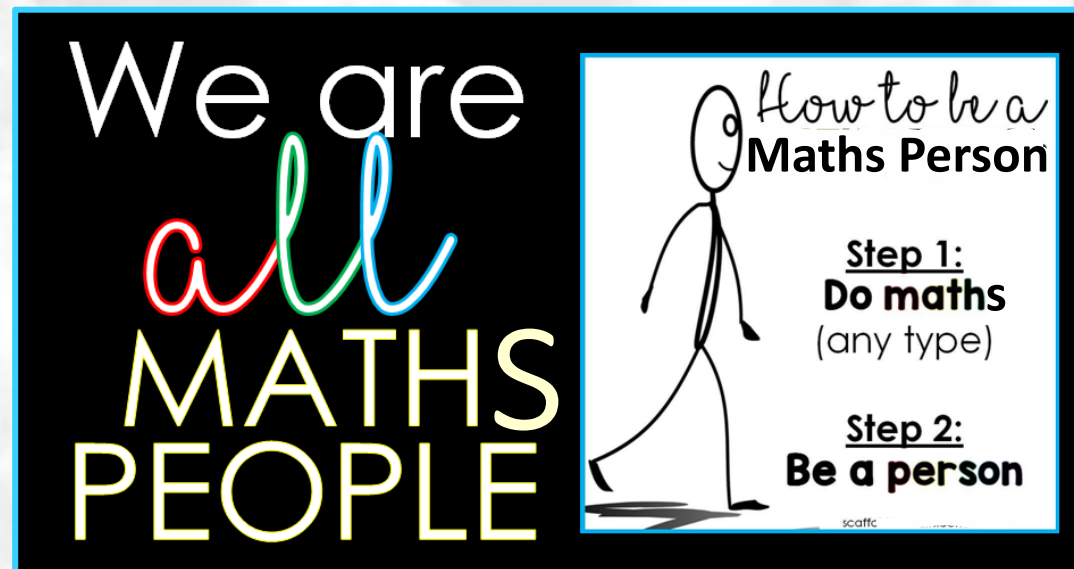
Learn to embrace and love maths!
Maths is everywhere
We can't run away from it!

You can be a complainer or an achiever, but you can't be both.

I often hear students initially complain: "I don't like maths, I'm just not good at it."
It is human nature to like what we are good at.
I guarantee that once you become good at maths you will love it!

I ♥ MATH

i(♥)² math

The Beauty Of Maths

MATHEMATICS IS THE MOST BEAUTIFUL AND MOST POWERFUL CREATION OF THE HUMAN SPIRIT.

Jobs

Job columns (left to right):
Accountant, Administrative Assistant, Aerospace Engineer, Airline Pilot, Animator, Architect, Artist, Attorney, Auditor, Auto Mechanic, Bank Teller, Biologist, Bus Driver, Business Planner, Carpenter, Cashier, Chef/Cooks, Chemical Engineer, Childcare Worker, Chiropractor, Civil Engineer, Computer Programmer, Construction Manager, Construction Worker, Cosmetologist, Counselor, Customer Service Representative, Dental Assistant, Dentist, Doctor, Dietician, Drafter (Engineering), Electrician, Electronics Technician, Event Planner, Fabricator, Financial Advisor, Fire Fighter, Fitness Trainer, Flight Attendant, Food Preparation Worker, Graphic Designer, Hairdresser, Hotel Ma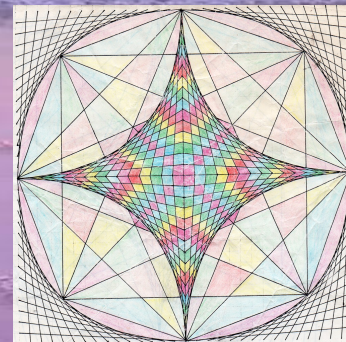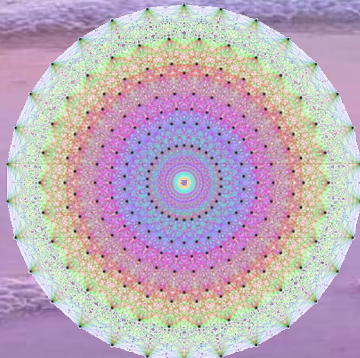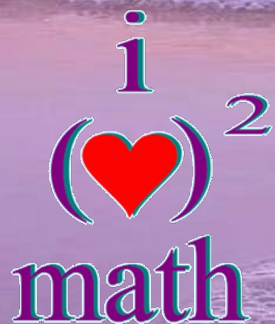nager, Housekeeping Cleaner, HR Specialist, Insurance Agent, Interpreter & Translator, Laboratory Technician, Landscaper & Groundskeeper, Lawyer, Librarian, Logistician, Machinist, Maintenance Worker, Management Analyst, Market Researcher, Mechanical Engineer, Medical Assistant, Medical Researcher, News Reporter, Office Clerk, Optician, Optometrist, Painting Contractor, Paralegal, Paramedic, Pharmacist, Photographer, Physical Therapist, Physicist, Plumber, Police Officer, Payroll Supervisor, Professional Athlete, Psychologist, Real Estate Agent, Receptionist, Recreation Worker, Registered Nurse, Retailer, Salary Analyst, Sales Representative, Security Guard, Small Business Owner, Social Worker, Software Developer, Stock Broker, Stock Clerk, Therapist, Travel Agent, Truck Driver, Veterinarian, Video Game Developer, Waiter/Waitress, Web Developer, Welder & Fabricator

Basic Math/ Pre-Algebra

- Fractions
- Decimals
- Ratio and Proportions
- Percent
- Customary Measurement
- Metric Measurement
- Measurement Conversion
- Basic Probability
- Basic Statistics
- Statistical Graphing
- Powers and Roots
- Other Number Bases
- Negative Numbers
- Scientific Notation
- Basic Problem Solving

Basic Algebra

- Using Formulas
- Linear Equations
- Linear Inequalities
- Operations w/ Polynomials
- Factoring Polynomials
- Rational Expressions
- Coordinate Graphing (2D)
- Linear Systems
- Radicals
- Quadratic Equations
- Algebraic Representation

Geometry

- Basic Terminology
- Angle Measurement
- Congruent Triangles
- Triangle Inequalities
- Parallel Lines
- Quadrilaterals
- Similarity
- Geometric Mean
- Pythagorean Theorem
- Right Triangle Trigonometry
- Circles
- Constructions
- Area
- Volume
- Transformations
- Make Use 3D Drawings

Advanced Algebra and Trigonometry

- Functions
- Variation
- Imaginary Numbers
- Polynomial Equations
- Logarithms
- Sequences and Series
- Matrices
- Coordinate Graphing (3D)
- Advanced Probability
- Advanced Statistics
- Conic Sections
- Nonlinear Systems
- Trig/Circular Functions
- Graphs of Trig Functions
- Trig Identities
- Trig Equations/Inverses
- Oblique Triangles
- Polar Coordinates/Graphs
- Vectors

Other Topics

- Calculus and Higher Math
- Basic Calculator Use
- Scientific Calculator Use
- Computer Use
- Computer Programming
- Group Problem Solving
- Mental Math
- Induct./Deduct. Reasoning
- Math Communication
- Mathematical Modeling

MATH may not teach US HOW TO

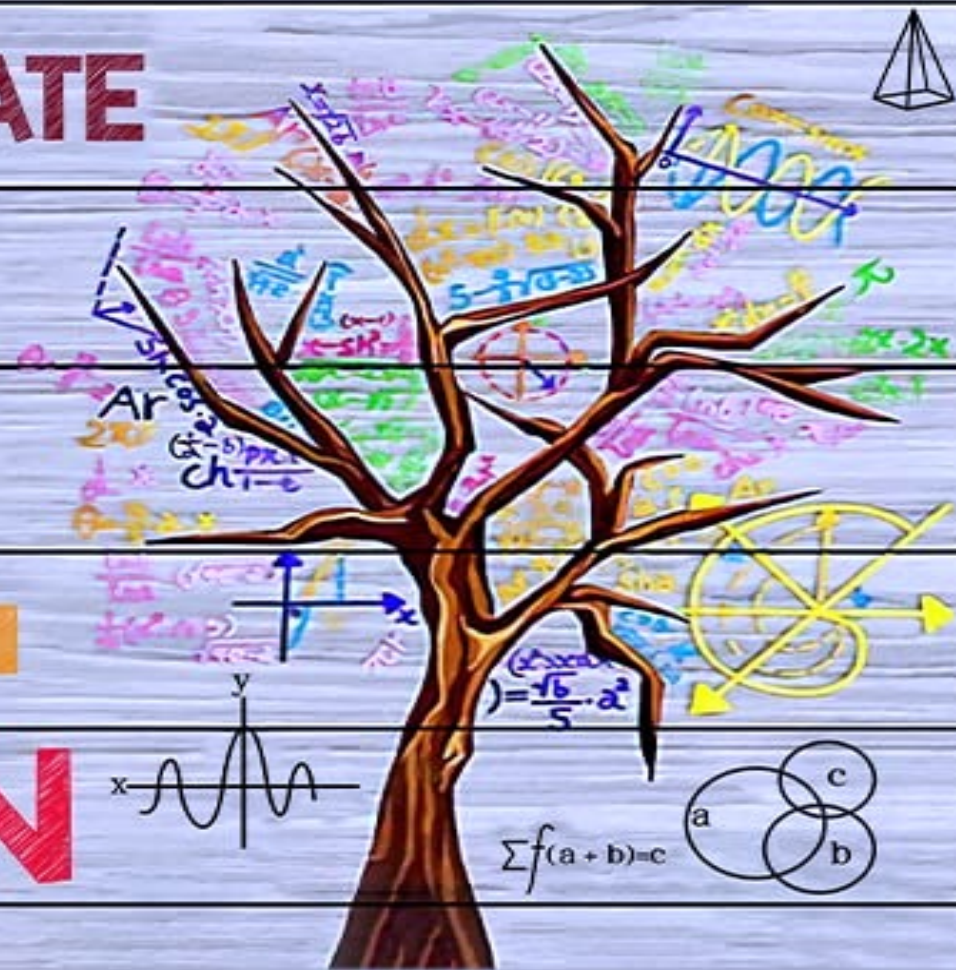$$y = \begin{cases} x + 3y + 2c = 1 \\ 2x + 6y + 5x = 38 \\ x + 2y + 10z = 2 \end{cases}$$

Add LOVE or subtract HATE But it gives us EVERY reason to hope that every PROBLEM has a SOLUTION

Shoot for the *Moon*
Even if you miss
You'll land among the *Stars*

I can't do it

EVEN THE SKY IS NOT YOUR LIMIT.
BELIEVE

YOUR LIMITATION—IT'S ONLY YOUR IMAGINATION.

Never Give Up

No Matter How Hard It Gets.
When Things Get Tough The Tough Get Going!

Don't Stop Believing.
No Matter How Impossible
Your Dreams May Seem.
No Matter What Others Say.

Hold On Tight To Your Dreams. They Will Carry You To Your Destiny.

Remember that the minute you take your first step into the life of your dreams, the first to greet you there will be fear. Nod. Keep walking.

DREAMS

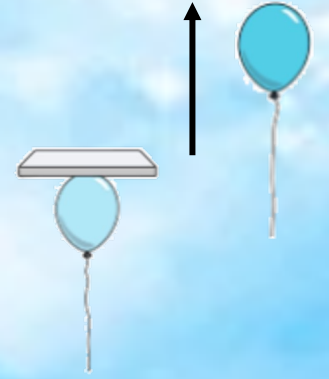*If dreams die, life is a broken-winged bird that cannot fly*

Learn To Enjoy Hard Work

Work Harder
Than You Think
You Did Yesterday

Don't Put Off Till
Tomorrow What You Can
Do Today.
Do It Now As Sometimes
Later Becomes Never.

Never Say Never – Fears, Like Limits, Are Often Illusions

If You Never Try You'll Never Know

Be Able To Look Back One Day And Know You Did Your Best. Don't Let Yourself Wonder "What If..."

Never Let Anyone Tell You That You Can't Do Something

It Doesn't Matter Where You Start, It Matters How You End

That's All For Now