## MATHS

## WHAT IS MATHEMATICS?

Experts describe mathematics as the "science of patterns... patterns of counting, patterns of reasoning and communicating, patterns of motion and change, patterns of shape, patterns of symmetry and regularity, and patterns of position."

Math and maths are generally accepted abbreviations of mathematics. The only difference between them is that math is preferred in the U.S. and Canada, while maths is preferred in the U.K., Australia, India, and most other Englishspeaking areas of the world. ... Whereas Math is a shorthand usually used in the US.

## WHY LEARN MATHS?

## Maths is everywhere!

Maths is a part of our lives, whether we clean the house, make supper or mow the lawn. Wherever you go, whatever you do, you are using math daily without even realizing it. It just comes naturally.

Sure teachers, parents, and adults tell students this on a regular basis. But, what do they know? Here are a few examples:

Chatting on the mobile phone
Chatting on the phone is the way of communicating for most people nowadays. It's easy, accessible and cost effective. Everyone has a phone and it requires a basic knowledge of skill and math. You need to know numbers and how they work, and with today's technology you can do basically everything on your phone, from talking and faxing to surfing the Internet.

## In the kitchen

Baking and cooking requires some mathematical skill as well. Every ingredient has to be measured and sometimes you need to multiply or divide to get the exact amount you need. Whatever you do in the kitchen requires math. Even just using the stove is basic math skills in action.

## Gardening

Even doing something as mundane as gardening requires a basic math skill. If you need to plant or sow new seeds or seedlings you need to make a row or count them out or even, make holes. So even without thinking you are doing math. Measuring skills is always needed, and calculations of the essence when doing something new in the garden.

## Arts

When doing any form of art, you are using Maths. Whether you're a sculptor, a painter, a dancer or even just doing a collage for fun, you will need to be able to measure, count and apply basic Maths to it. Every form of art is co-dependent upon mathematical skills.

Keeping a diary has become an essential part of our daily lives. We run from place to place and appointment to appointment. Making appointments and having a time schedule that works for you requires math. Without a diary we will crash and burn. Some people even have to make appointments to take some time out. Math is a much-needed skill in today's life.

## Planning an outing

Every outing you plan needs your math skill. Whether you go to the beach or the zoo is irrelevant. You will plan your way there and you will use your time wisely, math is your guide that will assist you and help you. When driving you need fuel, oil and water, without it your car will break down. All of these require maths.

## Banking

Can you imagine going to the bank and not having any idea what you need to do or how to manage your finances. This will cause a huge disaster in your life, and you will be bankrupt within hours.

## Benefits of tutoring:

## Overcoming mathematics anxiety

There are different reasons behind the display of anxiety by students when it comes to mathematics. A student's cause of anxiety may have proceeded from the fact that he/she memorizes too many formulas which he/she doesn't even have an understanding of how the problems can be solved. Such cases can get worse if the student isn't rescued and introduced to the right approach to true problem-solving.

Whatever the case may be, students' poor performance in mathematics doesn't necessarily mean that they are not intelligent. The students must be made to understand that the need for a maths tutor is to help them overcome the challenges faced by the subject. It is just a problem with mathematics and not a general intelligence decay.

Stressing this is quite important especially to younger ones. It may destroy their selfesteem if they are labelled to be less intelligent just because of their weakness in mathematics. Introducing a maths tutor should be seen as an extra effort to attain better grades rather than a means of punishment for a poor performance in the subject.

## Personal attention gives kids an advantage

When your child receives personal attention from a tutor, they have the opportunity to be taught in the learning style that best suits them.
Their questions and concerns can be addressed without the social pressure sometimes felt in the classroom, and because Maths tutoring lets your child learn at their own pace, it's more likely that they will understand the concepts being taught, building confidence from week to week that gets results in the classroom.

## Stress-Free Learning

The classroom environment could be quite stressful.

It's common for kids to worry about what their friends will say if they admit that they don't understand an idea or process in Maths. They're understandably reluctant to ask questions or draw attention to the fact that they don't understand Maths concepts for fear of being teased or laughed at.
Maths tutoring offers uncertain students a much more relaxed learning opportunity.
In a private Maths tuition setting, your child may feel less pressured and be more willing to make mistakes. This will greatly reduce their stress, encourage them to be more willing to try new things and result in them absorbing more of the information being taught to them.

## Tuition can even be fun

When a Maths teacher is able to turn tuition into a fun activity, the whole concept of Maths can seem less daunting for kids. Children who enjoy engaging tuition sessions eventually find that Maths problems are much easier to solve. Maths ceases to be a worry for them and many even begin to enjoy the subject.

## Regular Feedback

As a parent, you probably don't get many opportunities to talk to your child's teacher about how your child is going in Maths (or in any subject, for that matter!) With quarterly/bi-annually parent-teacher nights and a couple reports to go on, it can be tricky to get feedback about your child's progress.
One of the major advantages of having your child work with a Maths tutor is that the tutor can provide you with immediate feedback about how your child is going, as well as provide your child personal advice.
A qualified teacher can also give you tips about how you can help at home, as well as answer any questions you or your child might have.

## Better Results

Perhaps the main benefit, and the reason that many parents choose to have their kids work with Maths tutors, is the hope that their children will not only feel more confident about Maths but will also achieve better results at school.

The important thing to remember is that engaging a Maths tutor won't automatically guarantee that your child will race to the top of the class, but it does give them a great chance to improve and feel more confident about Maths.
When you choose a qualified teacher, who knows what they're doing as a tutor for your child, you're giving your child a great opportunity to achieve to the best of their ability.

And isn't that what we all want for our kids?

## What skills does studying mathematics develop?

- critical thinking
- problem solving
- analytical thinking
- quantitative reasoning
- ability to manipulate precise and intricate ideas
- construct logical arguments and expose illogical arguments communication time management


## Tutoring for better understanding of the following:

1. Addition
2. Algebra
3. Basic Operations
4. Comparisons
5. Complex Numbers
6. Counting
7. Decimals
8. Division
9. Estimation
10. Exponents
11. Factorising/Multiples
12. Fractions
13. Geometry
14. Linear Equations
15. Order of Operations - BODMAS/BOMDAS/BIDMAS
16. Metric system - Measurements
17. Money
18. Multiplication
19. Patterns \& Sequences
20. Percentages
21. Probability
22. Place Value
23. Rounding
24. Shapes
25. Subtraction
26. Telling Time
27. Word Problems
28. And more according to the need of students pertaining to school year level.
