

# **A Success Guide to Maths Exams**

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**by Gopala Krishnan M. Ed.**

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# Introduction...

**Congratulations!** You have taken the first step to success in Maths. This book has been written just for you. Please put aside whatever difficulties you are facing in Maths. Do not give any thought to it and read this book with an open mind. Only then will you realise the full potential of this book. You must remember that it is **NORMAL** to have difficulties in learning Maths. However, you cannot let these difficulties be a stumbling block if you sincerely want to progress in Maths.

You will understand the **PETS approach** that I have used with my students and it has produced very good results. The chapters in this book have been arranged such that you are gradually led from one idea to another. Take your time to read each chapter. This book is not a novel, so do not read it like you are reading a novel. Reflect on the ideas and suggestions made in each chapter and take action. Answer the questions given in the task at the end of each chapter. The questions have been designed to make you reflect and think about Maths in an objective way. Implement the ideas as you go along and make it a habit to continue using these ideas when you are revising Maths for your exam.

Tell yourself that you are determined to overcome your difficulties in Maths and this is the golden opportunity you have been waiting for.

## How to use this book

1. Have a pen and paper ready.
2. Read a chapter at a steady pace. Do not rush through it. Do not skip lines and do not read this book like you read a novel.
3. At the end of each chapter you will be given a task to do. Carry out the task suggested immediately.
4. Sometimes you may have to read a chapter again. Do it. You may pick up something new that you have missed the first time round. The ideas and suggestions given in this book are for you to implement so you need to understand and assimilate them.
5. Start practising the ideas and tips given in this book **TODAY**. Treat this book like a handbook to success in Maths. Do not postpone implementing the ideas and tips. This way you will start to experience, firsthand, the suggestions made. You will slowly realise a change in you and your feelings towards Maths.

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# The PETS Approach

There are many reasons why some students find Maths difficult. Some of these difficulties can be due to bad experiences during the early years learning Maths. What I have found is, when students were able to overcome their emotional obstacles to Maths; they were able to perform better. One method to deal with these emotional obstacles is to approach Maths in a systematic way.

Many students learn or revise Maths like any other subject. They read the revision guide and try to memorise some formulas and then hope their Maths will improve. Maths is a 'hands on' subject. You need to be doing Maths to learn Maths. It's like learning to play football. You can't be a good footballer just by reading about football or watching others play. You will need to go into the field and play the game. Similarly, preparing for Maths exam is like preparing for a major tournament, like the World Cup or the Olympics. You need to plan your revision and employ some effective strategies before you can see improvement in your Maths.

The **PETS approach** will help you to revise Maths in a systematic way. The chapters in this book have been divided to represent the **PETS** approach, so it is important you go through the book step by step. Do not go on to a new chapter without carrying out the suggestions and task recommended. Remember you learn Maths by doing not just by reading.

**PETS** is an acronym for **Preparing, Executing, Tracking** and **Sustaining**. Go through the four stages every time you want to revise Maths. It is a cycle. You start with preparing followed by executing your plan, tracking your progress and sustaining what you have learned. Do not give up without going through the whole cycle. The diagram on the next page explains this cycle better:



## THE PETS APPROACH

**Preparing** involves the preparation and planning stage. This includes your mental preparation to learn Maths. You need to adopt positive attitudes to Maths in order to make progress in Maths. You will also set your targets and goals in Maths. This is important to motivate you to continue your efforts in revising Maths for your exam.

**Executing** is the stage where you implement your plans- taking action to revise on a daily basis. You use effective methods, tools and resources that will help you understand the concepts in Maths and build up your mathematical skills.

**Tracking** is being aware of the progress you are making in Maths. Tracking your progress will motivate you to continue studying Maths. It will also help you to identify weak areas in Maths that you may need to spend more attention and time on.

**Sustaining** is to continue the remembering the Maths you have learnt. It requires you to revisit the topics from time to time so that you don't forget what you have revised.

## **PREPARING**

**Success Mindset**

**Target and Goal**

**Time and Place**

**Exam Board**

**Your Health**

***“Nobody plans to fail but many fail to plan”***

# Success Mindset

It is important to identify your feelings towards Maths if you are to succeed in Maths. A lot of people fear Maths and experience Maths anxiety. This is a common phenomenon. I had these fears when I was younger and so did all the students I have ever taught over the years. The only difference between the high achieving students and the low achieving students is their ability to deal with their fears of Maths.

The number one reason people develop a fear towards Maths is their fear of **FAILURE**. This fear of failure has robbed many capable students a good grade in Maths exams. There are many reasons why people develop a fear of failure and this fear is more intense in Maths than in any other subject. Do you have this fear? Reflect on this for a few seconds. Try to recall why you have this fear. Write it down. Get it out of your system. Remember your fear of failure has developed into fear of Maths and it is impeding your progress.

You must understand that failure is only temporary. Failure is essential for learning to take place. Ask anyone who has achieved great success and they will tell you how they have failed many, many times before they achieved success. Ignore failure every time you experience it. Just **SHRUG IT OFF**. Treat it as just an inconvenience and move on. I know this may be difficult at first but persist and soon failure will no longer bother you.

## **Task**

**In order to progress in Maths you must deal with your fears in Maths.**

- 1. Identify the emotional difficulties you have in Maths and write them down. Write exact topics you have problems with.**
- 2. Bin this paper and mentally tell yourself - you have now got rid of your fears in Maths and can now move on.**
- 3. Talk to your school counsellor, Maths teacher or parents about your fears.**



***Your Attitude  
Will Determine  
Your Altitude***

# Targets and Goals in Maths

Have you given serious thought to why your teachers keep setting you targets in all your subjects? There are many reasons why you are set these targets. In addition, you must also think of your goals in Maths.

There is a difference between targets and goals and it is important you understand the difference between the two. **Targets are short term** whilst **goals are long term**. In order to achieve your goals you need to set targets that will lead you to your goals.



For instance you may aspire to be an engineer in say, 10 years time. That is your goal. However to achieve this goal you need to achieve a Grade A in GCSE Maths and a Grade B in Advanced level Maths. These will be your targets. Your targets are the milestones in your journey to achieving your goal of becoming an engineer. Without these targets you will not be able to gauge your progress and know whether you are on the right track to achieving your goal of becoming an engineer.

**Targets also play a motivational role** in your effort to achieve your goal. Targets give you a sense of achievement from one level to the other and will spur you on towards your goal. Targets will help you overcome frustrating and difficult moments in your life and help you focus on your goal. Targets are like the steps on a staircase. You take one step at a time to achieve your final goal of reaching the top of the stairs.

**On a piece of plain paper write down your targets** for Maths and refer to it as often as you can. This can be the grades you would like to achieve in the term test or assignment etc. Picture yourself achieving these targets and how it will make you feel once you have achieved them.

**Write your goals down on the same piece of paper.** This would be what you would like to achieve in the GCSE exam or any other exam you be taking. Add pictures and diagrams and use colours to make it attractive. Keep this piece of paper some where you can look at it as much as possible. I suggest the wall by your bed or by the mirror you look into every morning.

**Reflect on your target and your progress** and keep reminding yourself that you will achieve the targets you have set yourself.

### **Task**

- 1. What are your goals in Maths?**
- 2. How important is a good grade in Maths for your future education and career?**
- 3. Set targets to achieve this goal. Write these targets down.**

# Importance of Time and Place

When embarking on your revision programme, it is important that you consider the time and place of revision. You might have heard of the saying:

***"There is a time and place for everything."***

This is especially true in your learning. We are creatures of habit. Our minds will get into learning mode when we do our studying at the same time and in a specific place every time. Setting a definite time and place to revise will help your mind to focus. Below you will find guidelines for finding the suitable time and place to revise Maths:

## **Time**

1. It is a well-known fact that our mind works best at certain times of the day. You need to identify which part of the day you are able to concentrate best. If you are a morning person then you should schedule your revision in the morning. If you are not sure of this try to revise at different times of the day and identify the time of the day you are able to focus well on your studies. This time will be your optimum time and you should maximise this time to do really important things like revising your Maths.
2. Make sure the time you have chosen is a **quiet time** in your home when there is least distraction.
3. Try to revise at the **same time each day** so that your mind gets into the habit of doing this. Avoid watching TV/movies before this time as this will affect your concentration.
4. It will be helpful to **draw out a timetable** for your revision to make sure that all your subjects are allocated enough revision time.
5. For your Maths revision, you will need to **spend about 20-30 minutes** a day. Increase this time according to your needs for example a few weeks before your exams etc. You may need to spend more than 30 minutes.

## **Place**

1. Create a special space in your home for your revision. This will be the place where you will spend time revising each day.
2. Your mind will tune in to learning mode every time you come to this place. This place can be a little corner in your room or home or just a small table.
3. Put up quotes, your targets for your subjects or posters that will motivate you to continue revising. Do everything you can to make this space special so that you would like to be there day in day out.

Inform your family members your revision time and place so that they will keep noise to the minimum and reduce any distractions. Remember, the above are only guidelines. You need to explore yourself the best time and place to revise but it is really important you revise at the same time and in the same place every day.

## **Task**

- 1. How many minutes will you allocate for revising Maths in a day?**
- 2. How many times a week will you revise Maths? Write down the days and time.**
- 3. Where will be revising Maths? Why have chosen this place?**

***It's not enough to be busy, so are the ants. The question is, what are we busy about?***

Henry David Thoreau

# Know Your Exam Board

It is really, really important for every student to visit the exam board for all their subjects. There is a wealth of information that students can access on the exam board website.



1. **Specifications** – You will find the specifications for all your subjects on the exam board website. This document contains all the details about the exam papers including the percentage breakdown for each paper.

2. **Past papers** – Most exam boards will allow access to past papers. Going through the past exam papers will give you a clear idea of the type exam questions to expect for each topic. In fact you should integrate answering exam questions as part of your revision effort.

3. **Specimen Papers** – The specimen papers are useful if you are the first cohort to take a new exam paper or a new format. It also gives you good practise with exam type questions.

4. **Resources** – The exam board will also make available resources like revision guides, revision workbooks etc that you can purchase direct from their website. This way you are sure of the revision guides that you need to help in your revision

5. **Examiners Report** – This may not be an attractive document but you can learn a lot from the mistakes made by students in the previous exams. You can then make sure you don't make the same mistake and score high marks.

These are just a few reasons why you should know your exam board. Find out from your teachers the exam board for your maths exam and visit their website. You will benefit greatly from this.

## **Task**

- 1. What is your Maths exam board? If you do not know this, ask your Maths teacher, and then write it down on a piece of paper.**
- 2. Visit the exam board website and write whatever information you can find on this piece of paper.**
- 3. Bookmark the website in your computer.**



# How Healthy Are You to Succeed In Maths

It is true that health is paramount to success. If you are unhealthy then your progress towards your target will be greatly affected. As you spend time and effort on revising and preparing for your exam, you want to focus some of your attention on staying healthy. Here are some key points you need to remember about keeping healthy:

**1. Food** – Check that you are eating **a balanced diet**. Drink enough water. Vitamin and mineral deficiency can make you lethargic and affect your concentration. Find out from your GP or refer to a health advisor/nutritionist on what type of food will help you to concentrate and improve your brain activity. Don't forget have a good breakfast and lunch so that you have enough energy for the day. Talk to your parents about your diet and explain to them how important it is for you to have proper food.



**2. Exercise** – Make sure you get involved in an **outdoor activity** that will make you sweat. Playing games can make you feel very relaxed and again help in your concentration. Learning Maths requires stamina and exercise can give the stamina and energy you need to persist.

**3. Avoid smoking and taking drugs at all cost** – A lot of young people are curious and want to try everything others are doing without considering the repercussions. Drugs and smoking can have long-term damage to your brain and lifestyle.

**4. Rest/Sleep** – It is very obvious that a person who lacks rest or sleep will not be able to focus on anything. Lack of rest/sleep can also make you impatient and lose interest in revising for your Maths exam. Avoid playing video games just before you go to bed as you will lose track of time and sleep late. Set aside a definite time in a day when you can play video games and limit the time you spend on them. This also includes being online on social networking sites.

**5. Mental Health** – If you are disturbed mentally, this will drastically affect your behaviour and motivation to work. If you are worried about something talk to someone about it and try to get rid of the worry. Accept failure as part and parcel of learning Maths. It is natural to make mistakes. The important thing is you do something about the mistake and not ignore it. Read motivating and inspirational stories to keep you positive and motivated.

**6. Be sensible** – A healthy life comes from a sensible lifestyle. There are many distractions around you but if you are committed to improving your Maths grade then you need to make sensible/positive choices. Avoid activities that may hurt you or affect you physically and mentally.

Talk to your parents and teachers on how you can take care of your health and be fit to revise and prepare for your Maths exam.

## **Task**

- 1. Create a timetable to include your games and exercise time. Your timetable should only indicate your revision time and exercise time.**
- 2. Read about balanced/healthy diet and compare it with your diet. How can you improve your diet?**

**Recipe for success:**

***Study while others are sleeping; prepare while others are playing; and dream while others are wishing.***

Unknown Author

# Getting Organised For Maths Exams

There are a few things you need to do before you embark on your Maths revision programme.

1. **Identify the times in a week** you are going to set aside for your Maths revision. This can be 15 to 20 minutes a day or an hour every other day. You must stick to these times. Develop the habit of doing Maths regularly.

2. **Find out your Maths exam board.** This is really important as you need to be familiar with the exam papers and other requirements.

3. **Get a set of past exam papers** so that you know what to expect and how the exam questions are phrased. Ask your teacher or you can download some from the exam board website.

4. **Prepare a list of topics** you will have to cover for the whole course. Try asking your teacher for a list of topics.

5. **Identify the topics you will need to improve on the list.** Use the list on a daily basis as you go through the course at school and at home.

6. **Keep track of your progress.** Create a spreadsheet and record all scores of topics you revise. Refer to this record from time to time to gauge your progress and make changes to your learning schedule and style.

Your revision programme will be more effective if you get organised. It will also create clarity in your mind and reduce anxiety.

## **Task**

**List some of the topics in Maths you would like to improve on. Be very specific. Below are some examples of topics you can identify:**

Adding and Subtracting Fractions

Expanding and Simplifying Algebraic Expressions

Finding Area and Circumference of Circles

Factorising Quadratic Expressions

Solving Equations with Unknown on Both Sides

**EXECUTING**

**MATHS REVISION GUIDES**

**MATHS VIDEOS**

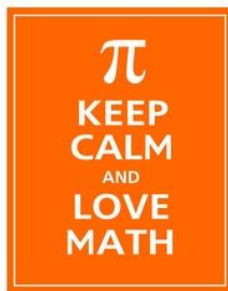
**MATHS ONLINE QUIZZES**

**MATHS ONLINE GAMES**

**EXAM TECHNIQUES**

# How to Use Maths Revision Guides

Using revision guides and workbooks to revise has been the traditional way to revise for an exam. There are hundreds of revision guides and workbooks available these days and it can sometimes be very confusing to students trying to purchase a suitable revision guide or workbook. I will write reviews for some of the Maths revision guides and workbooks that I have come across and recommended to my students. In this post I wish to discuss how you can use revision guides effectively to revise Maths for your exams.



One of the first things you need to do is to **look at the contents page** and identify the topics that have already been taught at school. This is important especially at the beginning of the schooling year, as you have not covered much of the curriculum yet. Make note on the contents page by ticking or any other means to indicate you have learnt a particular topic at school.

The next step is to **split the chapter or topic into small parts**. Normally, this will be the sub-topics. So for example for 'Fractions' you might have to learn equivalent fractions, add and subtract fractions, multiplying fractions, dividing fractions and finding fraction of a quantity. It will help to draw a spider diagram so that you get an overview of all the sub-topics you need to revise for a main topic.

Next, you **estimate how long you will take to cover each topic**. I suggest you spend at least 20 minutes on each sub-topic (you should be spending at least 20 minutes a day revising Maths). This will give you an idea of how long it will take you to cover all the topics before your exam. You might have to spend more time each day so that you are able to revise all the topics within the time you have before your exam.



Once you have sorted this, you can now start your revision. Revision guides will normally give you some notes including formula for the sub-topic. **Read these notes and formula then look at any worked examples given.** You can even try to summarise the notes or draw a mind-map to have an overview of the concept. Then, look for some questions related to this topic either in the revision guide or workbook. You can also look for questions on the web. Try to **answer about 4 to 5 questions.** When choosing questions, make sure you attempt **different types of questions** on the concept or topic you have read. The idea is to experience different ways questions can be asked about the topic.

Now, **check you answer.** If no answers are provided, take the questions and your solution to your teacher to be marked. It is no use just answering questions without finding out how well you have understood the topic. Make a note of the topic if you score less than 50%. This way you can start to **identify topics you will need more help with.** Continue your revision until you complete all topics. Once you have gone through all the topics you can then start overall over again, making a second round of revision.

### **Task**

**Find out from your teacher for suitable revision guides and workbooks. Write these titles down and talk to your parents about purchasing them.**

***Live as if you were to die tomorrow.***

***Learn as if you were to live forever.***

Mahatma Gandhi

# How to Use Maths Videos to Revise Maths

Most of you would certainly have heard of 'YouTube' – the video sharing social networking website. Thousands of video clips are uploaded to this website every day. You can find videos on almost every topic you think of including Maths. In fact you can use these video clips to help you with your Maths revision. I would like to share with some tips on using video clips to revise your Maths.



If you plan to use videos as part of your Maths revision strategy, then you must approach it in a systematic way. Don't just click on a video and watch and leave it at that. To make your learning more effective through videos, you need to make some preparations:

1. **Create a list of topics** that you need to improve on. You can find the topics in the specifications given on the Exam Board website.
2. **Choose one of the topics** and look for some questions either normal practice questions or past exam questions. About 5 to 6 questions covering the topic will be a reasonable number.
3. Now, **go to YouTube** or any other video sites and type in the topic or keyword for the topic into the search box. Use a long tail search that means, type in as much information as you can about the topic in the search box. The lesson objective that your teacher writes on the board at the beginning of a lesson is a 'long-tailed' keyword.
4. **View the video fully and replay** it if you can't follow an explanation. Remember you can pause and rewind the video every time you missed something. This is the great advantage of using videos to revise Maths.
5. Now you can **try to answer the questions** you collected before viewing the video. Do go through to the parts on the video that you can't find an answer.
6. Finally, **mark your work** and see how you have progressed in the topic.

### **Task**

- 1. Search for Maths videos on the internet.**
- 2. Bookmark these websites.**
- 3. Watch one of these videos to see how you can use them for your Maths revision**



# How to Use Online Maths Quiz

Doing online quiz could be a very good way of revising Maths. You can do a general Maths quiz or a quiz on specific Maths topics. About 10 to 15 questions in a session should help you a lot. There are several things you must observe when using Maths quiz if it is going to be an effective method for revising Maths.

1. You need to **revise the topic** before attempting the quiz. Otherwise, it would be a waste of time. Choose a particular topic that you need to improve on, go through the notes in your revision guide on the topic. Now you can try out the quiz.

2. When answering multiple choice questions, it is important you don't click on all the answers. You need to **work out** the answer on a sheet of paper before clicking on the answer. **Make note of any questions** you are not able to answer and research further on the topic online or take it to anyone (parents, study buddy, Maths teacher) that would be able to help you.

3. You must **analyse the results**. Find out why you got a question wrong and how you can improve on it. Note down anything you don't understand and take to your teacher or any person who can help you.

Remember, just doing quiz will not improve your Maths. You need to do it the right way so that your revision is effective – meaning you are learning every time you revise including doing quizzes.

## Task

**Search for some Maths Online quiz websites. Bookmark them.**

# How to Use Online Maths Games to Revise Maths

Revising Maths at home can be done in many ways. You have a variety of resources to choose from to help you revise Maths. In this post I would like to highlight the idea of revising Maths through online interactive games.

There are practically hundreds of websites offering free online Maths games including [mangahigh.com](http://mangahigh.com), [hoodamath.com](http://hoodamath.com) and [coolmath.com](http://coolmath.com). These games were designed to reinforce your understanding of mathematical concepts in a fun way. If used correctly, you will be able to learn Maths very effectively.



Here are a few guidelines for using online games to revise your Maths:

1. Decide before hand the topic you would like to revise e.g. Adding and Subtracting fractions
2. Go through the topic either in a revision guide or online guide. Know the main concepts involved in the topic. For example if you have chosen adding and subtracting fractions, know and understand the method involved in adding and subtracting fractions. Look at some examples and try one or two questions yourself.
3. Now look for suitable online games that will test your skills at adding and subtracting fractions. I have suggested some at end of this chapter.
4. Make sure you chose the right level of difficulty to keep you challenged e.g. easy, medium or hard.
5. Play and enjoy the game while at the same time revising your Maths topic.

6. Note any difficulty you come across while playing the game to help you identify your weak areas in that topic. Spend more time on improving these difficult areas in your revision sessions.

Below are some Maths games websites that I have let my students try out:

[mangahigh.com](https://www.mangahigh.com)

[hoodmath.com](https://www.hoodmath.com)

[arcademics.com/games](https://www.arcademics.com/games)

### **Task**

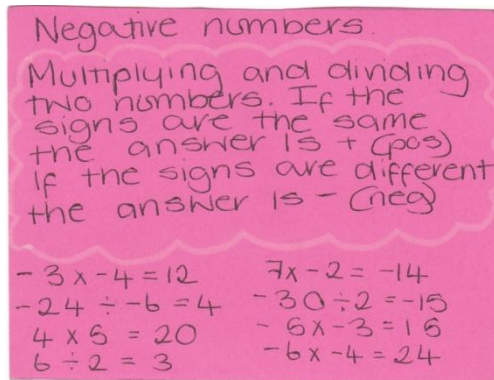
- 1. Visit the websites suggested above and play one or two games.**
- 2. Identify what problems you faced playing these games. Think of the skills you would need to develop, to play these games better.**



# Revising Maths Using Index Cards

One way you can improve your memory when it comes to Maths formula and facts, is by making your own revision cards, sometimes known as index/cue cards.

1. You must make your own cards and not purchase ready made ones. This will defeat the whole purpose of improving your memory. The very act of writing down the formula and mathematical information will help in impressing the brain to save this in long term memory.
2. The next thing you need to do is to refer to the cards as often as you can. Whenever you are practicing Maths keep the cards by your side so that you refer to them.



3. Include diagrams, flow charts, mind maps etc in your index cards.
4. Use colour or highlighters where ever possible to brighten up your notes. Research has shown that using colour helps to improve memory.
5. You can also collect questions for each card and answer them.

I hope this little tip will go a long way in helping you to remember Mathematical facts and formula in your effort to prepare for your Maths exam.

## Task

1. Create index cards for a chosen topic in Maths.
2. Show the card to a friend or study buddy and get feedback from them.

# Maths Exam Techniques

Here are a few exam techniques you need to remember and carry out when taking your Maths exam.

**1. Read questions more than once.** Under exam conditions you might miss a word or a phrase and this will hinder you from understanding the question. Make sure you read the question at least twice.

**2. Highlight or underline keywords or information in the question.** The keywords and information used or given in a question are there for a reason. Pay special attention to them as they will give you the clue to finding a solution

**3. Move on to next question if it takes you more than 3-5 minutes to answer a question.** The Maths question paper has been designed in such way that you shouldn't take more than 5 minutes to answer a question. Move on to the next question and come back to the difficult question after you have gone through the whole paper. This way you will have time to answer the easier questions first and secure the marks.

**4. Answer all questions -** No marks are deducted for wrong answers. Make it a point to write an answer for all questions even if it means you have to guess the answer as a last resort.

**5. Use pencil and ruler for graphs and diagrams -** Good presentation will increase your chances of getting better marks. Remember you will not be able to rub off graphs or diagrams if you have used a pen. You will not be given another paper. Go to the exam well equipped.

You must try to practice these techniques at home when going through practice papers. The more practice you get the more the chances you will implement these in the actual exam.

## Task

**Summarise the above techniques into a mind-map.**

**TRACKING**

**PAST PAPERS**

**MATHS QUIZZES**

**TRACKING YOUR PROGRESS**

# Past Exam Papers

In your planning stage you would have visited the exam board website. One of the benefits of visiting the exam board website is to get past exam papers. There are several reasons for going through past exam papers:

1. Going through past exam papers will give you a clear idea of the **type of questions** to expect in the exam. Exam questions are worded differently from practice questions you do in the classroom. The aim of the exam questions is to gauge your understanding of the mathematical concepts involved. Exam questions are also used to gauge how well you are able to apply the mathematical concepts in different situations or context.
2. Another reason for going through past exam papers is to help you **focus** on some of the popular topics in exams. You will find that certain topics appear more frequently than others. You need to make list of these topics and pay special attention to them.
3. Past exam questions will help you keep **track of your progress**. They give you an idea of how well you have covered the topics in the subject and how well you have mastered it. You need to record down questions that you have difficulty in answering so that you can focus on them when doing your revision. Look for more similar type of questions to help you strengthen your understanding of these type of questions.

Your teacher will definitely give you past exam questions at school but it is normally about a few weeks or months before the exams. You need to be going through past exam questions from the beginning. Do not wait for your teacher or tutor to give past exam questions. Do it yourself and start answering past exam questions from the very start of your revision programme.

# Maths Quizzes

In chapter 10, I mentioned about using online quizzes to help in your revision. You can also use the same quizzes to track your progress. You can use both online quizzes or you can use quizzes found at the end of chapters in your revision book. Alternatively you can make up your own quiz for each topic you revise.

I would highly recommend you make your own quiz. Creating a quiz requires understanding of the topic. You would need to work out the answers yourself. You can use a study buddy (see chapter 17) to mark your quiz.

Most online Maths websites provide quizzes. Choose the websites that will give you instant feedback. You must also choose the appropriate topics that are relevant to your Maths exam. Make a record of the URL of these web pages so that you use them to track your progress after revising a topic. Below are some websites that provide free maths quizzes:

[ixl.com](http://ixl.com)

[mymathspages.com](http://mymathspages.com)

[softschools.com](http://softschools.com)

[studymaths.com](http://studymaths.com)

## **Task**

**Visit each of the website above and check out the quizzes available on these websites. Keep a record of the websites that you find suitable for your Maths exam.**

# Tracking Your Progress

You may wonder why I am giving much attention to tracking your progress in Maths. Tracking your progress will show the direction you are heading towards in your Maths. It will show how close you are in **achieving your targets** and eventually your goals. Tracking your progress will also **motivate** you to continue with your revision programme.

It is common practice for schools to give you a **report** at the end of each term or year. The information in these reports is actually a way to track your progress. Keep these reports and refer to them regularly. It is a feedback from your Maths teacher on how well you are progressing in Maths. Use these reports or tracking data to help you in your efforts to revise Maths.

## Task

**A good way to track your progress in Maths is to keep a record of test scores and quiz scores. Create a spreadsheet where you can record these results. Below is an example of such a record:**

Topics	Quiz 1 Date	Quiz 2 Date	Quiz 3 Date	Test 1 Date			
Add and Subtract Fractions							
Percentage of a quantity							

**SUSTAINING**  
**REVISION TIME TABLE**  
**YOUR SUPPORT**

# Revision Timetable

You would have expected creating a revision timetable to be one of the first things I should have written about. I have decided to place this in this section because for you to continue revising and improving in Maths you need to find a way to sustain your progress. The only way you can do this is to create a revision timetable.

The timetable will make sure you allocate enough time for each of the subjects you are taking in the GCSE exams or any other public exam. On this timetable you need to set aside times you will be revising Maths in a week. Only fill the timetable with revision times and not any other activities.

Once you have planned the number of times in a week you have set aside for Maths, you can then estimate the number of times you will be revisiting a particular topic. For this you will need another table to record the dates the next time you will revisit a topic. Remember, it is not enough to revise a topic once. You need to revisit topics after seven to eight weeks. That way you will continue to remember the topic better. It will be good if you can revisit a topic about 4 or 5 times before your exam.

## Task

**Create your revision timetable. The sample may help you to construct your own revision timetable.**

Days	10.00am to 11.00am	1.00pm to 2.00pm	4.00pm to 5.00pm	6.00pm to 6.30pm	8.00 pm to 9.00pm
Monday	-	-	Hwk	Maths	Physics
Tuesday	-	-	Hwk	Maths	Geog.
Wednesday	-	-	Hwk	Maths	English
Thursday	-	-	Hwk	Maths	Chem.
Friday	-	-	Hwk	Maths	French
Saturday	His	Bio	Hwk	Maths	PE
Sunday	Geog	English	Hwk	Maths	Plan



# **Your Support**

I am very aware that it will be a challenging journey to prepare for your Maths exam. It will be more challenging if you have been neglecting your Maths and have been achieving low marks in tests and terminal exams. You do not need to go on this journey alone. There are people around you who can help and support you all along the way. They will be the support you need to keep you motivated and ensure you continue to progress in Maths and keep to your plan.

## ***Study Buddy***

Find another student in your class or in your Year group who is as motivated as you to achieve good results in the Maths exam. I used to enjoy my sessions with my study buddy. We planned ahead what maths topic we will revise for the week and then we will meet up once a week to discuss our difficulties in the topic. You must both agree on a time and duration of this meeting. During the meeting, you will refrain from talking about anything else but the Maths topics you have decided at the beginning of the week. Make sure you phone or any other mobile devices are switched off. No music and no TV. You have to be strict with yourself if you want positive results from these meet ups with your study buddy.

## ***Parents***

Your parents are your strongest support and greatest ally. Keep a good relationship with them. You need their support and help very often especially when you embark on your revision programme for your exams. I know some parents can be a little pushy (I am a parent too) while others can be very easy going. You need to understand that parents have your best interest at heart. Should they annoy you in any way, shrug it off and let them be.

Inform your parents that you are making an effort to improve your Maths and would like their support and help. Tell them what you are doing. Mention the time and place you will be using to revise your Maths so that they can give the space and quiet that you need. Once you have convinced your parents that you are sincerely working towards a goal, they will understand and will try to give their support and help even without you asking for it.

## ***Teachers***

Your Maths teacher will be of help to you in many ways. Foster a good relationship with them. Give the impression that you are willing to learn and want to learn Maths. Ask questions whenever you have the opportunity and complete all tasks given by your teacher. Attend after school homework club if you have one at your school. This little effort on your part will leave a good impression and teachers will be more than willing to help when you need their help or time.

## ***Self Motivation***

There will be times when you feel down and will not feel like doing any Maths. Sometimes you may feel that you want to give up altogether. You need to keep your spirits up and motivate yourself regularly. Find inspiring quotes and watch motivating videos to keep you charged up. Stick the inspiring quotes around your room so you can read it every day. Talk to your study buddy about your doubts and worries. Read a funny story to cheer you up when you are feeling down.

### **Task**

- 1. Choose a friend who will make a good study buddy. Talk to this friend about your plan to improve your Maths and how both of you can help each other. Plan your first meeting.**
- 2. Talk to you parents about your revision programme and your efforts to improve your Maths grade. Show them your timetable and goals.**

## CONCLUSION

*The essence of mathematics is not to make simple things complicated, but to make complicated things simple.*

S. Gudder

# Finally

I understand it is a lot to take in one go. This book is very prescriptive but the ideas and tips suggested here have worked time and again. Read this book several times and take your time. Don't rush through the pages. Remember you want to do well in Maths. Keep this thought in your mind all the time. Write down some of the things you have to do, as suggested in this book. The action you take will determine your success.

The second thing I would like to share with you is your mindset. I am not claiming that it is going to be easy to do well and achieve your target in your Maths exam. I have merely suggested a systematic way you can start preparing for your Maths exam. The PETS approach has worked well for my students and I am confident it will work for you. You need to keep an open mind and embark on your revision. Do not put barriers or obstacles that will impede your progress. Every time you come across an obstacle or difficulty, talk to someone about it. Your parents and teachers are eager for you to do well in your Maths as much as you do. Alternatively, you can [contact me](#) and I will do my best to get back to you. Read inspiring quotes or watch motivating videos on You Tube. Whatever you, do not give up!

*'You are only a failure when you stop trying'*

I wish you the best of luck in your revision and hope you do very well in your Maths exam.

# About the Author

Before I tell you about myself, I wish thank you for purchasing this book. It has been written for you. I have been a secondary school Maths teacher for over 30 years. In that time, I have come across all kinds of students; from the very bright to the very needy. The challenges and difficulties faced by my students have helped me to improve myself as a teacher. I have learnt a lot through the years by helping these students to overcome their difficulties in Maths. I have helped many students to achieve very good results in their GCSE Maths exam using the PETS approach. This book is a condensation of the important aspects of preparing for a major exam like the GCSE. You can use the PETS approach in all your subjects and achieve your target results in your exams.

I sincerely hope you benefit greatly from the ideas and suggestions I have made.



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