Penyrheol Comprehensive School

Useful Hints and Tips!

Read the question twice. Carefully.

Underline key information in the question.

Always show your working – even if you've used a calculator.

If it's tricky, draw a piccy!

Would a bar model help you visualise the question?

Before you move on, check that you have fully answered the question.

Use the number of marks available to gauge how long to spend on the question.

If a diagram is not drawn accurately, don't measure it.

Practice makes permanent.

Advice for Exams

Higher Tier: Exam Time 1 hr 45 minutes
Intermediate Tier: Exam Time 1 hr 45 minutes
Foundation Tier: Exam Time 1 hour 30 minutes.

Unit 1:- Non Calculator
Unit 2:- Calculator

Essential Equipment

- Black pen
- Rubber
- Pencil
- Sharpener
- Scientific calculator
- Ruler
- Protractor
- Compass

Subject

GCSE Mathematics Higher Tier

Key Dates

GCSE Numeracy Unit 1 :- Tuesday May 7th
GCSE Numeracy Unit 2 :- Thursday May 9th
GCSE Mathematics Unit 1 :- Tuesday May 21st
GCSE Mathematics Unit 2 :- Thursday June 6th
Additional Maths :- Tuesday June 18th

Suggested revision tools/strategies

1. Follow the Revision Timetable as closely as possible.
2. Each topic from the Revision Timetable is linked to a QR code Video Lesson.
3. There are Topic Question that accompany every topic on the revision list.
4. Use the Video Lesson, your Maths book/notes and Topic Questions in the revision process.
5. Additional revision material can be found on GCSE Pod and other websites.
6. Use Flash cards, Quizlet …..
7. You will be completing past papers in class.
8. Your teacher will inform you when to complete past papers at home.
9. Use the "Revision and Exam Tips" sheets for more strategies and ideas.

KEEP CALM AND REVISE

Retrieve don't highlight

Retrieval Activities

Week beginning (Monday)		Suggested Topics to Revise:	Achieved? ☑
Feb 25th 2019 February Half Term		**Prime factorisation** **Fractional and Negative Indices** **Simultaneous Equations**	[ ] [ ] [ ]
March 4th		**Changing the Subject of a Formula** **Similar Shapes (inc Area/Volume)**	[ ] [ ]
March 11th		**Negative and Fractional Enlargements** **Histograms** **FOIL (multiplying out two brackets)**	[ ] [ ] [ ]
March 18th		**Surds, Circle Theorems,** **Area and Arc Length of a Sector**	[ ] [ ]
March 25th		**Equation of a Straight Line (y=mx+c),** **Gradients of Perpendicular and Parallel Lines** **Inequalities**	[ ] [ ] [ ]
April 1nd		**Upper and Lower Bounds** **Proportion, Fractions (+ - ÷ x)**	[ ] [ ]
April 8th		**Area and Volume** **Probability (including conditional)** **Recurring Decimals**	[ ] [ ] [ ]
April 15th	Easter Holidays	**Solving Quadratic Equations (inc. formula and factorising)** **Polygons (interior & exterior angles)**	[ ] [ ]
April 22nd		**Sampling** **Transformation of graphs** **Curved Graphs (Polynomials)**	[ ] [ ] [ ]

Exam Q/Past Paper Practice

Date	Topics	
April 29th	**Algebraic Fractions** **Cumulative Frequency and Box Plots** **Distance Time Graphs**	[ ] [ ] [ ]
May 6th	**Transformations (inc. negative enlargement)** **Forming Equations, Substitution**	[ ] [ ]
May 13th	**Linear and Quadratic Sequences** **Reverse Percentages** **Pie Charts** *Revisit any topics of concern as the exam is next week*	[ ] [ ] [ ]
May 20th	**Night before- Watch short clips, look through Past Papers, refresh knowledge, use flash cards, target questions of concern.** **Exam Tuesday 21st May - Maths Unit 1**	[ ]
May 27th **Whitsun Half Term**	**Anything that didn't come up in Unit 1 should be a priority** . **Sine and Cosine Rule** **Trigonometry** **Pythagoras' Theorem**	[ ] [ ] [ ]
June 3rd	**Night before- Watch short clips, look through Past Papers, refresh knowledge, use flash cards, target questions of concern.** **Exam Thursday 6th June - Maths Unit 2**	[ ]
June 10th		

Click on the following hyperlinks for the worksheets and answers that go with the topics from the revision timetable.

Click here for the Worksheets

Click here for the Answers

Tips for Revising Maths

1. **Get all your notes sorted, and draw up a list of all the topics you need to cover**. This serves two purposes: you will definitely cover everything you need to cover, and a bit of tidying and sorting out is a nice relaxing way to ease yourself into the revision process.

2. **Plan exactly when you are going to revise, and be strict with yourself**. Don't just wake up one Saturday and say that you are going to be revising all day, because you probably won't get a lot done. Break the day in to smaller revision chunks and do something nice between each session.

3. **Give yourself little treats and things to look forward to**. If you do a good day of revision, take the night off and enjoy, put all thoughts of maths and school to the back of your mind. Buy yourself some chocolate, but only let yourself eat it once you have achieved what you need to do.

4. **Don't just read through the textbook!** The only way to revise maths is to do maths. You will do much better spending 20 minutes doing maths questions than spending two hours just reading a textbook.

5. **Use the internet**. The internet is like having your own personal teacher who is available for you whenever you like. You tube, My Maths, Corbet Maths, Barton maths, BBC Bitesize……….

6. **Don't just practice the topics you can do**. If you are really good at fractions, for example, it is very tempting to keep doing lots of fractions questions and then smiling as you keep getting them right. Although it can be painful, work your way through the topics that you struggle with.

7. **Make sure you ask for help**. Again, once you are in the exam you are on your own, but during revision you are certainly not. If you are stuck on a topic or a question, then ask one of the people from your class, or your teacher, or someone at home, or look on the internet. Don't suffer alone!

8. **Practice doing questions under exam conditions**. Get someone to pick you a set of questions from your textbook, or get some from a maths website, and try doing them in silence, with no help, for a fixed amount of time.

9. **Practice using your calculator!** Many people seem to assume that any question that lets you use a calculator is easy, and all calculators work the same. Those people are wrong on both counts. Find out if there are any problems early enough to correct them!

10. **If it works for you, try revising with a friend for a bit of the time.** You will find that one of you understands one topic more, whilst the other is a bit of an expert on another. Just by explaining things to a friend, you will find that your understanding increases, and likewise you might learn a different way of thinking about and understanding a topic.

11. **Most important of all, try not to worry.** A little worry is not a bad thing as it keeps you focused, but revision certainly shouldn't be a stressful time.

Revision.
Just do it.

Tips for Sitting Maths Exams

1. **Whatever you do, don't stay up all night revising the night before your exam.** Your brain actually needs processing time to sort out all the information you have bundled into it during your revision, and sleep and relaxation are the best way to achieve that. Last minute cramming only makes you stressed and tired and makes it harder to access all the information at the back of your brain. Finish revising at about 6pm then take the night off.

2. **Before you leave the house, make sure you have got all your equipment**. The most important is your calculator as that is like an extra part of your brain which only you know how to use. Other important pieces of equipment are: pen, pencil, ruler, compass, and angle measurer.

3. **Be careful who you talk to before the exam!** Our friends are great most of the time but when it comes to exams some can be stressed and panicky, and after talking to them, you can be stressed and panicky too!

4. **When you get into the exam and you find your seat**, it is probably going to be a good ten minutes before the exam starts. Spend the time wisely. Read the instructions on the front of the exam paper. Not only will this get your mind focused, it might just also tell you something important.

5. **A lot of people struggle with the timing of exams**. Some people go too quickly and end up with time at the end with nothing to do, or they go so slowly that they don't get chance to finish. You can see how many marks are available on the exam and divide the total length of the exam by this number. This will tell you how many minutes you have per mark and a guide of how long to spend on each question.

6. **If you get stuck on a question, move on!** This tends to happen at the start of exams when you are still nervous and your brain hasn't had a chance to warm up. Some people like to flick through the exam paper and find a question on their favourite topic, do that one first, and then go back to Question 1.

7. **Read the questions carefully!** Maths questions, more than in any other subject, contain words which, if you don't spot them, can send you down the completely wrong path. Imagine if you didn't see the "not" in this question: Which of the following shapes are not regular polygons? Goodbye marks!

8. **Show your working**. Again, I know everyone says it, but it is just so crucial! This is especially important the older you get. The beauty of working out is that even if you make a couple of daft mistakes, you are still picking up lots and lots of marks.

9. **Check your answers at the end.** If you have time you may find one of two daft mistakes and that could make the difference between a grade or a level.

10. **Use the beauty of algebra**. A lot of people hate algebra, but in exams it is brilliant because you can easily tell whether you have got the question right or wrong. If you are solving an equation, just substitute the answer back into the question and see if it makes sense. If you are factorising, then expand your answer and see if you get the question.