SUBJECT REVISION GUIDE

YSGOL HARRI TUDUR

HENRY TUDOR SCHOOL

Advice for Exams:

Essential Equipment – Arrive prepared to succeed.

- Black pen
- Sharp pencil
- Rubber
- Sharpener
- Ruler
- Protractor
- Pair of compasses
- Scientific Calculator
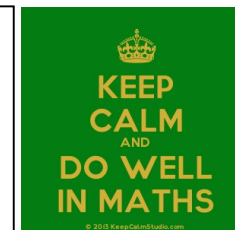
Unit 1: Non Calculator
Unit 2: Calculator Allowed

Higher and Intermediate Exams: 1hr 45min
Foundation Exams: 1hr 30 min

Subject

GCSE Mathematics

and GCSE Mathematics Numeracy

KEEP CALM AND DO WELL IN MATHS

© 2013 KeepCalmStudio.com

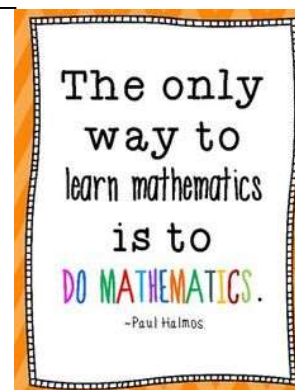## Key Dates:

GCSE Numeracy Unit 1: Tuesday 5 May – Morning
GCSE Numeracy Unit 2: Thursday 7 May – Morning
GCSE Mathematics Unit 1: Tuesday 19 May – Morning
GCSE Mathematics Unit 2: Tuesday 4 June – Morning

Revision tools/strategies/resources:

- The best maths revision is active – that is answering questions.
- Attempt the past papers you are given, take any problems to your teacher.
- Attend all the revision sessions you can.
- Start and finish each revision session with a question on one of your favourite topics to build confidence.
- If you want a break try Jones the Sum, Revise GCSE Maths or Corbettmaths (this is also great for individual topics).
- Create a poster of things you keep forgetting; put it somewhere you visit regularly, like your bedroom wall, the fridge or the toilet.
- Learn the command words for maths so you know what the question is asking.
- Learn how to use your calculator. Not all calculators are the same. Get a Casio *fx*83 or *fx*85 if you don't have a good calculator.

The only way to learn mathematics is to DO MATHEMATICS.
~Paul Halmos

REPETITION IS THE KEY TO MASTERY

YHT 10 IN 10 REVISION PROGRAMME

FOUNDATION TIER			
Week beginning (Monday)	Suggested Topics to Revise:	Achieved?	WEEK
February 17th HALF TERM	Work through the content in the topic list for your mock exams.		
Feb 24th	Converting and comparing fractions, decimals and percentages		1
March 2nd	BIDMAS		2
March 9th	Calculating perimeter and area of a rectangle, triangle, circle. Surface area of a 3D shape		3
March 16th	Money calculations, finding a fraction and percentage of an amount		4
March 23rd	Ratio		5
March 30th	Sequences and nth term.		6
April 6th EASTER HOLIDAY	Collecting like terms, solving algebraic equations, expanding brackets		7
April 13th EASTER HOLIDAY	Drawing the net of a 3D shape, drawing accurate diagrams with a ruler and a pair of compasses, constructions of triangles with a ruler and a pair of compasses		8
April 20th	Finding missing angles about a point, on a straight line, in a triangle and in parallel lines		9
April 27th	Co-ordinates. Using maps, scales and bearings		10
May 4th (1st exam this week…)	Numeracy Unit 1 – 5 May and Numeracy Unit 2 – 7 May		
May 11th	Revisit any topics of concern		
May 18th	Mathematics Unit 1 – 19 May		
May 25th HALF TERM	Revise all topics on the suggested Unit 2 list that your teacher will give you		
June 1th	Mathematics Unit 2 – 4 June		
June 8th			
June 15th			

YHT 10 IN 10 REVISION PROGRAMME

INTERMEDIATE TIER			
Week beginning (Monday)	Suggested Topics to Revise:	Achieved?	WEEK
February 17th HALF TERM	Work through the content in the topic list for your mock exams.		
Feb 24th	Multiplying Decimals, Adding/Subtracting Decimals, Simple Powers/Power Rules		1
March 2nd	Adding/Subtracting Fractions with Different Denominators, Percentage of Quantities, Sequences		2
March 9th	Simplifying Expressions, Substitution, Probability (Sample Space), Parallel Lines		3
March 16th	Area of Rectangle and Triangle including Reverse - Problem Solving, Solving Equations, Mode, Median, Mean and Range		4
March 23rd	Probability of…, Complete the Table for Quadratic Graphs, Probability Tree Diagrams		5
March 30th	Recognising Factors, Multiples and Primes, Angle Facts, Function Machines, Interpreting Pie Charts		6
April 6th EASTER HOLIDAY	Negative Numbers, Angles in Triangles/Quadrilaterals, Nth Term, Pythagoras, Trigonometry		7
April 13th EASTER HOLIDAY	Quadratic Sequences, Reflections in y=1 etc, Translate (Using Vectors), Bearings, Constructions		8
April 20th	Converting FDP, Estimation, Product of Prime Factors, Simultaneous Equations, Metric Conversions		9
April 27th	Trial and Improvement, Venn Diagram, Algebraic Fractions, Mass, Density and Volume, Upper and Lower Bounds		10
May 4th (1st exam this week…)	Numeracy Unit 1 – 5 May and Numeracy Unit 2 – 7 May		
May 11th	Revisit any topics of concern		
May 18th	Mathematics Unit 1 – 19 May		
May 25th HALF TERM	Revise all topics on the suggested Unit 2 list that your teacher will give you		
June 1th	Mathematics Unit 2 – 4 June		
June 8th			
June 15th			

YHT 10 IN 10 REVISION PROGRAMME

HIGHER TIER			
Week beginning (Monday)	Suggested Topics to Revise:	Achieved?	WEEK
February 17th HALF TERM	Work through the content in the topic list for your mock exams.		
Feb 24th	Prime factorisation, Fractional and Negative Indices, Simultaneous Equations		1
March 2nd	Changing the Subject of a Formula, Similar Shapes (inc Area/Volume)		2
March 9th	Histograms, FOIL (multiplying out two brackets), Linear and Quadratic Sequences, Percentages		3
March 16th	Surds, Circle Theorems, Area and Arc Length of a Sector, Transformations		4
March 23rd	Equation of a Straight Line (y=mx+c), Gradients of Perpendicular and Parallel Lines, Inequalities		5
March 30th	Upper and Lower Bounds, Proportion, Fractions (+ - ÷ x), Forming Equations, Substitution		6
April 6th EASTER HOLIDAY	Area and Volume, Probability (including conditional), Recurring Decimals, Pythagoras' Theorem		7
April 13th EASTER HOLIDAY	Solving Quadratic Equations (inc. formula and factorising), Polygons (interior & exterior angles)		8
April 20th	Sampling, Transformation of graphs, Curved Graphs (Polynomials)		9
April 27th	Algebraic Fractions, Cumulative Frequency and Box Plots, Distance Time Graphs, Trigonometry		10
May 4th (1st exam this week…)	Numeracy Unit 1 – 5 May and Numeracy Unit 2 – 7 May		
May 11th	Revisit any topics of concern		
May 18th	Mathematics Unit 1 – 19 May		
May 25th HALF TERM	Revise all topics on the suggested Unit 2 list that your teacher will give you.		
June 1th	Mathematics Unit 2 – 4 June		
June 8th			
June 15th			

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, a pair of compasses and an 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. As a rough guide, you have just over a minute per mark.

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 workings. 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 careless mistakes, you are still picking up lots and lots of method marks.

9. Check your answers at the end. If you have time you may find one or two silly mistakes and that could be the difference between one grade and the next.

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 original question.