Maths - activities you can do from home!

Draw a scale drawing of your bedroom. 10 POINTS	Draw as many diagrams as possible to prove the formula for the area of a trapezium. 10 POINTS	Write a revision lesson to deliver on a topic of your choice. 10 POINTS	Write an end of topic test for someone in your class on your most recent topic. 10 POINTS	Write an article for a newspaper, explaining why it is important to study maths. 10 POINTS	Prove 1+1=2 in the most complicated way you can. 10 POINTS	Demonstrate Pythagoras Theorem using physical objects. 10 POINTS	Pick a topic from science and show how you use maths in the topic. 10 POINTS	Write a maths dictionary containing 20 mathematical terms. 10 POINTS	Explain how to convert between centigrade and Fahrenheit. 10 POINTS
Write a question with $\frac{2}{3}$ as the answer. 10 POINTS	Design a menu for your family for a week. 10 POINTS	How long would it take for you to walk to the moon? 10 POINTS	Write a question with $\sqrt{2}$ as the answer. 10 POINTS	Write three "always, sometimes, never" sentences for maths. 10 POINTS	How many grains of rice would you need to fill your house? 10 POINTS	Write step by step instructions on how to change the subject of an equation. 10 POINTS	Design a revision poster on 3 topics you have done so far. 10 POINTS	Write an exam question with mark scheme testing knowledge of averages. 10 POINTS	Find the average temperature each month for your home town. Plot the information on a graph. 10 POINTS
Design a lesson for Year 7 on an introduction to angles. 10 POINTS	How many footballs would you need to go around the equator of the earth? 10 POINTS	Condense a topic onto one revision card. 10 POINTS	Write a question with a mark scheme where you have to explain your answer. 10 POINTS	What does it mean to reason mathematically? 10 POINTS	What advice would you give to Year 9 who will start their GCSE Maths in September? 10 POINTS	Choose any topic in maths and make a spider diagram summarising your knowledge. 10 POINTS	Count how many steps it takes to walk around your bedroom. 10 POINTS	Choose one piece of marked work in your book and re-do it, responding to feedback and making improvements where necessary. 10 POINTS	Design an information sheet explaining how to convert between 12 and 24hour clock. 10 POINTS
How many seconds have you been alive? 10 POINTS	Pick a profession or career and try to list as many ways maths might be used in that job as you can. 10 POINTS	How could you calculate the volume of your brain? 10 POINTS	Write a list of 5 common mistakes you might find in an exam paper. 10 POINTS	Using up to four 4s and any of the 4 operations, how many numbers can you make? 10 POINTS	Show 4 different representations of a fraction 10 POINTS	Write instructions on how to measure angles using a protractor. 10 POINTS	Explain the difference between significant figures and decimal places. 10 POINTS	Give an example to show when "two minus make a plus" is false. 10 POINTS	Write an exam question and mark scheme testing knowledge of forming and solving equations. 10 POINTS
Design a new flag. It must have at least one line of symmetry and three colours. 10 POINTS	How many Rice Krispies are there in a box? How could you estimate this without counting them? 10 POINTS	Investigate the London Eye. How may rotations does it make? How far does it travel each day? 10 POINTS	How long would it take for you to walk around the UK? 10 POINTS	Explain what a negative number is. 10 POINTS	Carry out a survey in your house, it could be on anything. Display the data using the appropriate chart. 10 POINTS	Choose any topic. Make a set of cards of key words and a second set of definitions. Mix them up and find the matching pairs. 10 POINTS	Draw a poster with the key points on circle theorems. 10 POINTS	Write an exam question testing the knowledge of circle theorems. 10 POINTS	Write a homework guide for parents so that they can help their child with maths. 10 POINTS
Explain how to convert fractions to decimals and percentages. 10 POINTS	Explain the difference between compound and simple interest. 10 POINTS	Write 5 key points to remember when answering questions on speed, distance and time. 10 POINTS	Draw a flow chart to explain how to round to degrees of accuracy. 10 POINTS	Write a tree diagram question without replacement. 10 POINTS	Look for data in a newspaper or TV report. Explain why it might be misleading. 10 POINTS	Explain how to convert fractions to decimals and percentages. 10 POINTS	What is the difference between HCF and LCM? 10 POINTS	Can you draw a diagram to explain the formula for the area of a parallelogram. 10 POINTS	Explain how to convert fractions to decimals and percentages. 10 POINTS
Write 10 quick questions on basic number skills. 10 POINTS	Create a poster explaining how to carry out loci questions. 10 POINTS	Find 5 exam-style questions and rank them in order of difficulty, then decide which order to answer them. 10 POINTS	Write 10 quick questions on basic probability skills. 10 POINTS	Design some misleading 'best buy' labels. 10 POINTS	Write instructions on how to use 4 of the calculator functions. 10 POINTS	Write a blog post explaining what you have done during the time off school. 10 POINTS	Describe 5 ways to effectively revise maths. 10 POINTS	What is a surd? Convince me that they are useful! 10 POINTS	What are the different ways to sample? What are the pros and cons of each method? 10 POINTS
Show two different methods for sharing out in a ratio. 10 POINTS	Write 10 quick questions on basic algebra skills. 10 POINTS	Draw a flow diagram showing how to calculate percentage increase and decrease. 10 POINTS	Find a button on your calculator which you don't know how to use and see if you can find what it is for. 10 POINTS	What is the difference between a factor and a multiple? Give an example of when you use both of these in maths. 10 POINTS	Write 10 quick questions on basic shape skills. 10 POINTS	What are the laws of indices? Write an algebraic example for each one. 10 POINTS	What is the definition of an outlier? (using quartiles) 10 POINTS	Write a question that would require a Venn diagram with 3 sections to answer it. 10 POINTS	How do you know whether to use the Sine Rule, Cosine rule or trig ratios? Write a flow chart to help you decide when faced with a problem. 10 POINTS
Prove that the product of two odd numbers is even. 10 POINTS	Complete a 'Thinking Hard Revisit' mat on inequalities. 10 POINTS	Write a list of 5 definitions of words which link to the topic of probability. 10 POINTS	How many ways can you solve a quadratic? List them with clear explanations of each. 10 POINTS	What are the key points to remember when drawing boxplots/using them to compare distributions? Write a revision card. 10 POINTS	The average person uses 27 sheets of toilet paper a day. A toilet roll has 100 sheets. How many toilet rolls does a family of 4 need in a week? 10 POINTS	Draw diagrams of Venn diagrams to show the union, intersection and complement. 10 POINTS	What are the exact values for trig that you need to know? Write a revision card for these. 10 POINTS	Research – where are trig graphs used/seen in real life? 10 POINTS	Draw a flow diagram to show how to rationalise a surd. 10 POINTS
Write a set of revision cards on how to factorise quadratics. 10 POINTS	Draw a diagram explaining how to calculate speed, distance and time. 10 POINTS	The number eight comes first if all numbers were arranged alphabetically. Which would come last? 10 POINTS	Write 10 quick questions on basic algebra skills. 10 POINTS	Draw a poster explaining inequalities. 10 POINTS	Why do we use Pythagoras? Convince me! 10 POINTS	Design a lesson for Year 7 on an introduction to ratio. 10 POINTS	Investigate different tests for divisibility of numbers. Create a poster to show these. 10 POINTS	Explain why triangles, squares and hexagon are the only regular polygons which tessellate. 10 POINTS	What is the only number which is twice the sum of its digits? 10 POINTS