



Easter home learning



Year 10

- Look at the following subject activity grids by clicking on the links below.
- Challenge yourself to achieve 60 points or more by the end of the holidays.
- You can choose activities from different subjects.
- Share your work with your family and show them what you have done!



Happy Easter from all @Cynffig  **Safe**

ENGLISH

MATHS

SCIENCE

HISTORY

GEOGRAPHY



English – activities you can do from home!

HOME

KS4

Use BBC Bitesize to list skills/topic areas you need to develop for English. Highlight the most important for you and use the site to help you improve. 10 POINTS	Explore the English timeline on the British Library website: https://www.bl.uk/english-timeline . Produce a guide aimed at a younger pupil. 20 POINTS	Read a non-fiction article about a topic of your choice online. Summarise what you have read into six points and then rank these in order of importance. 10 POINTS	Use the internet to find a variety of poems about different topics and from different time-periods. Read at least one poem a day. 20 POINTS	Make a list of spellings you frequently spell incorrectly. Devise a game or set of flashcards to regularly test yourself on these. 10 POINTS	Re-read one of your literature set texts. Make notes of any key details – particularly anything that you had forgotten! 30 POINTS	Revise a skill on the BBC Teach Skillswise website: https://www.bbc.co.uk/teach/skillswise/english/zig4scw 10 POINTS	Read one book mentioned in the list of 'the greatest books of all time': https://thegreatestbooks.org 30 POINTS	Create a list of 7 essay questions about a text or poem you have studied. Pop them in a jar and select one every few days to plan or write in full. 20 POINTS	Draw a gingerbread person. Choose a character and write what they appear to think of themselves inside the body and what others think on the outside. 10 POINTS
Create a game to help you revise the subject terminology you have been taught. Use it to help teach someone else at home by playing together. 20 POINTS	Find five language devices in a text you have read (fiction or non-fiction). 10 POINTS	Arrange with a friend to create a booklet of texts for each other, or to share. Find a mix of fiction and non-fiction to read and complete activities with. 20 POINTS	Bullet point the effect that three language devices had on you in something you have read this week. 10 POINTS	Use a piece of artwork as inspiration for a piece of creative writing. 20 POINTS	Watch the Braveheart Freedom speech on YouTube. Identify as many devices as you can and then rank them in order of effectiveness. 10 POINTS	Read an article on a website such as BBC News. Write a speech on the same topic for a Newsround presenter to present this information to children. 20 POINTS	Read a text (online article or book, for example) and identify five words that you are unfamiliar with. Find the definition of these and learn them. 10 POINTS	Choose a book that has a film version. Read the text, watch the film and compare the two in the form of a review. 30 POINTS	Research Victorian Britain on the British Library website. Create an in-depth guide for new GCSE students: https://www.bl.uk/victorian-britain 20 POINTS
Listen to a TED or TEDx talk you haven't heard before. Write down five points of information and two questions. 10 POINTS	Read two articles with opposite viewpoints. Create a Venn diagram showing what each writer thinks and how they've demonstrated this to the reader. 10 POINTS	Read <i>Pride and Prejudice</i> and <i>Jane Eyre</i> . Compare the protagonists' struggles. 50 POINTS	Ask a friend or family member to recommend a book to you. Recommend one to them in return and then read each other's suggestions. 20 POINTS	The actor Rob Myles is uploading YouTube videos of actors reading all of Shakespeare's plays, with one going live each week. Watch one. 20 POINTS	Once you have watched a Shakespeare YouTube video on Rob Myles' page, write a review of it. 20 POINTS	Write to your local GP surgery or hospital to thank them for all of the work they do. Find the address and post it. 20 POINTS	'Film is a better medium for communicating messages than the novel.' To what extent do you agree? Create a Venn diagram to present your thoughts. 10 POINTS	Play a word game with a family member or friend. For example, Scrabble or Bananagrams. There are online word games you could play too. 10 POINTS	Make a list of adjectives which describe three characters from a text you have studied/read at home. Find synonyms for these, using a thesaurus. 10 POINTS
Watch some spoken word poetry on YouTube about various topics and identify five devices that are used in each video. Make notes on the effect of each. 20 POINTS	Choose five quotations from one of your GCSE texts. 'Explode' the quotes by analysing them and mind-mapping your notes around each one. 10 POINTS	List five different ways a story could begin. Rank them in the order of which ones you would find the most interesting. 10 POINTS	Create a Venn diagram to show your thoughts about whether you agree with the following statement: 'Animal testing should be banned.' 10 POINTS	Choose a paragraph from a text. Re-write it using more complex punctuation, including a semi-colon. Revise punctuation first, if you need to. 10 POINTS	'Violent video games should be banned.' To what extent do you agree? Write ideas on a continuum line to show where they lie. 10 POINTS	Read this article about Shakespeare's use of verbs. Identify 3 interesting points: https://www.bl.uk/shakespeare/articles/verb-ing-shakespeares-linguistic-innovation# 10 POINTS	Read another text by a writer you have studied as part of your GCSE so far. Consider any similarities/differences in style, message etc. 30 POINTS	Watch a film and evaluate one thing that worked well about its structure and one thing that didn't. 10 POINTS	Create a leaflet informing someone about an activity you enjoy or a topic which you are passionate about. 20 POINTS
Read a poem of your choice. Identify five structural devices that have been used and consider reasons why the poet used each one. 10 POINTS	Write the script for a podcast about a topic/issue of your choice. 20 POINTS	'There is no reason to study writers from previous centuries as they're not relevant today.' To what extent do you agree? Write your response. 20 POINTS	Compare how two extracts present work and welfare: https://www.bl.uk/teaching-resources/19th-century-non-fiction-texts-work-and-welfare# 20 POINTS	Create a grid with characters from a text down one side and themes across the top. Use this to make links between characters and themes. 20 POINTS	Write the mark scheme indicative content for three literature essay questions you have created. 10 POINTS	Write an essay about one of your literature texts, using one of your own questions or from a past paper on the internet. 20 POINTS	Choose a character from a TV programme or film and create a monologue from their perspective based on an event in the film, or one you make up. 20 POINTS	Choose a topic to explore on the Teaching English website. Make notes. https://www.teachingenglish.org.uk/resources/secondary/uk-culture/shakespeare 10 POINTS	Write a guide for Year 9 students who will start their GCSE courses in September. What should they know about the study of English? 20 POINTS
Choose a non-fiction article to read and then summarise it in 50 words. 10 POINTS	Choose a quiz to complete on the Education Quizzes website: https://www.educationquizzes.com/gcse/english/ 10 POINTS	Write a blog post about a piece of positive news or which sends a positive message to help the reader feel inspired and motivated. 20 POINTS	Avoid starting letters with 'I am writing to...'. Create three different openings for a letter to a teacher about your time at home. 10 POINTS	Watch an episode of a TV show. Write five reasons why you think it was structured in the way it is. What effect does it create? 10 POINTS	Redraft a piece of creative writing you have written either at school or at home. Find five ways to improve it. 10 POINTS	Read an extract from the website below and identify five points of information. https://www.bl.uk/teaching-resources/19th-century-non-fiction-texts-crime-and-punishment# 10 POINTS	Identify 5-10 quotations for each main character in one of your literature texts. 20 POINTS	Summarise your favourite film in 100 words. 10 POINTS	Write an article for your school magazine advising students how to practise self-care during this period away from school. 20 POINTS
List five different devices which could be used to start a persuasive speech. 10 POINTS	Analysed a piece of creative writing which you have written. What devices did you use? What effect do they have on the reader? 20 POINTS	Read about the benefits of mindful writing and practise it every day for a week: https://www.developgoodhabits.com/mindful_writing/ 30 POINTS	Choose a character from a TV programme or film and list ten of their characteristics that have an effect on you as a viewer. 10 POINTS	Read <i>The Strange Case of Dr Jekyll and Mr Hyde</i> and <i>The Picture of Dorian Grey</i> . Write about how they explore human nature and responsibility. 50 POINTS	Consider an alternative ending to a film you have read. Write it, either in prose or script form. 20 POINTS	Choose a topic that you feel strongly about and create five rhetorical questions based on it. 10 POINTS	Take a minor character from any text you have read. Write about the events in the text from their point of view. 20 POINTS	Listen to a podcast from the link below and identify five key points. Rank them. https://www.penguin.co.uk/articles/2019/feb/the-best-literary-podcasts-for-book-lovers/ 10 POINTS	Write your own poem, inspired by the current situation. 20 POINTS
Redraft an essay you have written either at school or home. Find five ways to improve it. 10 POINTS	Listen to this speech: https://www.youtube.com/watch?v=MkTw3_PmKtc Identify five devices and then rank them in order of effectiveness. 20 POINTS	Pick a topic you feel strongly about. Think of five ideas that link to it – starting close up and then moving to wider implications for you and others. 10 POINTS	Look at an image of your choice, such as a busy street, beach or dark forest. Create five descriptive sentences based on it. 10 POINTS	Read this article: https://erichowriters.com/hub/plot/5-even-basic-plots/ Take one of the 7 plot types. Plan and write your own story. 30 POINTS	Read about careers and skills you develop in English. Bullet point the key points you find. https://www.prospects.ac.uk/careers-advice/what-can-i-do-with-my-degree/english 10 POINTS	Using your reading about careers and skills the study of English gives you, from the Prospects website on the left, write a guide for a Year 11 student. 20 POINTS	Write a speech to be presented in parliament arguing your views about whether the voting age should be lowered to 16 years old. 20 POINTS	With a friend, choose a story that you both know. Write alternative endings and share them with each other via email. 20 POINTS	'Technology is the most important thing in society.' To what extent do you agree? Write ideas on a continuum line to show where they lie. 10 POINTS
Create seven writing tasks that would require you to write a piece of fiction. Pop them in a jar and select one every few days to plan or write in full. 10 POINTS	Write a response to a writing task you have written, or one which has appeared on a past paper. 20 POINTS	Read to someone in your home or via webcam. It could be a sibling, friend or relative. 10 POINTS	Compare how two extracts from the line below present crime and punishment: https://www.bl.uk/teaching-resources/19th-century-non-fiction-texts-crime-and-punishment# 10 POINTS	Read an autobiography of someone you've heard of. Summarise this in 250 words. 30 POINTS	Create a tweet for every key moment for a character in a text you have read, demonstrating how they felt at each point. 20 POINTS	Choose two texts you've read, in school or at home, with a similar theme/genre. Create a Venn diagram to compare the similarities and differences. 10 POINTS	Write a blog post persuading students to do Joe Wicks' PE lessons every day at 9am: https://www.youtube.com/watch?v=K6r99N3kXME 20 POINTS	Think about what the country (or world!) might look like in the future – or what you would like it to look like. Write a piece of dystopian fiction. 30 POINTS	Try two writing tips from the following website: https://www.iuniverse.com/en/resources/writing-and-editing/20-writing-tips-from-fiction-authors 10 POINTS
Choose a children's story that you remember from your childhood. Create a new ending that you feel would be more engaging for your age group. 10 POINTS	Take an extract from a text and re-write it in a different tense. Consider how altering the tense changes the dynamic of the piece. 10 POINTS	Take the Pearson ultimate English homophone quiz: https://www.english.com/blog/english-homophone-quiz/ 10 POINTS	Watch Newsround. Write a newspaper article on the same topic for an adult audience. Think carefully about changes you'd make for your audience. 20 POINTS	Write the characters from a text on various parts of a piece of paper. Draw lines between them and write the link/connection between them on the line. 10 POINTS	Complete the Metro's quiz based on 20 misspelled words: https://metro.co.uk/2016/06/30/quiz-can-you-spell-the-20-most-misspelled-words-in-the-english-language-5976500/ 10 POINTS	Create a Venn diagram to organise your thoughts about whether you agree with the following statement: 'Everyone should be vegetarian.' 10 POINTS	List five different ways a story could end. Rank them in order of which you would find the most interesting. 10 POINTS	Read an extract from the link below and identify five points of information. https://www.bl.uk/teaching-resources/19th-century-non-fiction-texts-work-and-welfare# 10 POINTS	Create seven writing tasks that would require you to write a piece of non-fiction. Pop them in a jar and select one every few days to plan or write in full. 10 POINTS



Maths - activities you can do from home!

HOME

KS4

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



Science – activities you can do from home!

HOME

KS4

Describe how you would test foods for glucose, starch, proteins and fats. 10 POINTS	Describe what an ore is and explain the advantages and disadvantages of mining. 10 POINTS	Draw and name each of the four parts of the blood. Describe the function of each part. 10 POINTS	Choose three packets of food and evaluate how healthy they are. 10 POINTS	Compare a permanent magnet and an electromagnet. Describe how they are used differently and the advantages and disadvantages of each. 10 POINTS	Describe the movements in the thorax that allow breathing to occur. 10 POINTS	Place energy, power and time in a formula triangle. Give the units of each. 10 POINTS	Describe the effects of smoking and asthma on the lungs. 10 POINTS	Write a short story to describe what happens when a sperm meets an egg and fertilisation occurs. 10 POINTS	Choose an element from the periodic table. Draw a labelled diagram of an atom. Describe the atom in as much detail as possible. 10 POINTS
Make a crossword using scientific key words for a physics topic. 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	Write a step by step method describing how make an onion cell slide and how to view it under a microscope. Include an equipment list. 10 POINTS	Draw particle diagrams of a solid, liquid and a gas. Add arrows and labels to show evaporating, condensing, melting and freezing. 10 POINTS	Make a model of a plant cell, labelling all the parts. Describe the function of each part. 10 POINTS	Write a step by step method describing how to test for the presence of blood in a sample. 10 POINTS	Describe how metals can be extracted from their ores using electricity. 10 POINTS	Draw a Venn diagram describing changes during puberty: those that happen to males only, females only and those that happen to both sexes. 10 POINTS	List the structures that make up the circulatory system. State the function of each structure. 10 POINTS	Explain how a blast furnace is used to extract iron. 10 POINTS
Write a step by step method describing to a Year 6 pupil how to safely light a Bunsen burner. 10 POINTS	Describe the disadvantages of industrial-scale electrolysis. 10 POINTS	Chose five appliances in your home and work out how much it costs to run them for 1 hour. 10 POINTS	Name the components of a balanced diet. Describe what each is used for by our bodies. 10 POINTS	Chose any topic in science and make a spider diagram summarising your knowledge. 10 POINTS	Describe and explain 4 ways in which the lungs are adapted for gas exchange. 10 POINTS	Draw a Venn diagram comparing series and parallel circuits. 10 POINTS	Choose a predator and its prey. Explain how each is adapted to their environment. 10 POINTS	Write a method for an experiment to investigate the pH of some household chemicals. Include an equipment list. 10 POINTS	Write 10 multiple choice questions about electricity, including the answers. 10 POINTS
Write a method for an experiment to investigate the speed of sound. Include an equipment list. 10 POINTS	Compare the solar system with an atom. How are they similar and different? 10 POINTS	Make a poster to explain how the particles behave in the reaction between iron and sulphur. 10 POINTS	Design a poster that explains how plants are adapted to scatter their seed. 10 POINTS	State the equation linking mass, weight and gravitational field strength. Explain why a 10 kg machine has a mass of 11.6 N on the moon but 90N on Venus. 10 POINTS	Describe how the different blood vessels are adapted to their function. 10 POINTS	Describe the structure of the heart, naming all the chambers and blood vessels. 10 POINTS	Explain the importance of bacteria in the digestive system. 10 POINTS	Draw a flow diagram to show what happens when the skin is damaged. Describe how the parts of the blood protect from infection and form a clot. 10 POINTS	Draw a Venn diagram comparing plant and animal cells. 10 POINTS
Write 10 multiple choice questions about forces, including the answers. 10 POINTS	Explain which properties allow metals to be used for saucepans, bells, electrical wires and jewellery. 10 POINTS	Make a crossword using scientific key words for a biology topic. 10 POINTS	Draw a labelled cross-section of each type of blood vessel. Write a summary of the difference between them. 10 POINTS	Explain why it's important to balance symbol equation for a chemical reaction. 10 POINTS	Design a pair of ear defenders. Explain your choices of material. 10 POINTS	For each of the following answers, write down the question: friction, weight, contact, magnetism and Newtonmeter. 10 POINTS	Describe how sound waves are formed by wind chimes. Explain what affects the intensity and pitch of sound. 10 POINTS	Draw a poster to explain, in as much as possible, about electrical circuits. Include series and parallel circuits. 10 POINTS	Write a step by step method describing how to test the strength of an electromagnet. Include an equipment list. 10 POINTS
List the structures that make up the respiratory system. State the function of each structure. 10 POINTS	Think of a science keyword beginning with every letter of the alphabet. 10 POINTS	Using your knowledge of plants, design a plant capable of surviving in the desert. Explain how it is adapted. 10 POINTS	Describe how the air we breathe in differs from the air we breathe out. 10 POINTS	Describe a sink full of washing up. State whether each item is a solid, liquid or gas and an element mixture or compound. 10 POINTS	Write two lists of the properties of metals and non-metals. 10 POINTS	Write a step by step method describing how to test the strength of an electromagnet. Include an equipment list. 10 POINTS	Think of a mnemonic to remember the order of metals in the reactivity series. 10 POINTS	Make a crossword using scientific key words for a chemistry topic. 10 POINTS	Draw a transverse wave and label the amplitude, wavelength and frequency. 10 POINTS
Design a circuit diagram to allow the lights in a room to be switched on and off by two independent switches. 10 POINTS	Choose a food web. Write as many food chains as you can find. Describe how some of the organisms are adapted to their environment. 10 POINTS	Describe how enzymes work, using the lock and key hypothesis. 10 POINTS	Describe how lung volume can be measured. 10 POINTS	Write the equation involving energy, power and time into a formula triangle. Give the units of each. 10 POINTS	List the structures that make up the digestive system. State the function of each structure. 10 POINTS	Describe the digestion of a ham sandwich, naming the organs and enzymes involved. 10 POINTS	Use your knowledge of forces to explain how a lighter person can balance a heavier person on a seesaw. 10 POINTS	Describe how to calculate power using current and voltage. Give the units of each. 10 POINTS	Describe why we burn fuels. Explain what happens when fuels are burned and why these are useful reactions. 10 POINTS
Write a step by step description of how electricity is generated using coal and wind power. 10 POINTS	Draw a particle diagram and explain what is happening in the displacement reaction between iron and copper sulphate. 10 POINTS	Explain why sound travels faster through a rock than air. 10 POINTS	Explain why eating undercooked meat can cause food poisoning. Explain how your body tries to prevent food poisoning. 10 POINTS	List the sources of renewable energy and describe the advantages and disadvantages of each. 10 POINTS	Draw three different transverse waves and compare their amplitude, frequency and wavelength. 10 POINTS	Write a method for an experiment to investigate the speed of sound. Include an equipment list. 10 POINTS	Write a step by step method describing how to investigate which surfaces bacteria grow on. Include an equipment list. 10 POINTS	Draw a particle diagram to model the chemical reaction between oxygen and magnesium to produce magnesium oxide. 10 POINTS	Design a poster to explain how the greenhouse effect causes global warming. 10 POINTS
Use your knowledge of heat transfer to explain why it's better to use a wooden spoon than a metal spoon when cooking pasta. 10 POINTS	Describe how to make an electromagnet. Include an equipment list. 10 POINTS	Describe what happens to a ray of light as it passes through a cuboidal prism and a triangular prism. Use ray diagrams to help. 10 POINTS	Design an investigation to discover which antacid tablets are best to treat heartburn. Include an equipment list. 10 POINTS	Explain how selective breeding has been used to breed dairy cows with a high milk yield. 10 POINTS	Draw a poster to explain why an ice cube melts when put in a drink. 10 POINTS	Design a questionnaire that could be used to assess how healthy a person's lifestyle is. Explain why each question is important. 10 POINTS	Choose three specialised cells in the human body. Draw diagrams and explain how they are specialised to their function. 10 POINTS	Using your knowledge of photosynthesis, draw a poster to explain how a plant grows from a seed. 10 POINTS	Use your knowledge of food webs to explain why farmers use pesticides and explain the problems they cause. 10 POINTS
Draw a diagram of the Earth's crust and use it to explain the stages in the rock cycle in as much detail as possible. 10 POINTS	Draw an outline of the human body and label all the ways in which it resists infection. 10 POINTS	List the structures of the female reproductive system. State the function of each structure. 10 POINTS	Write the word equations for aerobic and anaerobic respiration. Explain why the equations are different. 10 POINTS	Draw a diagram of a Van der Graaf generator and explain how it works. 10 POINTS	Describe and explain the changes in the breathing and circulatory systems during exercise. 10 POINTS	Draw force diagrams to show the journey of a car from stationary to accelerating, to travelling at a constant speed then slowing down. 10 POINTS	Draw a circuit diagram for a torch. Use the diagram to describe and explain the flow of electricity. 10 POINTS	Draw a poster to explain what happens when sugar dissolves in a cup of tea. 10 POINTS	Write a letter to your local MP outlining your concerns about global warming. 10 POINTS



History - activities you can do from home!

HOME

KS4

In GCSE History, what exam board are you studying? What are the 4 units you will study? How do these divide into exam papers? 10 POINTS	For the Thematic Study, divide your notes/work into time periods. Use your text book to help you identify these. 10 POINTS	For the Thematic study, create a detailed timeline for each of the time period sections you have created. Each one is worth 10 points. 10 POINTS	For the Thematic Study Medicine, watch the following video: https://www.youtube.com/watch?v=nVIV8iFAm88 10 POINTS	For the Thematic Study, listen to the information on the website/video. Create a set of notes for each section. 10 POINTS	For the Thematic Study, use your notes and prioritise the 3 most important points in each section. Why are they important? 10 POINTS	What is change? Explain in no more than 30 words. 10 POINTS	What is a political ideology? 10 POINTS	What different types of Political ideologies are there? E.g. Communism 10 POINTS	Explain 2 of your chosen ideologies in as much detail as you can. 10 POINTS
For the Thematic Study, create a cartoon depicting one of the most important events in your Thematic Study. 10 POINTS	For the Thematic Study, use your timelines to create a set of revision cards. Add as much detail as possible to each card. 10 POINTS	For the Thematic Study, what were the most significant events in your thematic topic? 10 POINTS	For the Thematic Study, draw a picture demonstrating each of these significant events. 10 POINTS	For the Thematic Study, if you study Medicine, create a set of revision notes on the different beliefs about causes of illness. 10 POINTS	For the Thematic Study, if you study Medicine, create a set of revision notes on the different ways illness was prevented. 10 POINTS	For the Thematic Study, if you study Medicine, create a set of revision notes on the different ways illness was treated. 10 POINTS	For the Thematic Study, if you study Crime, explain what the different definitions of crime are. 10 POINTS	For the Thematic Study, if you study Crime, consider what different types of punishment there were. 10 POINTS	For the Thematic Study, if you study Crime, what different methods of law enforcement were there? 10 POINTS
For the Thematic Study, who are the key individuals you have studied? 10 POINTS	For the Thematic Study, explain why each of the individuals are important/significant. Make sure you give reasons! Are they decisive, important, quite important, not important? 10 POINTS	For the Thematic Study, what are the key events you have studied? 10 POINTS	For the Thematic Study For each of these events, explain why they are important/ significant. Make sure you give reasons! Are they decisive, important, or quite important or not important? 10 POINTS	You will be asked to answer 'describe' questions. Write out as many of your own describe questions as you can. 10 POINTS	Answer your describe questions – 1 a day. Remember you need to give as much detail as possible. 10 POINTS	Explanation of 'cause' questions. Write out as many questions that you can beginning: "Explain why..." E.g. Explain why the Babington Plot was a threat to Queen Elizabeth. 10 POINTS	Explanation of 'cause' questions. Create a plan/ visual plan to help you answer each of your "Explain why" questions. 10 POINTS	Explain the term monarchy. 10 POINTS	Draw a diagram to represent the word monarchy. 10 POINTS
Create a fact file on one of the topics you have studied already at school this year. 10 POINTS	Find some music created at the time or in the country you are studying. Listen to it. Is it a useful piece of evidence? 10 POINTS	Watch an appropriate film with a historical theme. 10 POINTS	Discuss the film you have watched with someone. To what extent is it accurate? 10 POINTS	Why might the interpretations in the film you have watched not be accurate? 10 POINTS	Watch a documentary of your choice. 10 POINTS	Why did you choose this documentary to watch? 10 POINTS	What new information did you learn from the documentary you have watched? 10 POINTS	What were the different interpretations given in the documentary that you have watched? 10 POINTS	What could we do as historians to research the topic of the documentary to find out how accurate the documentary was? 10 POINTS
Write a "pitch" to a producer about a film or documentary you would like to make, based on a historical theme. 10 POINTS	Create a film/documentary title for the film you would like to make. 10 POINTS	Create a poster that will advertise your film. Try to get the historical detail as accurate as possible. 10 POINTS	Which monarch, that you have studied, created the greatest change in England? 10 POINTS	Create a diagram/family tree showing all British Monarchs from Edward the Confessor to James I (James VI of Scotland). 10 POINTS	Describe the Feudal System. 10 POINTS	Draw a diagram to explain the feudal system. 10 POINTS	Create a 5-minute speech explaining the Feudal System. 10 POINTS	What was the Treaty of Versailles? 10 POINTS	How many American Presidents have there been? 10 POINTS
Create a word search for the key words/glossary of the topics you have studied. Do one for each topic; each one is worth 10 points. 10 POINTS	Write out 10 words that can be used to connect ideas or sentences, e.g. thus or therefore. 10 POINTS	Write out 5 words or phrases that can indicate the extent of something. E.g. a little, a lot... 10 POINTS	Elizabeth I https://www.youtube.com/watch?v=ZH28Z5WkUs&list=PLi4H3iY8QTLdJy8WYXEBCXHBKRkwyGF1C Watch the video and take notes. 10 POINTS	Germany https://www.youtube.com/watch?v=Br-QxOJg&list=PLWpifPWj0wOP0izWyscEIf0GiZ7bc_Ill&index=4 Watch Andrew Marr's video and take notes on Germany. 10 POINTS	Draw a map of Europe either in 1914, 1919, 1939 (just as war broke out) or in 1945 (at the end of the second World War). Choose one that matches the units you are studying. 10 POINTS	Talk to someone who has voted. Ask them to explain what happens when you go to vote. 10 POINTS	What is the role/job of the Prime Minister of the United Kingdom? 10 POINTS	What is a democracy? 10 POINTS	What is a Parliament? 10 POINTS
Who is the most famous historical character to be born near where you live? 10 POINTS	Create a newspaper article on your chosen person. 10 POINTS	Every other day, read 4 pages of your text book. 10 POINTS	Create some notes, a "brain dump" or a mind map on the section of your text book you have read. 10 POINTS	Answer the questions in your text book on the section you have read. 10 POINTS	Think about what you have read in your text book. What questions do you still have? Write them down to ask your teacher. 10 POINTS	Create a short biography of each of the key characters you have studied? (10 points for each one!) 10 POINTS	To what extent has your chosen individual changed history? 10 POINTS	What is a dictatorship? Have you studied any? 10 POINTS	Describe some of the political systems you have studied. 10 POINTS
Write out a timeline of the key events you have studied in your other units. E.g. Germany, Norman Conquest, Elizabeth etc 10 POINTS	Break those timelines into "chunks". Think about why you decided to divide them that way. Create notes for each section. 10 POINTS	If you have studied the 20 th century, choose one key historical character and write 50 words about them. 10 POINTS	What is a revolution? 10 POINTS	What is the difference between a dictatorship and a democracy? 10 POINTS	Draw a diagram that represents the word revolution 10 POINTS	Explain your drawing of the word revolution to someone else. 10 POINTS	Learn 5 new words that are linked to your topics every day. 10 POINTS	Write out the meanings of 5 new historical words every day. Create a glossary for each topic. 10 POINTS	Learn the spellings of 5 new topic-specific words every day. Test yourself e.g.: Appeasement, Pilgrimage, Conquest. 10 POINTS
If you can, talk to an older person in your family over the phone. Ask them about the most important historical event they have experienced in their life. 10 POINTS	Find out 7 pieces of information about the event mentioned in your phone conversation with an older family member. 10 POINTS	Transform the 7 pieces of information into 7 pictures about the event. 10 POINTS	Create a drawing or cartoon of the event in the previous boxes. Use as much information as you can. 10 POINTS	Write a list of all the different types of evidence that historians can use to increase our understanding of the past. Eg a diary. 10 POINTS	Choose 3 from your list of evidence. Are some more useful than others? Why? 10 POINTS	Choose 3 from your list of evidence – are some more reliable than others? Why 10 POINTS	Find 2 sources on a topic with opposing interpretations. 10 POINTS	What is an interpretation? 10 POINTS	What factors can affect the reliability of evidence? 10 POINTS
What is your favourite time period in history? 10 POINTS	Create a timeline showing the key events that took place, or the key characters, in your favourite time period. 10 POINTS	Create a speech explaining why you have chosen your favourite time period. 10 POINTS	Create a painting/drawing showing some, or one, events that took place or the key characters in your favourite time period. 10 POINTS	Create a title to a newspaper article on that person/event. Then explain why they are/it is significant. 10 POINTS	Write an article on your favourite person in history. 10 POINTS	What is your favourite event that you have studied in history so far? 10 POINTS	Create a mini research project on your favourite event in history. 10 POINTS	Find some cartoons about the topics you have studied in your text books. Think about their message. 10 POINTS	Using the cartoons you have found, what is their message to you the viewer? Explain the content of the source in as much detail as you can. 10 POINTS



Geography - activities you can do from home!

HOME

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Prepare a 5-minute talk on the importance of studying geography. 10 POINTS	Investigate the reasons why some countries are poor, and others are rich. 10 POINTS	If you have studied rivers, draw a labelled long profile. 10 POINTS	Now add a cross-section diagram for each stage of the river. 10 POINTS	Name 4 world biomes. 10 POINTS	For 1 world biome, describe its characteristics. 10 POINTS	List 3 ways development can be measured. 10 POINTS	Find a photograph of an interesting place and label all the physical and human characteristics. 10 POINTS	What is urbanisation? 10 POINTS	If you could live anywhere in the world, where would it be? Explain why. 10 POINTS
What is your favourite place in the UK? 10 POINTS	Write a post card from that place to a friend, explaining what it is like and why they should visit. 10 POINTS	Watch an appropriate film that is set in another country. 10 POINTS	Discuss the film with someone. What have you learnt about the place? 10 POINTS	Define what a tectonic hazard is. 10 POINTS	Explain what erosion is. Name 4 types of erosion. 10 POINTS	Explain what deposition is. 10 POINTS	Draw a set of diagrams that explain 3 types of weathering. 10 POINTS	Imagine you were doing a fieldwork investigation by a river. Write a risk assessment. 10 POINTS	Think about your local area. How would you improve it? 10 POINTS
Plan a world trip, during which you will visit at least 4 of the continents. 10 POINTS	Now list 30 items you will need to pack for your trip and explain why. 10 POINTS	Watch a documentary of your choice. 10 POINTS	Why did you choose this documentary to watch? 10 POINTS	What new information did you learn from the documentary? 10 POINTS	Have a conversation with someone about the documentary. 10 POINTS	Produce a country fact file for a High Income Country. 10 POINTS	Choose a volcanic eruption and describe the effects in 50 words. 10 POINTS	Give an example of a primary, secondary, tertiary and quaternary job. 10 POINTS	Produce a country fact file for a Low Income Country or Newly Emerging Economy. 10 POINTS
What is the demographic transition model? 10 POINTS	Create a labelled diagram showing the structure of a volcano. 10 POINTS	What does HDI stand for? 10 POINTS	What is your favourite topic in geography? Why? 10 POINTS	If you were a town planner, how would you solve challenges linked to transport in UK cities? 10 POINTS	Imagine you are a migrant arriving in the UK. Write a diary entry for your first week in the UK. 10 POINTS	Create a 5-minute talk on desertification. 10 POINTS	Deliver your talk. What would you add or remove from the talk? 10 POINTS	Explain why tropical rainforests are important locally and globally. 10 POINTS	Compare a UK city with a city in a NEE. State the differences and similarities. 10 POINTS
Imagine you are a migrant in a NEE/LIC moving from a rural to an urban area. Write a diary entry for your first week in the city. 10 POINTS	For a hot desert you have studied, do the challenges outweigh the opportunities? 10 POINTS	Your opinions – “It is OK to use plastics in all packaging”. Discuss. 10 POINTS	Create a 5-minute talk on deforestation. 10 POINTS	Deliver your talk. What would you add or remove from the talk? Why? 10 POINTS	What natural event happened in the Philippines in November 2013? 10 POINTS	Have a conversation with someone about an issue in the news that links to geography. 10 POINTS	Water consumption is increasing in the UK. Find out why. 10 POINTS	What is Fairtrade? 10 POINTS	Give 5 examples of Fairtrade products and state where they were produced/grown. 10 POINTS
Plan your dream holiday. 10 POINTS	Explain the costs and benefits of your holiday. 10 POINTS	Explain what sustainable tourism is. Give examples. 10 POINTS	When studying earthquakes, what is the difference between the focus and the epicentre? 10 POINTS	If you were a coastal planner, how would you protect vulnerable coastlines? 10 POINTS	What is international migration? 10 POINTS	Your opinions – “hard engineering strategies are the best way to protect the coast”. Discuss. 10 POINTS	Plan a sustainable city. 10 POINTS	Find 7 food products in your home that were grown abroad. 10 POINTS	Plot the origin of these products on a world map and work out the food miles. 10 POINTS
Describe the characteristics of a river in the upper course. 10 POINTS	Describe the characteristics of a river in the lower course. 10 POINTS	If you have studied population, explain who is economically active and who are dependents. 10 POINTS	Sketch a small-scale ecosystem and label the factors that might change it over time. 10 POINTS	Produce a poster about a global issue that interests you. 10 POINTS	Draw a labelled diagram of a drainage basin. 10 POINTS	Draw 2 hydrographs from contrasting drainage basins. 10 POINTS	What happened on March 11 th 2011, in Sendai Japan? 10 POINTS	Define the words irrigation and drought. 10 POINTS	Food insecurity is still an issue in some countries. Find out why. 10 POINTS
Have a conversation with someone about why fragile ecosystems should be protected. 10 POINTS	“There is a North-South divide in the UK.” To what extent is this true? 10 POINTS	To what extent is desertification a natural process? Discuss your thoughts with someone. 10 POINTS	Research how people can protect themselves in earthquake prone areas. 10 POINTS	Design your own earthquake building (drawings or a model). 10 POINTS	Define the word conservation. 10 POINTS	Choose an earthquake event and describe the effects in 50 words. 10 POINTS	Produce an information leaflet about climate change. 10 POINTS	Find out what carbon capture is. 10 POINTS	Find 2 ways that height is shown on an Ordnance Survey map. 10 POINTS
Draw a cartoon that sums up why we need to protect our cold environments. 10 POINTS	Plan a virtual fieldtrip to investigate a physical geography question. 10 POINTS	Plan a virtual fieldtrip to investigate a human geography question. 10 POINTS	Draw a timeline to show the events associated with a weather hazard of your choice. 10 POINTS	Explain the concept of sustainable development. 10 POINTS	Give an example of sustainable development. Assess the extent to which it is a success. 10 POINTS	Draw a cartoon that sums up the global development gap. 10 POINTS	Draw a diagram that explains the global atmospheric circulation model. 10 POINTS	Explain how the global atmospheric circulation model links to deserts, tropical rainforests and tropical storms. 10 POINTS	Your opinions – “we should build coastal sea defences in all areas that are at risk”. Discuss. 10 POINTS
Draw a flow diagram to explain the sequence of how a headland changes over time to become a wave-cut- platform. 10 POINTS	If you were a flood risk planner, how would you protect areas at risk from flooding? 10 POINTS	What does the Saffir-Simpson scale measure? 10 POINTS	If you have studied hot deserts, draw an animal and a plant. Label to explain how they have adapted to desert conditions. 10 POINTS	If you have studied cold environments, draw an animal and a plant. Label to explain how they have adapted to desert conditions. 10 POINTS	Your opinions – “we should encourage urban greening in all UK cities”. Discuss. 10 POINTS	Imagine you were doing a fieldwork investigation in an urban area. Write a risk assessment. 10 POINTS	Have a conversation with someone about why we need to reduce our use of fossil fuels. 10 POINTS	Draw a cartoon that sums up global warming. 10 POINTS	Read an article about climate change. Summarise the article in 7 sentences. 10 POINTS