

Year 9 Homework Options Half Term 3

January 29th to February 2nd - Maths, Art, Computer Studies

Maths

Above and beyond Research Project: Leaf Tessellation. Apply 3 rules: translation, rotation, and reflection, to make a tessellation. 17 Innovative Mathematics Projects that Inspire Students | by Ali | However, Mathematics | Medium.

Option 1 Sparx Compulsory Work (this is the one hour task each student is expected to do). Option 2 Sparx XP Boost (additional optional work students can do for further stretch and challenge). Option 3 Sparx Compulsory Work/XP Boost/ Times Tables Extra (students can complete two optional tasks on top of their normal expected task).

Art: Projects

Project 1 Photography and Textiles: Above and Beyond Take your own photograph of a person and stitch a geometric pattern into it, like Maurizio Anzeri OR Take your own photograph, cut it up and collage it like Del Zou. Option 1 Create a collage inspired by Del Zou. Option 2 Stitch a parabolic curve being inspired by Maurizio Anzeri. Option 3 Draw a parabolic curve.

Project 2 Graphics and 3D: Above and Beyond Take at least five photographs of graffiti that appears in Newcastle, email your work to your class teacher. Option 1 Create a paper collage of your name, use different types of paper, example: newspaper, magazines, old letters, coloured paper. Option 2 Create a visual moodboard (images) of street art images. Option 3 Draw your name in a graffiti style font.

Project 3 Art and Design: Above and Beyond Visit an art gallery and take a photo of yourself outside. Create a piece of work in response to your favourite piece in the show. Option 1 Visit Tate.org and find out about an artwork that's new to you. Create a piece of work in response. Option 2 Visit Tate.org and find out about an artwork by an artist you've studied in school. Create a piece of work in response. Option 3 Write 100 words on an artist you've learnt about. What do you like about their work and why?

Computer Studies

Above and Beyond: Find, read and bring in a newspaper/ online article about health and safety in the computing workplace.

Option 1 Make a PowerPoint presentation that uses animations to show a piece of text is encrypted by a Caesar cipher. Option 2 Explain how binary search is different to linear search. Option 3 Explain (using about 100 words) how linear search works.

February 5th to 9th - Science, History, Technology, PE

Science: Universe

Above and Beyond: Research life on the ISS and present what you found out. For example: • Day in the life as an astronaut • Sleeping, showering and toilets in space • Conducting experiments in space • How do astronauts stay fit in space It's up to you what you research. We can't wait to see what you discover!

Option 1 Asteroid Impact Write a news article for a children's news website to explain NASA's recent DART Mission Impact. Option 2 Draw a cartoon strip to show the events in the life cycle of a star. Option 3 Satellites: • Describe what a satellite is • Give examples of natural and artificial satellites • Describe some uses of artificial satellites.

History: The Holocaust

Above and Beyond: Visit here and summarise a survivor's experience during the Holocaust in over 100 words.

Option 1 Create and annotate a picture montage of Holocaust Memorials around the world. Option 2 Draw a mind map connecting all the themes this topic. E.g Persecution, Jewish resistance etc. Option 3 Describe in over 100 words how and why the Holocaust took place.

Technology: Sustainable food

Above and Beyond: At your local food shop find which seasonal produce is currently grown in the UK and which products have been imported.

Option 1 Create a research information page on the impact 'food miles' have on the environment. Option 2 Create a research poster on which factors influence our food choice. Option 3 Research the phrase 'sustainable food', make a list of foods that are considered sustainable.

PE

Above and Beyond: Watch one of the Newcastle teams play a live fixture taking a photo of yourself at the game. For example, Newcastle United men or women, Newcastle Falcons or Newcastle Eagles. Or an amateur local sporting fixture.

Option 1 Take part in sporting activity during the weekend every week of the Half Term. Option 2 Use You Tube to learn a new skill eg, headstand or a football trick. Option 3 Complete 15,000 steps every day for a week.

February 12th to 16th- English, Geography, French

English: A Christmas Carol

Above and Beyond: Write your own story with a link to ACC – Perhaps it could be a sequel; it could feature ghosts; travel to the past, present and future; or a character who reforms themselves.

Option 1 Creatively present what you have learnt about the Tempest in lessons and through your own research. Include 7 information on plot, characters, and themes. You can present this any creative way you wish, e.g. a model, a video, etc. Be creative! Option 2 Write a script version of one of the key scenes. If you have a flair for drama, you could even film yourself and your friends/ family acting out the scene. Option 3 Write some interview questions that you could ask one of the characters. Then, imagine you are that character and answer the questions. If you're feeling very creative, enlist the help of a friend or family member and record the results.

Geography: Lack of Resources and Climate Change.

Above and Beyond: Create a podcast discussing the impacts of climate change.

Option 1 Write a speech that discusses the impacts of climate change. Option 2 Compare global temperatures from 1980 to 2020 – what has happened to the world temperatures? Option 3 Evaluate the impact of the lack of precipitation in a country such as Ethiopia.

French: Bien dans sa peau

Above and Beyond: Cook a healthy meal for your family using a French recipe.

Option 1 Create a guide in French on healthy living. Option 2 Log on to Languagenut and score as many points as you can. Option 3 Draw a mindmap illustrating what you have been learning this half term.