# KENTON CHC OMEWORK

Name:

Form:

Form Room:

**Year Leader:** 

# GUIDANCE

The Homework tasks in the different subjects should be submitted and celebrated in the last 3 weeks of each Half Term. Students can choose between 4 options including the Above and Beyond Homework Task which is extra special. You will be rewarded for completing high quality homeworks in creative ways especially the Above and Beyond tasks. The homework tasks must be completed in each Half Term in the dates below.

# Half Term 1

October 9th to 13th - Maths, Art, Music, RE, Computer Studies
October 16th to 20th - Science, History, Technology, PE
October 23rd to 27th - English, Geography, French

#### Half Term 2

December 4th to 8th - Maths, Art, Music, RE, Computer Studies
 December 11th to 15th - Science, History, Technology, PE
 December 18th to 22nd - English, Geography, French

#### Half Term 3

Jan 29th to Feb 2nd - Maths, Art, Music, RE, Computer StudiesFebruary 5th to 9th - Science, History, Technology, PEFebruary 12th to 16th- English, Geography, French

# Half Term 4

March 11th to 15th - Maths, Art, Music, RE, Computer Studies
 March 18th to 22th - Science, History, Technology, PE
 March 25th to 29th - English, Geography, French

# Half Term 5

May 6th to 10th - Maths, Art, Music, RE, Computer Studies
May 13th to 17th - Science, History, Technology, PE
May 20th to 24th - English, Geography, French

# Half Term 6

July 1st to 5th - Maths, Art, Music, RE, Computer Studies
 July 8th to 12th - Science, History, Technology, PE
 July 15th to 19th - English, Geography, French

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# 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?



# STUDIES

# Half Term 1

# **Programming in Python**

# Above and Beyond

Write a small report on a language other than Python. What does the code look like? What is the language used for?

# Option 1

On paper or on the computer, carry out the program explained in Option 2 but the program should give the user 3 attempts to get the login details correct before locking.

On paper or on the computer, write and comment a Python program for a login. The program should take in (as inputs) a login and password and check if they are correct.

#### Option 3

On paper or on the computer, write and comment a small Python program that adds 3 numbers together and outputs their total.

# Half Term 2 Topic\SOW:

#### **Above and Beyond**

Write a small report on a language other than Python. What does the code look like? What is the language used for?

#### Option 1

On paper or on the computer, carry out the program explained in **Option 2** but the program should give the user 3 attempts to get the login details correct before locking.

# Option 2

On paper or on the computer, write and comment a Python program for a login. The program should take in (as inputs) a login and password and check if they are correct.

# Option 3

On paper or on the computer, write and comment a small Python program that adds 3 numbers together and outputs their total.

# Half Term 3 Topic\SOW:

#### **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 shows 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.



### Half Term 1

#### **Above and Beyond**

Attend a play or performance and write a review of this

# Option 1

Research a famous classical theatre performer and explain their career and specialist skills. Present this through a poster/magazine article/vlog.

# Option 2

Record a Vlog on what you have learned and developed in 'Refining skills in Drama' so far.

# **Option 3**

Create a key Drama skills poster with key words, definitions and supporting images.

# Half Term 2 Topic\SOW: Melodrama to Pantomime

#### **Above and Beyond**

Attend a pantomime

#### Option 1

Write an article about the relevance of pantomime in modern Britain.

#### Option 2

Creatively present what you've learnt about pantomimes from lessons and your own research. For example a video blog, model of a feature or presentation.

#### Option 3

Create a mind map of the stock characters that appear in a pantomime.

# Half Term 3 Topic\SOW: Devising – Identity

### **Above and Beyond**

Watch a piece of devised theatre on DigitalTheatre+ (such as Negative Space which is particularly useful for exploring devised theatre)

#### **Option 1**

Write a verbatim script based on the actual words of people involved in a real life event.

# Option 2

Creatively present what you've learnt about devising from lessons and your own research. For example a video blog, model of a feature or presentation.

# Option 3

Create an information poster on a devising activity for a drama classroom (research what is needed for a successfully devised activity )

# Half Term 4 Topic\SOW: Theatre in Education

#### **Above and Beyond**

Watch a TIE production on DigitalTheatre+/YouTube

#### Option 1

Devise a script which tackles a current issue using the theatre conventions of TIE.

#### Option 2

Creatively present what you've learnt about TIE from lessons and your own research. For example a video blog, model of a feature or presentation

#### Option 3

Describe the features of TIE in the form of a booklet or poster.

# Half Term 5 Topic\SOW: Performance Project

#### **Above and Beyond**

Attend a professional production

# Option 1

Write a review about a theatre production you have seen in the past.

# Option 2

Creatively present what you've learnt about professional theatre productions from lessons and your own research. For example a video blog, model of a feature or presentation

# Option 3

Design a poster for a theatre production (real or fictitious).

# Half Term 6 Topic\SOW: Performance Project 2

#### **Above and Beyond**

Attend the school production

#### Option 1

Write a newspaper article about the school production (interview cast and crew)

#### Option 2

Creatively present what you know about the school production. For example a video blog, model of a feature or presentation

#### Option 3

Design a poster for the school production.



# Half Term 1

# The Tempest

# **Above and Beyond**

Create a costume for one of the characters. Explain why you have chosen particular colours/ materials, or included certain ideas.

# Option 1

Create a map or model of the setting to the play. Include the different parts of the island where the characters get stranded.

# Option 2

Write a poem based on The Tempest. Take inspiration from one of the characters, a theme or one of your favourite scenes.

# Option 3

Write a diary entry as if you were Miranda at different points in the play. Remember to discuss how you feel about different events.

# Half Term 2 Topic\SOW: The Tempest

#### **Above and Beyond**

Write your own story/play with a link to The Tempest – Perhaps it could be a sequel or prequel; it could feature magic; an island; or be a comedy.

#### Option 1

Creatively present what you have learnt about the Tempest in lessons and through your own research. Include 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 prose version of one of the key scenes (like a chapter in a book). Or, if you're feeling ambitious, write it up as a short story.

#### 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 interview!

# Half Term 3 Topic\SOW: 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

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 interview!

# Half Term 4 Topic\SOW: A Christmas Carol

#### **Above and Beyond**

Write a poem which links to ACC. You could retell the story as a poem or write about one of the themes. Use your imagination!

#### Option 1

Create a quiz/ crossword/ wordsearch that could test the knowledge of your classmates.

# Option 2

Construct a timeline to show the main plot points in the story. Be creative. How could you present your timeline?

# Option 3

Create a map or model of the Victorian Streets where the novella is set. Include each of the different settings, e.g. Scrooge's counting house, the Cratchits' house etc.

# Half Term 5 Topic\SOW: Blood Brothers

#### **Above and Beyond**

Write your own story/ play with a link to BB – Perhaps it could be a sequel or prequel; it could feature twins who are separated; themes of superstition and fate etc.

#### Option 1

Creatively present what you have learnt about the Tempest in lessons and through your own research. Include 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 prose version of one of the key scenes (like a chapter in a book). Or, if you're feeling ambitious, wite it up as a short story.

# 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 interview!

# Half Term 6 Topic\SOW: Blood Brothers

# Above and Beyond

Write a poem which links to ACC. You could retell the story as a poem or write about one of the themes. Use your imagination!

Create a quiz/ crossword/ wordsearch that could test the knowledge of your classmates.

#### Option 2

Construct a timeline to show the main plot points in the story. Be creative. How could you present your timeline?

#### Option 3

Create a map or model of the Victorian Streets where the novella is set. Include each of the different settings, e.g. Scrooge's counting house, the Cratchits' house etc.



# Half Term 1

# ma vie sociale d'ado

#### **Above and Beyond**

Watch a French film at Tyneside cinema and write a review.

# Option 1

Prepare a presentation about yourself and how you use technology in every day life.

# Option 2

Log on to Languagenut and score as many points as you can on the tasks your teacher has set you.

# Option 3

Draw a mindmap illustrating what you have been learning this half term.

# Half Term 2 Topic\SOW: ma vie sociale d'ado

#### **Above and Beyond**

Change your phone settings onto French for 2 weeks

#### Option 1

Create a French social media page

#### 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

# Half Term 3 Topic\SOW: 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 heathy 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

# Half Term 4 Topic\SOW: à l'horizon

# **Above and Beyond**

Find the top 10 French international brands. What do they do?

# Option 1

Research why it's important to learn language and what careers it can lead to

# 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

# Half Term 5 Topic\SOW: au boulot

#### **Above and Beyond**

Create a presentation about your dream job, what it is and what you do in it. This can be on PowerPoint, a poster or any format you like.

#### Option 1

Create and advert for a job in France

#### 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

# Half Term 6 Topic\SOW: En vacances

#### **Above and Beyond**

Research the top 10 French holiday destinations. What are they popular and what are they well known for?

# Option 1

Design a holiday camp in France an create an advertisement for it

# 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



# Half Term 1

# **Tectonic Hazards**

#### **Above and Beyond**

Create a tic-toc showing the impacts of Tectonic Hazards.

#### **Option 1**

Create a poster showing how prepare for a earthquake.

#### Option 2

Create a timeline showing the last 10 years of volcanic eruptions from around the world.

#### **Option 3**

Draw and annotate a plate margin of your choice.

# Half Term 2

# What is the Geography of Disease?

#### **Above and Beyond**

Design your own plan on how you would manage an infectious disease.

# Option 1

Map the spread of a disease of your choice – The Black Death, Ebola, Malaria.

# Option 2

Create a poster showing how to stop the spread of disease.

# Option 3

Evaluate the effectiveness of Malaria management techniques.

# Half Term 3

# 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.

# Half Term 4

# How does Geopolitics influence world affairs?

#### **Above and Beyond**

Create a PPT presentation focusing on one Geopolitical conflict from History.

#### Option 1

Write a letter to a world leader to explain why war is not the best option to solve issues between countries.

# Option 2

Make a poster board of one Geopolitical event that is currently taking place.

# Option 3

Create a timeline showing the collapse of the USSR (Russia) to today's issues in Ukraine.

# Half Term 5

# How does Geopolitics influence world affairs?

#### **Above and Beyond**

Create a video presentation showing the impacts of the Cold War.

#### Option 1

Make a card matching game showing Geopolitical links between different countries.

#### Option 2

Describe in 100 words why Antarctica is central to the worlds Geopolitics.

#### Option 3

Map out the different Geopolitical events, that have taken place over the last 10 years, on a world map.

# Half Term 6

# What is Globalisation?

# **Above and Beyond**

Map out connections between countries using a world map.

# Option 1

Colour a map of the world showing all the countries that are connected to your mobile phone.

# Option 2

Design an information leaflet showing the advantages and disadvantages of Globalisation.

# Option 3

Make a mural of products that are made in China.

# HISTORY

# Half Term 1

# **Russian Empire**

#### **Above and Beyond**

Write a diary entry from inside a Russian Gulag. Ensure you write why you are imprisoned and what life is like.

#### **Option 1**

Creatively present what you've learnt about Russia from lessons and your own research. For example, a video blog or presentation.

#### **Option 2**

Draw a mind map connecting Russia under the Tsar. Lenin and Stalin.

#### **Option 3**

Describe in over 100 words how Stalin became a dictator.

# Half Term 2

# **Russian Empires**

# **Above and Beyond**

Write a diary entry from inside a Russian Gulag. Ensure you write why you are imprisoned and what life is like.

# Option 1

Creatively present what you've learnt about Russia from lessons and your own research. For example, a video blog or presentation.

# Option 2

Draw a mind map connecting Russia under the Tsar. Lenin and Stalin.

# Option 3

Describe in over 100 words how Stalin became a dictator.

# Half Term 3

# 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.

# Half Term 4

# WW2

# Above and Beyond

Take a picture with an artefact from WW2. E.g. Medal, uniform, ration book etc.

# Option 1

Creatively present what you've learnt about WW2 from lessons and your own research. For example, a video blog or presentation.

# Option 2

Draw a mind map connecting the key events of WW2. E.g. D-Day, Pearl Harbour, Hiroshima etc.

# Option 3

Describe in over 100 words what life was like for children during WW2. E.g. Rationing, blackouts, the Blitz, Evacuation.

# Half Term 5

# **Civil Rights Part 1**

#### **Above and Beyond**

Write 100 words about how a famous Civil Rights leader has links to Newcastle.

#### Option 1

Creatively present what you've learnt about segregation from lessons and your own research. For example, a video blog or presentation.

# Option 2

Draw a mind map connecting the key events of Civil Rights after slavery ended.

#### Option 3

Describe in over 100 words what life was like for black people in America during segregation.

# Half Term 6

# **Civil Rights Part 2**

# **Above and Beyond**

Take a picture / selfie with the famous Civil Rights statue in Newcastle.

# Option 1

Creatively present what you've learnt about Civil Rights protests from lessons and your own research. For example, a video blog or presentation.

# Option 2

Draw a mind map connecting the key individuals of Civil Rights. E.g. MLK, Malcolm X, JFK, Rosa Parks, Emmett Till etc.

# Option 3

Choose another famous African American (not from politics) and write 100 words why they are significant.

# MATHS

# Half Term 1

#### **Above and Beyond**

Graphing Stories: Consider a situation in life. Your challenge is to 'graph the story'; in other words, your graph should represent the situation. Watch the following video for an example: I STEM A person is shown climbing to the top of a playground slide. They pause at the top and then slide down the slide. The end of the slide has an upwards turn for safety. The task is to graph the height of the person's waist off the ground against time.

#### 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)

# Half Term 2

# **Above and Beyond**

Research Project: Volume By Slicing. Calculate the volume of a vase using knowledge on volume and area. 17 Innovative Mathematics Projects that Inspire Students I by Ali I However, Mathematics I Medium

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)

# Half Term 3

#### **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 I by Ali I However, Mathematics I 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)

# Half Term 4

#### **Above and Beyond**

Research Project: The Visual Proof of Pythagoras' Theorem. Use a visual apparatus to demonstrate Pythagoras' theorem. One example could be the use of lego. 17 Innovative Mathematics Projects that Inspire Students I by Ali I However, Mathematics I 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)

# Half Term 5

# **Above and Beyond**

Research Project: Investigating Similar Shapes. Explore the link between length, area and volume with similar shapes. Write a report on your findings. Similar Shapes - Project Maths

# 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)

Sparx Compulsory Work/XP Boost/ Times Tables Extra (students can complete two optional tasks on top of their normal expected task)

Half Term 6 Topic\SOW:

#### **Above and Beyond**

Research Project: The Horse Race Game – Probability. Investigate the game and write a report on why particular horses cannot win. Ideas for Probability Projects for Math (theclassroom.com)

#### 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)



# Half Term 1

# **Above and Beyond**

Attend a concert or gig and write a review of this.

# Option 1

Research a famous Band and explain their career and specialist skills. Present this through a poster/magazine article/ vlog.

# Option 2

Record a Vlog on what you have learned and developed in 'Band project' so far.

#### **Option 3**

Create a key Band project key word poster, including definitions and supporting images.

### Half Term 2

# Music Performance Project 1

#### **Above and Beyond**

Attend a musical club for the full half term.

#### Option 1

Create an information poster demonstration how to perform the 4 basic chords on piano/guitar/ukulele (C, F, G, Am)

#### Option 2

Select a popular song and create a performing resource for other students. This should include the song lyrics, images of the guitar/piano chords used in the song and any other relevant information.

#### Option 3

Create a 'Wall of Fame' poster for your favourite artist. It must include information about their music score e.g. genre, instrumentation and top 3 songs.

Half Term 3 Topic\SOW: Music Performance Project 2

# **Above and Beyond**

Music Journalism - Go and watch a live music performance. This could be at a community centre, a local church, at The Sage Gateshead, The O2 academy, the Utilita arena or any other venue. Take a photo of yourself there and write a review of your experience.

Create your own arrangement of the song you are performing in lessons. This could be done using an app such as GarageBand, or a website such as BandLab.

#### Option 2

Keep a listening diary of all the songs you hear throughout the day for a full week. This should be songs you lsiten to as well as those you might hear on the radio, in games and the TV. Send a copy of this to your music teacher!

#### Option 3

Track of the week - Listen to a piece of music of your own choice. Create a series of 'track of the week' style questions such as 'Describe the dynamic' and 'What are the instruments'. Provide answers to your questions and share your work with your teacher.



# Half term one

# **Above and beyond**

Complete a fitness test, record it in your planner (submit to your PE teacher if you want). Work on improving this aspect of your fitness, then repeat the test 6 weeks later. Let us know your progress

# Option 1

Create a poster about your favourite sporting role model

# Option 2

Burpee or Updowns challenge. Complete 50 burpees or Updowns everyday for a week

#### **Option 3**

Complete 10,00 steps every day for a week Half

# Half Term 2

#### **Above and Beyond**

Select one of the countries playing in the World Cup. Research their history in the competition and the key players of their team presenting your findings in a creative way.

#### Option 1

Attend a after school club every week of the Half Term

#### Option 2

Write a match report for a sport of your choice

#### Option 3

Complete 15,000 steps every day for a week

# Half Term 3

#### **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

# Half Term 4

#### **Above and Beyond**

Every other day complete the following fitness challenge: 25 push ups, 25 sit ups, 25 burpees, 25 squats and a 60 second plank.

Create your own HOW TO video for a skill in a sport of your choice.

#### Option 2

Write a match report for a sport of your choice

#### Option 3

Complete 15,000 steps every day for a week

# Half Term 5

#### **Above and Beyond**

Topic Your sporting hero. Creatively present your sporting hero including information such as the sport, statistics on their career, background information on their life and why they appeal to you.

#### Option 1

Take part in sporting activity during the weekend every week of the Half Term.

#### Option 2

Write a match report for a sport of your choice that you have watched.

# Option 3

Complete 15,000 steps every day for a week

# Half Term 6

# **Above and Beyond**

5 km challenge. A minimum of twice a week run 5 km writing your times in your planner. Show your PE teacher your fastest time.

# Option 1

Write a review of your experience in PE this year. What have you learnt? What did you most enjoy? Has your fitness improved and how? How could PE improve next year?

#### Option 2

Create a poster of why PE is important in school that can be displayed.

#### Option 3

Complete 15,000 steps every day for a week



# Half Term 1

# **Ethics**

#### **Above and Beyond**

Formulate a conversation between you and a friend/family member or guardian, discussing this question "All human life is special" try to have two opposings point of view

#### Option 1

Create a comic strip/storyboard about someone with an ethical dilemma, include their situation, what decision they had to make, the result of the decision and the affect it had.

# Option 2

Apply your learning and listen to/watch/ read the news at least twice this week and write a report about an interesting story. Include your opinion on the story. Look out for stories that link to Religion or Ethics

# Option 3

Describe what situation ethics is in 100 words.

# Half Term 2

# Persecution

#### **Above and Beyond**

Design an art piece that shows the struggles of a Jewish person living in Nazi Germany during the 1930's.

#### Option 1

Find two examples of news stories about persecution in the world in modern days.

#### Option 2

Create a storyboard or a comic strip about the ill-treatment of Pastor Baber George.

#### Option 3

Create a poem about how Jews were affected during the Holocaust.



Top tip! Don't forget you can use the LRC as well as the internet and youtube to help with any of your research projects.

# Half Term 1 Evolution

# Above and Beyond

Research the work of Darwin, Lamarck and Wallace.

- What were their different ideas?
- What are the similarities?
- What are the differences?
- What is the evidence to support their theories?

#### Option 1

Research an endangered species of vour choice

- What is their habitat?
- Why are their numbers in decline?
- What is the human impact on the species?
- What can we do to conserve the species?

#### Option 2

Research theories on what caused the extinction of the dinosaurs.

Explain why these are only theories and present some evidence to support them.

Display your ideas as a poster or report.

#### Option 3

Draw a cartoon strip or story board to explain the stages in natural selection

- V variation
- C competition
- S survival
- R reproduction
- G pass on Genes over many

Generations

# Half Term 2

# Chemical energy

#### **Above and Beyond**

Make your own edible endothermic reaction

- With adult help, make your own sherbet (https://fun-science.org.uk/funscience-how-to-make-sherbet/)
- Test the sherbet and note any observations. Does your mouth feel colder?
- Research why sherbet feels cold when you eat it

Bonfire night science – research the exothermic reactions in:

- Fires
- Sparklers
- Fireworks
- Hand warmers

#### Option 2

Define what an endothermic and exothermic reaction are.

Write some examples of each type of reaction

#### Option 3

Make your own wordsearch for chemical energy.

Use your knowledge organiser to help identify key words for this topic.

# Half Term 3

# 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

# Half Term 4

#### Cells

#### **Above and Beyond**

Choose an organ and research 3 specialised cells found in that organ:

- Draw a diagram of each and label it
- Describe how it is adapted to its function in terms of its shape and any organelles.

#### Option 1

Microscopes leaflet: Compare light microscopes to electron microscopes

# Option 2

Make a 3D model of a plant and animal cell to show the different structures in each. Can you add labels or a key to explain what each does?

# Option 3

Create a cell revision poster showing a diagram of a cell, label all the organelles and add a sentence for what each does.

# Half Term 5

# **Energy resources**

#### **Above and Beyond**

Draft a letter to your local MP or council to encourage the use of renewable energy. Highlight potential benefits for the environment and your local community, e.g. skilled jobs

Design a leaflet for Y7-Y9 pupils that explains renewable and non-renewable sources of energy. Compare some pros and cons of each energy resource.

#### Option 2

Make your own crossword.

 Use squared paper or an online programme to design your own crossword of energy resources by writing your own clues.

#### Option 3

Make a song or poem that explains the differences between renewable and non-renewable energy. Include examples of each.

# Half Term 6

# **Atomic structure**

#### **Above and Beyond**

Create top trump cards for the first 20 elements in the periodic table:

- Atomic number
- Mass number
- Group number
- Electron configuration
- Radius
- Reactivity

#### Option 1

Make models showing the atomic structure of an element from groups 1, 2, 5, 7 and 0.

Stretch further to explain how their structure affects their properties.

# Option 2

Research and draw a timeline to explain the discoveries that lead to understanding the model of the atom. (e.g. Dalton, Bohr, Thompson)

0

#### ption 3

Create a poster that represents the different models of the atom:

- Plum pudding model
- Nuclear model

Label the diagrams to show how they are different.



# Half Term 1

# **Food Tech**

### **Above and Beyond**

Safely prepare and cook a meal for others at home. This meal should be nutritious and contain a minimum of 3 of your recommended '5-a-day'. Take a picture of the meal and people enjoying it as proof.

#### Option 1

Research a famous chef and the importance of their work. Present this through a poster/magazine article/vlog.

# Option 2

Record a Vlog on what you have learned and developed in your current project so far.

# **Option 3**

Create a key Food Technology skills poster with key words, definitions and supporting images, be careful to consider Health & Safety too.

### Half Term 2

# Types of wood

### **Above and Beyond**

Find one Pine product online or in your home that you think could be improved. Re-design this product, changing materials or aesthetics, explaining reasons for your changes.

#### Option 1

Create a research page on the three different categories of wood, use colours and bold titles to make it look interesting. Include: category names, types within these, properties & product examples.

#### Option 2

Write a list of pine products that you can find in and around your home.

#### Option 3

Pine is slightly durable. Research what this term means and explain. Make a list of other durable materials.

Half Term 3 Topic\SOW: Sustainable food

# **Above and Beyond**

At your local food shop find which seasonal produce is currently frown 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 choices

# Option 3

Research the phrase 'sustainable food', make a list of foods that are considered sustainable

# Half Term 4

# **Metals**

#### **Above and Beyond**

Have your photograph taken in front of a well-known metal structure in Newcastle.

#### Option 1

Create a research page on metals, use colours and bold titles to make it look interesting. Include: types of metals, metal properties & product examples.

#### Option 2

Write a list of metal products that you can find in and around your home. Do you think they could be replaced with any other material? If so explain why?

#### **Option 3**

Create a list of the Top 10 things in the world made from metal. This is personal choice so you must explain what makes each one worthy of being in the 'Top 10'.

# Half Term 5

# **Fairtrade**

# **Above and Beyond**

Have a look at food products in your home and take pictures of any that carry the fairtrade logo, research the origin of one of the food

# Option 1

Research the fairtrade livelihoods. Present one of the stories through a poster/vlog/newspaper article

# Option 2

Select one product from the fairtrade food list and research what fair trade means to the workforce in that industry

Research fairtrade foods and make a list of companies that buy fairtrade food products

# Half Term 6

# **Aluminium**

#### **Above and Beyond**

Collect a bag of aluminium recycling from a public space and put it into your recycling bin. Take photographic evidence.

#### Option 1

Create an aluminium research page, use colours and bold titles to make it look interesting. Include: material properties & product examples

#### Option 2

Write a list of aluminium products that you can find in your home

#### Option 3

Create a health and safety poster relating to the equipment used in your latest project. This should explain the risks involved, how to avoid them and steps to use the equipment safely.





# HOMEWORK TASKS