Ashby School Transition to GCSE Activity booklet

Transition KS3—GCSE

This booklet is designed to support you with your transition from Key Stage 3 (Y9) to GCSE (Y10). The activities should help to introduce you to the GCSE subjects you are taking. Please work through the activities in here over the summer ready to bring back to your relevant subject teachers in August/September.

Many of the activities in here are based around the Ashby Core 4 Strategies for learning and revising.

- Mind Map
- Flash Cards
- Brain Dump
- Self Quizzing

You will have been introduced to these concepts during PD lessons this term but if you need any reminders about how they work, you can find videos and other resources here:

https://ashbyschool.org.uk/revision

Core 4 Booklet: https://ashbyschool.org.uk/uploads/files/Ashby%20Core%204%20Booklet%20to%20print.pdf

| Subject | Tick when completed |
|-------------------|---------------------|
| English | |
| Maths | |
| Science | |
| History/Geography | |
| French/German | |
| Option 1 = | |
| Option 2 = | |
| Option 3 = | |

Contents

- English
- Maths
- Science
- Geography
- History
- French
- German

Alphabetical by option subject:

- Art
- Business
- Computer Science
- Design and Technology
- Drama
- Engineering
- Food
- Music
- PE GCSE and PE CNAT
- Psychology
- Textiles



Arrogant: "_

Ruthless: "

Ozymandias by Percy Shelley

ENGLISH ACTIVITY:

| ENGLISH | CHVIII. | | | | |
|---|--|--|---|--|--|
| 1. Where do you think this if it comes from an 'antique | • | | | | |
| | | | | | |
| | | | | | |
| | | 3. What does "trunkless" and "vast" mean? | 5. What do we learn | | |
| | | Trunkless = | about Ozymandias from | | |
| 4. What is a "visage"? | | | these descriptions? | | |
| Visage: | | Vast = | | | |
| Why is it "shattered"? | l met | a traveller from an antique land | | | |
| | | `Two <u>vast</u> and <u>trunkless</u> legs of stone | | | |
| | | the desert. Near them, on the sand, | | | |
| | | | | | |
| | | a <u>shattered visage</u> lies, whose <u>frown</u> , | 6. What technique is used | | |
| | | kled lip, and sneer of cold command, | here? | | |
| CHALLENGE 4 THINKING | Tell that i | ts sculptor well those passions read | | | |
| CHALLENGE 1 THINKING: "Passions" are emotions | Which yet su | rvive, stamped on these lifeless things, | 7 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | | |
| - How does the traveller | The hand tha | at mocked them and the heart that fed. | 7. What does this imperative show about | | |
| know that the sculptor | And on t | And on the pedestal these words appear how Ozymandias chose to | | | |
| must have understood | | ame is Ozymandias, king of kings: | rule his kingdom? | | |
| Ozymandias quite well? | / | my works, ye Mighty, and despair!" | | | |
| | | | | | |
| CHALLENGE 2 THINKING: | | g beside remains. Round the decay | | | |
| Two contrasting aspects | | colossal wreck, <u>boundless and bare</u> | | | |
| of Ozymandias' character | The <u>lone</u> | e and level sands stretch far away. | | | |
| are revealed here. What | \ \(\frac{1}{2} \text{ \ \text{ \ \exitt{ \text{ \ | | 8. What technique is used | | |
| are they? | 1 X | do you think the poet suggesting about the hature here, compared to human power? | here? | | |
| | power of r | nature here, compared to numan power? | | | |
| 9. What technique is used | | | | | |
| here? | | | CHALLENGE 3 THINKING: | | |
| | | | How and why is nature 'boundless and bare'? | | |
| | | | boundless and bare? | | |
| REFLECTION: What are you | r impressions of (| Ozymandias as a ruler? Write 3 of your own adject | ives to describe him: | | |
| | | | | | |
| | | | | | |
| Now match quotations that | t support the adj | jectives below: | | | |
| Tyrannical: " | | | " | | |
| | | | - | | |

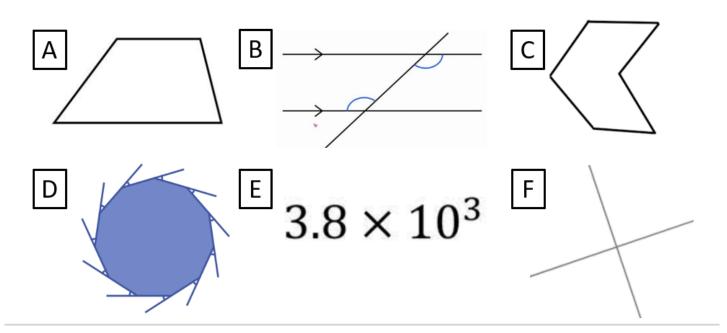
2. Find out some information about the context of the poem, what kind of

poet Shelley was and who Ozymandias was and write it in here:

Maths

Create Flashcards for the following:

Match the words to the pictures and then write a definition



| Hexagon | Trapezium | Standard Form | |
|---------------------|-----------------|------------------|--|
| | | | |
| | | | |
| Perpendicular Lines | Exterior Angles | Alternate Angles | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

<u>Science</u>

Over the last two terms of Year 9 you will have been working on your first GCSE science topics.

Now produce a set of revision flash cards for the topics you have been taught.

If you need help with how to produce the flash cards, watch the video on the Ashby School website.

If you need help with the knowledge that each card should contain, try these websites:

Biology <u>www.bbc.co.uk/bitesize/examspecs/zpgcbk7</u>

https://www.freesciencelessons.co.uk/gcse-biology-paper-1/cell-biology/

Chemistry www.bbc.co.uk/bitesize/subjects/zs6hvcw

<u>www.freesciencelessons.co.uk/gcse-chemistry-paper-1/atomic-structure-and-the-periodic-table/</u>

Physics <u>www.bbc.co.uk/bitesize/subjects/zpm6fg8</u>

www.freesciencelessons.co.uk/gcse-physics-paper-1/energy/

Science

Biology

Cell Biology

- Draw and label a plant and animal cell
- Draw and label a prokaryotic cell
- Give three differences between prokaryotic and eukaryotic cells
- Draw and label an example of a specialised cell. Explain how it is adapted to its function.
- Describe the three processes of movement into and out of cells (diffusion, osmosis and active transport)
- Define what a stem cell is
- Describe the two types of microscopes and explain the advantage of using an electron microscope

Chemistry

Atomic Structure and the Periodic Table

- Draw the structure of an atom and label the three sub-atomic particles.
- An atom has 3 protons, 3 neutrons and 3 electrons. What is its mass number?
- What is an isotope?
- An element has 5 electrons in its outer shell. Which group of the periodic table will this element be in?

Chemical Changes

- A substance has a pH of 10. Is it acidic, alkaline or neutral?
- What is the ionic equation for neutralisation?
- Complete: Zinc + Sulphuric acid à _____ + ____
- A student wants to investigate the reactivity of magnesium, zinc and copper with dilute hydrochloric acid. Outline an experiment that a student could do in order to investigate the metals reactivity.
- What is electrolysis?

Physics

Energy

- List the ten types of energy.
- What are the energy changes when a television is working?
- Write out the equations for:
- Kinetic energy
- Gravitational potential energy
- What are the advantages of non-renewables?
- What are the advantages of renewables?
- Write the equations for:
 - Power
 - Efficiency

<u>Geography</u>

Topic: Natural Hazards - Comparing the Haiti and Japan Earthquakes

Task 1: Earthquake Case Study Detective

Use classroom resources or online research (BBC Bitesize, Oxfam, National Geographic) to complete a comparison table on the earthquakes in Haiti 2010 (LIC) and Japan 2011 (HIC)

In your table include:

Magnitude

Date & Location

Primary Effects

Secondary Effects

Immediate Responses

Long-term Responses

Task 2: Why Was One Worse?

Write a short paragraph or create a diagram to answer the following question:

"Why did the Haiti earthquake cause more damage and deaths than the Japan earthquake, even though it was weaker?"

Include factors such as:

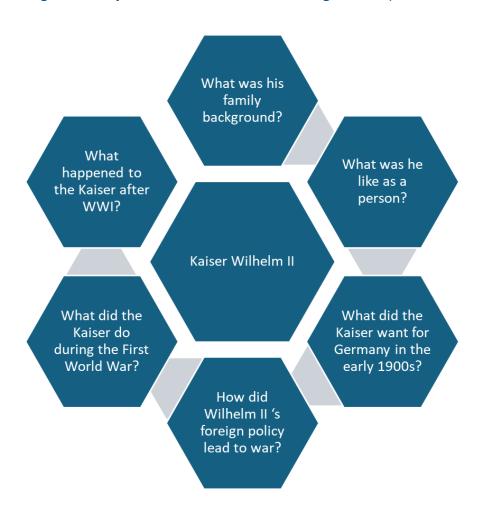
- Level of development
- Building quality
- Emergency services
- Preparedness and education

<u>History</u>

Who was Kaiser Wilhelm II and how did he contribute to the First World War?

Kaiser Wilhelm II is a key individual that you will study in your first GCSE History Unit, Conflict and Tension 1894-1918. Using the resources below produce your own mind map explaining who he was and how he contributed to the First World War. Use the questions in the hexagons to help you complete your **mind map**.

- •https://www.britannica.com/summary/William-II-emperor-of-Germany
- https://www.bbc.co.uk/history/historic_figures/wilhelm_kaiser_ii.shtml
- •https://www.tutor2u.net/history/reference/kaiser-wilhelm-ii-1
- https://www.iwm.org.uk/history/how-kaiser-wilhelm-ii-changed-europe-forever



French

To go - "aller" in past/present/future



Aller – to go

"Aller" is an irregular verb which means it does not change normally and must be learnt.

<u>Past</u> Je suis allé(e) = I went

(If you are a girl, you need the extra "e"

Present Je vais = I go

✓ J'aime aller = I like to go

Future Je vais aller = I am going to go

Je veux aller = I want to go

Je voudrais aller = I would like to go

Task 1: Match the French to the English.

1. Je suis allé A. I really like to go

2. Je vais aller B. I want to go

3. Je vais C. I don't like to go

4. Je veux aller D. I went

5. Je n'aime pas aller E. I go

6. J'aime bien aller F. I am going to go

Task 2: Translate these into French. Then categorise them by their gender (masculine/feminine)

Places in town

au magasin de sport – to the sports shop au magasin de musique – to the music shop

au grand magasin – to the department store

au magasin de chaussure – to the shoe shop

au café – to the café

à la gare – to the train station

à l'hôpital – to the hospital

à la boulangerie – to the bakery

à la confiserie – to the sweet shop à la patisserie – to the cake shop à la librairie – to the book shop

à l'épicerie – to the green grocers aux magasins – to the shops

hotel hospital train station

shoe shop supermarket

bakery book shop post office

*swimming pool *sports centre

police station *town hall*

use www.wordreference.com for these

Task 3: Make a sentence with the first letters from each word. They are in past/present/future.

e.g. J V A M D S = Je vais au magasin de musique.
I go to the sports shop.

1. JVÀLP=

2. JSAÀL'É=

3. JDAÀLL=

4. J V A G M =

5. JSAAMDM=

Task 4: Untangle these sentences to make them into just French then just English.

- 1. J'aime to go au shop de chaussures
- 2. Je suis went à the piscine
- 3. I veux aller to la boulangerie
- 4. Je would like aller au cinema
- 5. Je go au cafe avec my amis
- 6. Je déteste to go à la cake shop

Task 5: Translate these into French

- 1. Normally I go to the supermarket
- 2. Yesterday I went to the music shop
- 3. Tomorrow I am going to go to the train station
- I love to go to the cake shop and the sweet shop
- 5. I would like to go to the sports centre.



Use the **Ashby Core 4 strategy** – make flash cards to learn the difference forms of aller.

Make a comic strip in 3 tenses to describe where you went, go and are going to go.

Create a song/rap about the verb "aller" with different shops/places in town

ook up 5 more places in town that you o to. Write down the French/English

German

Create a presentation explaining how to use the German word "weil" (because). This can be presented on A3 or A4 paper, in a PowerPoint or on revision cards. Please use the internet to help you and include colours and pictures in your presentation if possible.





Art

Over the summer we'd love to see what artwork you like to create. What you make and how you make it is totally your choice. You will bring this artwork into the first GCSE Art lesson after the summer holiday.

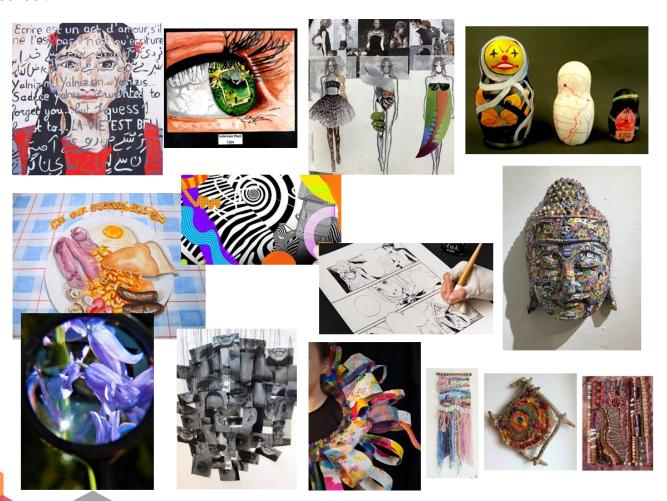
What could you make?

Drawing? Painting? Sculpture? Photography? Textiles? Digital artwork? Collage? Printmaking? Journal? Hanging Mobile? Illustration? Graphic Design? Magazine cover? Mood board? Crotchet, Scrap booking etc......

It's important that this is your own work. Be original and do not copy someone else's work, but you can show us how you are inspired by others work.

Think about what inspires you? People? Places? Objects? Music? Books? Films? Sport? Hobbies? Baking? Friends? Family? Holiday places? Languages? Think about how you could COMMUNICATE your interests in your artwork. It can be Abstract or Realistic.

Think about what art materials and techniques you have explored before in Key Stage 3 and out of school.



Business Studies

You should choose a well known entrepreneur (an entrepreneur is a person who sets up a business or businesses, taking on financial risks in the hope of profit.)

| Why did the entrepreneur set up this | Background of the entrepreneur | |
|--------------------------------------|---|------------------------|
| business? | Background of the entrepreneur | Current businesses are |
| | A case study of an entrepreneur | |
| | Name of entrepreneur chosen | |
| terested in this entrepreneur |] | Future plans or ideas |
| se | | |
| | Characteristics of the entrepreneur are | |
| | | |
| | | |
| | | |
| Any further information? | | \neg |
| | | |
| | | |

<u>Computer Science</u>

Task 1:

Create a mindmap about the GCSE topic: **Computer Systems (e.g. input/output devices, CPU, RAM/ROM and more!)**

Your mind map should:

- •Use colour to separate sub-topics
- Include key vocabulary
- •Show examples, diagrams, or mnemonics where helpful

Purpose:

To start your GCSE Computer Science journey by building an overview of the subject and practicing how to revise effectively using mind maps and self-quizzing.

Helpful resources:

- •5 videos from the Craig 'n' Dave YouTube playlist: https://tinyurl.com/5mccjz46
- •BBC Bitesize: https://www.bbc.co.uk/bitesize/quides/zbfny4j/revision/1

Task 2:

Generating quizzes using ChatGPT

- •Use ChatGPT to upload a picture of your mind map and get it to generate 10 questions from this. (you might need to create a free account on chatgpt first!)
- •If the above doesn't work, use a useful prompt instead such as "Generate 10 questions with answers based on OCR GCSE 1.1 systems architecture".
- •Make sure the questions **are** related to the content of your mind map
- Have a go at answering the questions without looking at the answers!

Design and Technology

Named Designers

- Investigate one designer from the following list and create a case study **mind map** about them and their work.
- Select your three favourite creations from the designer.
- Include at least one image of their products and an explanation of why you chose each of the three.
- Write approximately 300 words about the designers' work and their history

| Graphic design | Textile design | Architecture | Product / industrial design |
|----------------|-------------------|-------------------------------|-----------------------------|
| Harry Beck | Coco Chanel | Marcel Breuer | Gerrit Reitveld |
| | Alexander McQueen | Norman Foster | Ettore Sottsass |
| | William Morris | Charles Rennie Mac- intosh | Raymond Templier |
| | Mary Quant | Aldo Rossi | Louis Comfort Tiffany |
| | Vivienne Westwood | | Alec Issigonis |

<u>Drama</u>

| Drama Review: <i>Find Me</i> by Olwen Wymark |
|--|
| Name: |
| Class: |
| Class: Date of Performance: |
| What was the play about? What is the plot? What were the themes? |
| How did the actors create the role of Verity? How did they use multirole? |
| How did the audience use the stage space, lighting and sound? |
| What were the most effective moments? (Remember to explain why they were memorable) |
| What was your overall opinion of the performance. How did it impact you as a member of the audience? |
| |

Engineering

Famous Engineers

You are required to explore the works of the following 8 Engineers – past and present, look at what they did and consider the times they were working in and the affect that their work had on the world.

1. Complete an A4 **Mind Map** for one of the engineers (James Dyson, Isambard Kingdom Brunel, Elon Musk, Archimedes, Patricia Bath, Edith Clarke, Stephanie Kwolek, Ada Lovelace)

Add keywords that sum up their key designs.

2. Produce one A4 page of pencil drawings of work by one of the engineers. ANNOTATE YOUR DE-SIGNS TO EXPLAIN WHAT YOU LIKE AND WHY.

















Food Technology

Food - Nutrient Summary Table

Make your own FLASHCARDS by filling in the missing information using class notes or textbook.

| Nutrient | Macro or Micro | Function in the Body | Food Sources |
|-------------------------|----------------|----------------------|---|
| Carbohydrates | Macro | Provide energy | grains (like bread, pasta, rice, and cereals), fruits, vegetables (especially starchy ones like potatoes, corn, and peas), legumes (beans and lentils), dairy products. |
| Vitamin A | | | |
| Vitamin B1 (Thiamine) | | | |
| Vitamin B2 (Riboflavin) | | | |
| Vitamin B3 (Niacin) | | | |
| Vitamin B6 | | | |
| Vitamin B12 | | | |
| Vitamin C | | | |
| Vitamin D | | | |
| Vitamin E | | | |
| Vitamin K | | | |
| Calcium | | | |
| Iron | | | |
| Magnesium | | | |
| Phosphorus | | | |
| Potassium | | | |
| Sodium | | | |
| Zinc | | | |
| Water | | | |
| Dietary Fibre | | | |

Music

.

Match up the Elements of Music with their definitions – then make revision cards with these key elements.

Use these cards to test your knowledge of these key words

| Performance Forces | All the sections in a piece of music and how it is put together | |
|--------------------|---|--|
| Structure | The volume of a piece of music | |
| Melody | All the instruments and voices in a piece of music | |
| Texture | The patterns of note lengths | |
| Tonality | The key of a piece of music – major or mi- nor | |
| Harmony | The speed of the music | |
| Tempo | The time signature – how many beats are in a bar | |
| Rhythm | The main tune/theme in a piece of music | |
| Metre | The chords in a piece of music | |
| Dynamics | The different layers and how they relate to each other | |

PE-Cambridge Sport THE MEDIA

In Year 10 your first NEA module is to create a study for a sports club, focusing on their usage of media and suggesting ways to improve.

This research booklet outlines different media sources that sports clubs can use.

Independent research is a key asset for this course.

Your research and findings within this task can be applied directly to your first NEA module, when we begin the new year.

For each source use the internet (Google) to help you answer the questions and create a mind map using each heading and answering the two questions posed:

Mindmap 1- Sources of Media

Social Networking

- What is social networking? Give examples
- What do sports clubs post of social networks?

Media Sharing Sites

- What is a media sharing site? Give examples
- What do sports clubs post on these websites?

Streaming

- What is a Streaming website?
- Give examples of a streaming website

Websites

- Give an example of a sports club's website: www.
- What do sports clubs have on their websites?

Blogs

- Using 'Google' find an example of a 'Golf Blog': www.______
- Summarise, what content is on that blog?

Mind Map 2—Sources of media

Terrestrial Television

- What is Terrestrial Television?
- What sports / sports programmes are shown on terrestrial television?

Satellite Television

- What is Satellite Television
- What sports channels are on Satellite TV in the UK?
- Radio
- What is National Radio?
- There are two dedicated National Radio stations for sport, what are they?

Books

• What types of written sports books can you find in the UK (eg. Rule books, biographies)

Newspapers

- Give an example of a UJ National Newspaper
- What sports are covered in this newspaper?

PE-GCSE

.The Skeletal and Cardiovascular System

In Year 10 your first few modules are based around the skeletal and the cardiovascular systems. This research booklet outlines different areas of these systems you need to be aware of. Independent research is a key asset for this course.

Useful websites include: BBC Biteseize- OCR Youtube- OCR PE Complete

For each source use the internet (Google) to help you answer the questions and create a mind map using each heading and answering the two questions posed:

Mind Map 1—Skeletal System



- 1. Label the skeleton
- 2. Name the 6 Synovial Joints and give an example:
- 3. Name and describe the 6 functions of the skeleton:
- 4. Name the 6 types of movement:

Mind Map 2—Cardio-Vascular System



- 1. Label the Heart
- 2. Explain the roles of the following blood vessels: arteries, veins, capillaries
- 3. In list form write down the pathway of blood through the heart
- 4. Give a definition for: Heart rate, Stroke volume, Cardiac output

<u>Psychology</u>

Task 1: Murdock's Memory Experiment

Title: "Why Do We Remember the Beginning and End?"

Read the short summary of Murdock's study:

Murdock gave participants lists of words and asked them to recall them. He found that people tend to remember the first few (primacy effect) and the last few (recency effect) words best. This formed a 'serial position curve'.

- 2. **Activity**: Ask a family member or friend to read you a list of **15 words**, one at a time. Try to recall as many as you can. Then reflect:
- o Which words did you remember?
- o Was it easier to remember the first or the last ones?

Questions:

- a) What does your result show about how memory works?
- b) Why do you think psychologists use word lists in experiments?
- c) Give one strength and one weakness of Murdock's study. Explain your ideas.

Task 2: Bartlett and the War of the Ghosts

Title: "Is Memory Like a Camera?"

Read this adapted story:

"Two young men went hunting seals. One of them was told he would die. He ignored this and went with the others. On the way back, he felt sick and later died."

- 2. Wait 10 minutes, then try to write the story from memory.
- **3. Compare** your version to the original:
- o What did you change, forget, or add?
- o Why do you think that happened?

Questions:

- a) What does this tell us about how memory works?
- b) What is a "schema"? How might it affect memory?
- c) Give **one strength** and **one weakness** of Bartlett's study.

Challenge Question:

"Which study is more useful for understanding memory in real life – Murdock's or Bartlett's? Give your opinion with reasons."

Textiles

Create you own set of Sun printing fabric samples

https://www.youtube.com/watch?v =IXA5GLmaTq4

You will need:

- Cotton fabric (old pillowcase will do)
- Acrylic paint
- Water
- Paint brush

You could use:

- Leaves/ petals
- flower heads
- Feathers
- Or anything else



You could sew into them to add detail





If you need any resources, please see Mrs Sheldon before the end of term.





