

Year 9 Work Spalding High School
Work for 4th May to 22nd May

Art:

2 lessons plus homework time

It's now time to make a development piece from the work you have done so far. You need to think about scale and using any media which is available to you. Think about your intentions and have a try-out. Use your skills and take risks if you can. Complete a WWW and EBI in your reflective journal.

Well done and keep going...email me photos if you like!! Also post your images to your friends to encourage each other!!

Biology:

Science Work. By the end of the next two weeks, you should have completed all the work, for ALL THREE SCIENCES, that you have been set over the whole six weeks. Make sure you check back over the previous work to make sure.

Topic 4 Non-communicable diseases part 3 (final part)

Activity 1: Developing new medicines

In light of the current international drive to develop a vaccine to provide immunity against the COVID-19 virus, this final section is most apt! For some background information and a very relevant application, please read the article at www.bbc.co.uk/news/health-52394485.

You have also already encountered antibiotics in Topic 1, as a medicine used to treat diseases caused by bacterial pathogens e.g. tuberculosis and chlamydia met in Topic 3.

The process of developing new medicines (vaccines, antibiotics and many more!) has several stages, some of which you will have been introduced to by the BBC News article above – human testing for one. Read the information on the first 2 slides at www.bbc.co.uk/bitesize/guides/zgh96yc/revision/1 and p116-117 of the Edexcel GCSE (9-1) Biology textbook available at www.pearson.com/uk/learners/secondary-students-and-parents.html – scroll down to Free e-book access, select View e-books, select Edexcel GCSE (9-1) Sciences icon, then the Biology textbook icon.

An image of these pages, and the one below, will also be available on the VLE in the Topic 4 Year 9 Biology folder. Identify the 4 or 5 main stages of development and describe clearly what each of these involves.

How long does it usually take to develop a new medicine? From the first ideas through to GPs giving it to patients?
How much money does it cost to go through all the development stages? Again, from the initial idea to its use.
What do you notice/think when you compare these 2 answers to what you have read at the start in the BBC article?

Activity 2: Personalised medicine and the Human Genome Project (links Topic 4 and Topic 2 together nicely)

So, from Activity 1, you know that developing new medicines is a very thorough, lengthy and expensive process, but that does not always mean that the drugs produced are 100% effective for all patients. Why might a drug work in one person to treat their condition/cure their disease, but not in another? Outline 2 of your own suggestions/ideas.

Watch the video at <https://youtu.be/O5VZKVC57FY>. Watch it a second time and make notes. Using your notes and the information on p71 of the Edexcel GCSE (9-1) Biology textbook online (see instructions above), answer these Q's:

1.What was the Human Genome Project (HGP)?

2.The HGP analysed the DNA from 5 different individuals. Why might this limit the knowledge we have and how could we solve the problem? (Hint – think about genetic variation/different alleles)

3.Answer Q's 7 and 8 from p71 of the textbook online.

4.Some genetic variants have been discovered that are associated with increased risk of developing late onset Alzheimer's disease. However, there are currently no medically approved genetic tests for these variants.

a) Explain 1 possible benefit of testing a person for genetic variants that are associated with an increased risk of developing Alzheimer's later in life

b) Give 2 possible drawbacks of testing a person for these genetic variants.

Activity 3: Cell structures (links Y7/8/9 to Y10)

Draw out and label a bacterium cell and a virus particle from memory, then check and amend as required. Ensure you label all relevant structures and the functions of each – you may want to find labelled diagrams online and use these.

Draw out and label animal and plant cells from memory, then check and amend as required. Ensure you label all relevant structures and the functions of each – you may want to find labelled diagrams online and use these.

Complete the lesson at www.bbc.co.uk/bitesize/articles/zngq7nb. (no need to make the plant cell model though).

Read through the information on the first 3 sections at www.bbc.co.uk/bitesize/guides/zxm3jty/revision/1.

Look up and draw out and label a fungal cell. Ensure you label all relevant structures and the functions of each – you may want to find a labelled diagram online and use this.

Chemistry:

Science Work. By the end of the next two weeks, you should have completed all the work, for ALL THREE SCIENCES, that you have been set over the whole six weeks. Make sure you check back over the previous work to make sure.

Complete the work for the remaining science that you have left to do in the rotation, whether this is Biology, Chemistry or Physics. If Chemistry is the last one to do in the rotation, then you need to complete the Periodic Table and metallic bonding topic. The periodic table (notes can be made from Bitesize) Chemistry for AQA page 88-103. Once again Dr Wardell will provide sheets to download and complete from the school VLE, as well as videos to link to.

You can also use the Combined Science workbook to help pages 138-142 Groups in the Periodic Table, page 96 Metallic Bonding.

Please email me (Dr Wardell) if there are any issues with the Chemistry work: ian.wardell@spaldinghigh.lincs.sch.uk.

Computer Science:

Working to solve and document each of the 3 programming challenges for the assessment. Use the time to really push yourself to solve the challenges. Use the PowerPoints and practice programs to help you. Make sure to either flowchart or pseudocode your plan for the solution. Screen shots of code and program running are needed for the assessment.

History of Computing: continue with completing the assessment.

When completed, you will need to upload these assessments to the VLE – instructions will be on the VLE.

Design Technology:

There is a PowerPoint/pdf on the VLE (you had an email earlier in the year on how to access the VLE).

Consider what would be the best materials for prototyping your final design. Begin making a full scale prototype using the materials you can get hold of.

Choose an example of technology: make a study of how mankind has tried to use technology to improve our lives, but explain how that has had positive and negative impacts.

Drama:

Complete the 'Writing a Review' worksheet (this will be emailed to you), focusing on a programme / film of your choice.

English:

Objective: Explore and understand the genre and language of 19th century Literature.

Outcome: Annotated poems demonstrating understanding of the poems.

Learning Challenge: Answer the following questions on William Blake's *London*. Try and go into as much detail as you can. Each question requires close analysis. Answer in full sentences.

1. How does William Blake present London?
2. What themes and issues does he explore in relation to the city?
3. What do his attitudes to these seem to be?
4. What patterns of imagery do you notice?
5. What significance do these have?
6. Which words do you find the most striking? Why? Explore their connotations and connections.
7. What aspects of 18th century society might be symbolised by the chimney sweeper, the harlot, and the soldier? Think about the age, gender, class and role of these individuals.
8. EXTRA LEVEL OF CHALLENGE: Consider the aural impact of the poem. How are alliteration, assonance, and the sounds of words utilised by Blake? What impact do they have on mood or meaning?

Check the BBC daily lessons in English (Y10 English) <https://www.bbc.co.uk/bitesize/tags/zr7447h/year-10-and-s4-lessons/1>)

Accelerated Reader Awards – keep reading. Additional, Reading comprehensions on VLE.

Food and Nutrition:

Please ensure you check that all sections in your booklet are fully completed to P24.

I realise that 9CJ were not able to conduct the Empanada practical , however everyone who has access to the internet can complete P28 using www.foodafactoflife.org.uk/resources/explorefood.

Refresh your memories by re reading P25 before you start / look back at the work we completed for Nutritional Modelling of Choux on P23.

Then, **EVERYONE**, using your bright yellow A5 'Nutrients and their Functions in our Body' sheet, complete P29. Internet access is not needed for this. If you cannot find the yellow sheet, leave this blank and we shall complete it at another time.

IF YOU ARE ABLE TO COOK, please make the Italian Style Ragu P30 and the Cheese Sauce P31. Adapt your recipes if an ingredient is unavailable, but be sensible. Take a photograph and email it to yourself at school and we shall print them out upon our return.

Research and answer the 5 questions on P31 relating to the Cheese Sauce recipe.

I shall be sending everyone a booklet through the post. You may have already received it but please DO NOT start working on it yet. I shall be giving you details and guidance in the next phase of work to be set.

French:

You MUST check your email.

You will be emailed one PowerPoint and sound files.

You must complete the ppt Que fais-tu pour aider à la maison?

This should take you 4 hours.

Extra:

<https://quizlet.com/en-gb>

Using the search button: Que fais-tu pour aider à la maison

Contact:

Mrs Barats: florence.barats@spaldinghigh.lincs.sch.uk

Geography:

We are continuing with GCSE Global Development. On the VLE you will find a series of numbered resources. Your individual teacher will email you to let you know which ones to complete, based on how far your group got before we began remote learning!

German:

The work for these two weeks will be emailed to you (see a brief version below) so you **must** please read your school emails. If you have any queries please email Frau Carthy or your German teacher ☺

Katie.carthy@spaldinghigh.lincs.sch.uk mariana.almasi@spaldinghigh.lincs.sch.uk

sally.knowles@spaldinghigh.lincs.sch.uk dawn.bushell@spaldinghigh.lincs.sch.uk

Chapter 4 Die Kindheit – all exercises to be completed in yellow book (unless otherwise stated i.e. rough or Grammar). All vocab on p92-93

All work to be set out with date/title/page and exercise number

- 1) Work through the ppt (work through the PDF) in presentation mode
- 2) p78 – listen to Ex 1 listen to the 6 people match the picture to each statement
- 3) Look at the green grammar box on p78
- 4) Read the PPT slides called “Imperfect Tense Part One” haben (to have) sein (to be) and stick/copy up all slides including the examples into grammar book
- 5) Read the PPT slides called “Imperfect Tense Part Two” modals and stick/copy up all slides including the examples into grammar book
- 6) P91 Ex 3 Grammar questions on Imperfect tense with modals to be done in rough then self-mark
- 7) P79 complete ex 3 – reading exercise and ex 4 – vocabulary
- 8) Then choose one of the three texts and translate into English.
- 9) p79 Ex 6 – in rough complete the listening exercise, check your answers using the transcript.

History:

Complete all tasks on document titled **Y9 The Blitz** and **Y9 Dunkirk** (these can be found on the VLE).

Latin:

4 lessons plus homework.

- 1) Check the VLE for exercises and worksheets. Stage 17 Alexandria. Some of you have started this – work through the PowerPoint first making notes and completing the exercises on the genitive case. Work through the following exercises on the VLE under stage 17.
 - I. Alexandria (gap fill)
 - II. How much do you understand pp76-77?
 - III. Genitive p80
- 2) Use the www.cambridgescp.com and work through the sorting activities and complete the **practising the language** exercises which are the same as p83 Ex1+2. For both exercises write down the correct missing Latin word in your exercise book (doing it online will help you with this) and the translation – have a go online first and it will help you with this. (Do not copy the Latin)
- 3) Pp78-79 Check the VLE and complete the exercises that accompany these stories, you will need your textbook open as you work through.
- 4) **ad templum p81-82** translation. For *senatrix* choose to translate either the part of Barbillus or Plancus. For *imperatix* status include the italics and for *dea* do it all!

Extension: duolingo has added Latin to its courses – sign up and see if this helps!

Any queries email Mrs Jones: Charlotte.jones@spaldinghigh.lincs.sch.uk

Maths:

Topic focus: Constructions and Loci.

Complete any work set on MyMaths and Dr Frost Maths by your teacher, or use relevant pages in your CGP book. Chapter 7 in your homework book also has extra practice questions, as does mathsgenie.co.uk. Remember there are online lessons on both platforms and many videos on Dr Frost that can help. If you finish, use your notebook to look back at previous topics and consolidate these. Keep practising your numeracy – there are lots of games to practise times tables and key skills.

| |
|--|
| Construct the bisectors of lines and angles |
| Construct angles of 60° and 90°. |
| Draw a locus for a given rule |
| Solve practical problems using loci |
| Construct and interpret plans and elevations of 3D shapes. |

Music:

Continue working with Bandlab to produce your second song/instrumental. You can record instruments/vocals live into Bandlab. Make sure you have logged into the VLE to have a go at the Music KS3 resources which are now there.

Physics:

Science Work. By the end of the next two weeks, you should have completed all the work, for ALL THREE SCIENCES, that you have been set over the whole six weeks. Make sure you check back over the previous work to make sure.

Complete parts of the work below not covered in the previous weeks' work.

A) Use revision guide/textbook/this [BBC Bitesize link 1](#) and [link 2](#) to research the definitions, equations and units of work done, power and efficiency.

Complete the experiments described below to **measure your work done and power**. In your books or on paper describe the 3 experiments, write down all your measurements and show full calculations.

- 1) **Step on and off a step 20 times.** Measure the height of the step and times by 20 to get the distance - find your weight (mass in kg x 10) for the force and time how long it took you to complete the action. Use this to calculate your work and power. If you can't find your weight use 500N.
- 2) **Walk upstairs.** Measure the height of one step and times by the number of steps to get the distance - find your weight (mass in kg x 10) for the force and time how long it took you to complete the action. Use this to calculate your work and power. If you can't find your weight use 500N.
- 3) **Lift a 1kg object 5 times.** Pick up a 1kg bag of sugar (10N) 5 times. Measure how far you lift it and times by 5 to get the height. Time how long it took you to complete the action. Use this to calculate your work and power.

B) 1) Follow this link [BBC Bitesize energy stores](#) and make notes on stores/pathways/systems/transfer diagrams/conservation of energy - you can then complete the first part of the quiz.
2) Find 10 examples around your home and write down the energy transfers (identify the starting and end stores plus the pathways).

RS:

Use your revision booklet to help you plan an answer for the following 15-mark question: **"Sikhism is a religion of equality."** Discuss

First spend time going through the booklet identifying teachings and practices in Sikhism which support equality e.g. sewa, dasvandh, the langar, Nanak's teaching of a divine spark within, equal roles for men and women in the gurdwara etc.

Also explore what the gurus taught about women and how they promoted the rights of women. Use your booklets to help here or do further research online.

But remember that you must show a different point of view e.g. the Gurus taught a message of equality but in reality there are more men who are ragis and granthis than women and some say more women help in the langar.

Your exam board have a nice resource on equality in Sikhism which may help – link below:

http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2015-16/15-16_39/sikhism/eng/RS_8_Equality.html#

Spanish:

Contact Mrs Hickman if you have any questions about the work: Victoria.hickman@spaldinghigh.lincs.sch.uk.

Check your emails as I will email you work to complete:

1. Look at the vocab sheet, either print it out or copy it into your vocab book.
2. School uniform worksheet – if you are able to print it out, that's great, but don't worry if not. It doesn't matter, you don't need to. Title – KLO: to describe my school uniform (exercise book). Do this in your exercise book. Label the uniform in Spanish and in English. Use an online dictionary to help you. Spanishdict. Or wordreference.
3. School uniform worksheet – if you are able to print it out, that's great, but don't worry if not. It doesn't matter, you don't need to. Copy out the texts if you can't print the worksheet and then translate them. Complete the reading exercise and then mark it. Answers attached. Don't do the writing yet.

4. Go on to Languages online and complete - Caminos Book 2 Unidad 1 La ropa, ¿Cómo es?, En la tienda de moda, ESTE / ESE / AQUEL, LO, LA, LOS, LAS, El uniforme escolar
5. Then write 40-90 words for the two paragraphs. The first is describing your school uniform, the second is saying what you wear at the weekend. Remember when describing uniform, the colours go after the noun. For example: una falda azul. The colours have to agree with the item of clothing too, check the masculine and feminine endings. Do this in your exercise book. Don't email me this work please. Use the ppt slide to help you.
6. If you would like more to do, use the Senaca website and work your way through some of the topics.

Textiles:

You will be sent an email with the PowerPoint attachment for this work.

Task 1: In your red notebook write up the notes individually for each of the products included in the power point. Include a detailed explanation of why the fastening/fastenings are suitable for the user and function of the product.

Task 2: Research the creative use of fastenings in fashion garments and accessories.

Gather a minimum of 5 images from clothes in your wardrobe, magazines, catalogues or websites.

Mount the images and analyse their effectiveness for both function and aesthetics.

How does the fastening enhance the design?

Work hard and email your teacher if you need any help!

