Yr 11 - Science Information for Study Leave

Before each of the morning exams the subject teachers will be available in school from 8am and at lunchtime prior to the afternoon sessions. This will be a time when you may sit and work quietly with members of staff around should you need to do any last minute clarification.

Physics

Paper 1	Paper 2	
Energy	Forces	
Electricity	Waves	
Particle Model of Matter	Electromagnetism	
Atomic Structure	Space Physics	
	Questions in paper 2 may draw on an understanding of energy changes and transfers	
	due to heating, mechanical and electrical work and the concept of energy conservation	
	from the Energy and Electricity topics covered in paper 1.	

Additional Guidance

All details that could be included can be found in the Y11 Physics revision booklet on the Y11 Physics page of the website.

Useful websites are GCSE bitesize <u>https://www.bbc.com/education/examspecs/zsc9rdm</u> which has explanations and quizzes

Free science lessons <u>http://freesciencelessons.co.uk/</u> which has video explanations of all key topics and has now been updated to include all the topics in papers 1 and 2,

<u>http://www.physicsandmathstutor.com/physics-revision/gcse-aqa/</u> which has topic summary sheets and questions to try including the mark schemes.

In the Y11 Physics Files students can access past papers (with their mark schemes) for the legacy iGCSE but it should be noted that the content in papers 1 & 2 will not correspond to the content in the new specification paper 1 and 2 so should be used as consolidation of subject knowledge. In the Revision programme folder, students can find specific questions and mark schemes for each topic within the specification. There are also packs of past paper questions (under Homework Question Packs) that are organised with questions fitting to paper 1 or paper 2. Some have already been completed as HW but repeating can be helpful to ensure prior mistakes are eradicated and new knowledge has been learnt. Finally the file 'Some key definitions and explanations to learn' gives some simple wording of the key ideas that can be hard to explain in an exam.

Chemistry

Paper 1	Paper 2	
Particles, Atomic Structure	Atmosphere and Air	
and Periodic Table	Using Resources	
Structures and Bonding	Chemical Analysis Ion Testing and detection	
Energetics and Fuel Cells	Organic Chemistry	
Moles	Rates	
Metals	Equilibria	
Acids, Bases and Salts	In addition, students will be expected to know and understand some basic concepts	
Electrolysis	and principles from topics in paper 1: Atomic structure and the periodic table, Bonding,	
	structure, and the properties of matter and quantitative chemistry (moles)	

Additional Resources

The Yr11 file area <u>http://www.bws-school.org.uk/Curriculum-Exams/Science/Files/Y11Files/</u> for Chemistry has resources which will be useful to you including:

- A revision checklist
- Folder of Independent study guides they are useful video tutorial links and past paper questions and mark schemes. It is important that you mark the questions using the answers in the guide so that you are then able to focus any necessary further revision on areas of poor knowledge or understanding.

- Textbook, Revision Book and Workbook and also the revision sheets in the file area there are revision sheets for each topic which have condensed notes.
- BBC Bitesize https://www.bbc.co.uk/education/subjects/zs6hvcw

What can you do to help yourself during study leave?

- Go over the past paper questions and practice exams that you have done during the revision programme the AQA Practise Papers 1 and 2 (Set 1 and 2) are going to be the most helpful in helping you to identify what each paper will be like – revise any tricky topics on those papers.
- Make sure that you revise the correct topics for Paper 1 and Paper 2
- Continue to use the resources above
- If you want to do any further practice papers then the legacy AQA IGCSE Chemistry papers are good. There are copies of these papers and mark schemes on the file area of the website. Please bear in mind that the topics from paper 1 and paper 2 could be found on both papers and there won't be questions which assess your maths or practical skills in quite the same way.

Biology

Paper 1	Paper 2
Cell Biology and microscopes including stem cells and	
mitosis	Homeostasis and response
Transport in and out of cells. Diffusion/Osmosis and Active	Nervous system including the brain and he eye
transport.	Hormones
Digestion and Enzymes/Food tests	Plant Hormones eg auxin
Transport in animals. Heart/Blood/Circulatory	Kidneys and excretion/dialysis
systems/CHD and treatments	Control of Blood sugar/diabetes and Temperature control
Plant Transport. Phloem/Xylem/Transpiration and	Reproduction and fertility
translocation	Genetics and inheritance
Breathing Systems/gas exchange	Natural selection, variation, adaptation and evolution
Respiration and exercise	Ecology/food chains and populations
Photosynthesis	Human impact on ecosystems
Immunity and Communicable disease in animals and	
plants.	
Treating diseases/ drug development	
Non communicable diseases eg cancer	
Monoclonal antibodies	

Additional Guidance

The Yr11 file area <u>http://www.bws-school.org.uk/Curriculum-Exams/Science/Files/Y11Files/</u> for Biology has resources which will be useful to you including:

- A revision checklist has full information of what is in each topic.
- Textbook, Revision Book and Workbook
- BBC Bitesize <u>https://www.bbc.co.uk/education/subjects/zs6hvcw</u>
- If you want to do any further practice papers then the legacy AQA Biology papers. There are copies of these papers and mark schemes on the file area of the website. Please bear in mind that the topics from paper 1 and paper 2 could be found on both papers and there won't be questions which assess your maths or practical skills in quite the same way.