

NEWSTEAD WOOD SCHOOL

SCHOOLS GUIDE

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28 March 2025

Dear Parent/Carer,

#### **Revision and Preparation for the A Level Science Exams**

I am writing to you to set out what effective revision strategies your child should be using in preparation for their science A level exams in the summer, and what you can do to support them with this.

1. Firstly, it is important that your child has prepared a detailed revision timetable, which will ensure sufficient coverage not only of each subject, but of each of the topics from within each subject. This timetable should be in place by now, so that your child is prepared to make the best use of the time in the Easter holiday. You can support them by reviewing the timetable with them and making sure that it is detailed. Here is an example of what the timetable might look like:

Time	Monday	Tuesday	Wednesday
9am	Chemistry - Mole calculations	Biology - Required practical methods	Maths- Statistics
10am	Biology - Cell cycle	Maths - Fractions	Biology - DNA technology
11am	Break	Break	Break
11.30am	Maths - geometry	Chemistry - titrations	Chemistry - required practical methods
12.30pm	Chemistry - Thermodynamics	Maths - Quadratic equations	Go for a walk
1pm	Lunch		
2pm	Exercise	Trumpet practice	Maths -
3pm	Biology - Meiosis	Biology - Photosynthesis	Chemistry -

The important thing is that the timetable makes good use of the time but is also realistic to reflect where other regular commitments take place. Further guidance on making a revision timetable can be found here: <a href="Study support - BBC Bitesize">Study support - BBC Bitesize</a>

2. To be effective, revision should be an active process and should not simply involve reading through notes and highlighting details. It is important that your child is now completing practice exam style questions from previous exam papers. We have collated these for our students on the science SharePoint sites. (There are separate SharePoints for Biology, Chemistry and Physics.) Having completed practice

Headteacher: Mr Alan Blount, MA, BSc, QTS

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Newstead Wood School
Avebury Road
Orpington
Kent
t: 01689 853626
e: office@newsteadwood.co.uk
w: newsteadwood.co.uk













questions, your child should check their answers against the mark scheme and use this to identify any gaps in knowledge or areas where answers were not detailed enough. This then provides an opportunity to review gaps and make additional notes to address these gaps.

- 3. As well as completing longer answer questions from practice papers, it is a good idea for your child to regularly check their recall of key terms and concepts with warm up questions or flashcards. Good examples of these types of questions can be found in the Oxford Revision guides (<u>A Level Oxford Revise Revision Guides</u>) and in the CGP flashcards ( <u>Revision Cards and Flashcards | CGP Books</u>) You can help to support with this by asking some of the questions verbally to test your child's recall of key words and concepts together.
- 4. Oxford University Press publish a series of workbooks to support students with maths in a scientific context. (Maths Skills for Science for the latest A Level Biology, Chemistry, Physics and Psychology specifications, plus GCSE Science and GCSE Computer Science.). If your child requires further practice with their calculation questions, these books are very useful, providing worked examples and practice questions.
- 5. Your child must also revise practical skills and working scientifically using methods related to the Required Practicals that have been covered as part of the A level course, because some of the exam questions will relate to this. Resources to specifically support with revision of practical skills are available on the subject SharePoints.

### What revision and additional support is available at school?

As we near the end of teaching the syllabus, we are moving into a planned series of revision lessons. Here is an overview of these plans:

## **Biology**

Date or			
week			
beginning	Unit 3 teacher x 2 lessons	Unit 4 teacher x3 lessons	
	Topic 3.7	Topic 4.6	
	Finish Topic 3.7 evolution	Topic 4.6	
24 March	Exam feedback	Topic 4.6 (Including Nature's dice - restriction digest and electrophoresis practical)	
31 March	Finish up mock feedback	Essay feedback	
Wednesday 2 April = Test for 4.5, 4.6, 3.6 and 3.7		, 3.6 and 3.7	
	RP1 fluency + proteins &	Further essay practice	
	carbohydrates		
	Easter holiday		
Wednesday		Test feedback	
23 April	Fluency RP2 & cell cycle, plus Cells	Transport across membranes & RP3 fluency	
	and magnification calculations		
	Gas exchange	Mass transport	
28 April	Respiration and energy transfer	Homeostasis	
	DNA & protein synthesis	Nerves & response to stimuli	
		Gene expression	
5 May	Bank holiday Monday		
	Photosynthesis	DNA technology	
	Biodiversity, genetic diversity & RP6	Inheritance	

# Chemistry

Week beginning	Inorganic	Organic	
	Electrochemistry	Alkanes and alkenes	
24 Mar	Thermodynamics	Haloalkanes and alcohols	
	Chemical Kinetics		
	Amounts of Substance	Aldehydes and ketones	
31 Mar	Period 3 Oxides	Carboxylic acids and esters (RP10)	
	Atomic Structure and Bonding		
	Easter		
24 A	Bank Holiday and CPD		
21 Apr	2024 Paper 1		
	Periodicity	Aromatic Chemistry	
28 Apr	Transition Metals	Organic molecule tests	
	May Day		
5 May	Paper 3 practice		

## **Physics**

	3 hours per week teacher			2 hours per week teacher	
24 March	Mock feedback, multiple choice questions	Electric fields and capacitors	Cosmology	Simple Harmonic motion	Writing methods
31 March	Waves/harmonic s	Graphs and uncertainties	Electric circuits	Particle Physics	Radioactivity
Easter holiday					
21 April	Mechanics	Forces and motion (projectiles)	Momentum	Materials	Electrical properties/comp onents
28 April	Electric circuits, Kirchhoff's laws	Waves 1	Waves 2 and quantum physics	Thermal physics and ideal gases	Circular motion and oscillations
5 May	Gravitational fields	Electric fields	Magnetic fields	Particle Physics	Radioactivity

In addition to the regular support sessions that have already been taking place throughout the year, prior to the A level exams we will be inviting some students to additional support sessions at the following times during study leave. The Sixth Form team will contact you if we wish to invite your child to attend.

Biology	Monday 8.45 to 10.45am	Friday 11.05am to 13.05pm
Chemistry	Tuesday 8.45 to 10.45am	Wednesday 8.45am to 10.45am
Physics	Tuesday 11.05am to 13.05pm	Thursday 11.05am to 13.05pm

I hope that you will find this information useful. Should you have any questions, please do not hesitate to contact me at <a href="mailto:jlebreuilly@newsteadwood.co.uk">jlebreuilly@newsteadwood.co.uk</a>.

I wish your child every success with their forthcoming A level exams.

Yours sincerely

Jocelyn Lebreuilly

Mrs J Lebreuilly Head of Science