

### **Duke's Sixth Form**

### **3 Steps to Effective Examination Preparation**

Research has shown that revision is at its most effective when it is done in three different stages. At Duke's we call these 3 stages Learn > Revise > Test and we actively encourage all of our students to follow this process in their preparation for any exam series.

**Learn** is about getting organised for your **Revise** process by organising and familiarising yourself with your revision material The **Learn** phase works best if you start it early:

- Create a revision timetable
- Organise your notes
- Create revision resources such as flash cards

When you **Revise** you go over the learning material that you have previously organised and familiarize yourself with your Learn. To successfully Revise you need to do something with your notes to help you to put them into your memory. Try designing your own flash cards or mind maps and try to learn and remember them.

**Test** uses the knowledge you have gained through Learn and Revise. The more you test and use the knowledge you have gained the more flexible this knowledge will be, the easier you will be able to apply that knowledge to different questions and the better the knowledge will stay in your memory. Try tests and past paper questions.

Dear Students and Parents/Carers,

You are about to embark on a journey through revision and examinations which may seem daunting. You might be worried about where to start this journey and how to successfully navigate your way to exam success, but we are here to help. This guide will offer you a week by week plan to equip you for your revision. Access to the materials in this guide is only the first step, how you use them will enable you to make great strides towards your destination.

So what's the secret of successful revision? The answer is different for everyone and you need to find out what works best for you. But these four key points are essential for everyone to consider when revising:

#### Learn>Revise>Test

Research shows that following a 3 part revision strategy such as Learn>Revise>Test is the most effective and successful way of preparing for exams. Following our school Learn>Revise>Test strategy will ensure that you are fully prepared with a set of revision notes that contain no gaps and have an effective revision environment and timetable (Learn). It will also support you to remember the important information (Revise) and how to use and apply your knowledge (Test). Please see other information in this booklet for more detail on our Learn>Revise>Test strategy or refer to our website Effective Examination Preparation

#### **Time Management**

Be realistic, stick to it, plan time for breaks and relaxation. At the back of this guide is a paper copy of a weekly plan for when you are in school and one for the holidays. You can fill them in to help you plan your time wisely.

#### **Repetition**

The best way to transfer knowledge to your long-term memory is to revisit and repeat revision (experts say six times at least).

#### **Motivation**

Stay positive, your brain can only learn when you're relaxed and happy, so keep motivated. More on revision strategies and techniques can be found using the QR codes at the back of this booklet (also available on Firefly).

Lastly, you are not on this journey alone. Your teachers are here to support you; e-mail or visit your teacher if you have any questions about your revision. Also, your friends and classmates are revising too, support each other and work together to make this journey easier. The most difficult part of any journey is the first step.

Good luck, Sixth Form

## Art, Craft & Design Y13 Revision





# Year 12 – Applied Science

WEEK	TOPIC	REVIEW	TEST
Week 1	Unit 2 Laboratory Skills	Unit 2-3 Concentration of an	Formula
Week 2	Unit 2 Laboratory Skills	acid or base using titration	Balanced equations
Week 3	Unit 2 Laboratory Skills		Chemical reactions
Week 4	Unit 2 Laboratory Skills	Unit 2-4 Examine and	Microscopes
Week 5	Unit 2 Laboratory Skills	record features of biological samples	Calculations
Week 6	Unit 2 Laboratory Skills	<b>Unit 2-1</b> The importance of health and safety and quality systems to industry	Law and regulations
Week 7	Unit 2 Laboratory Skills	Unit 2-5 Identify cations and	Identity of cations
Week 8	Unit 2 Laboratory Skills	anions in samples	Identity of anions
Week 9	Unit 2 Laboratory Skills		Alternative identity
			techniques
Week 10	Unit 2 Laboratory Skills	Unit 2-6 Use aseptic	Method of aseptic technique
Week 11	Unit 2 Laboratory Skills	technique	Practical steps
Week 12	Unit 2 Laboratory Skills	<b>Unit 2-2</b> Separate, identify and quantify the amount of substances present in a mixture	Mole calculations

## **Construction Revision Timetable**

<u>Weeks to</u> <u>exam</u>	What I should be revising? What can I use for SPA/Unit 2 – check for relevant areas!
14 (WB 03.02.25)	Revisit your notes and presentations of <b>Task Sheet 1</b> - Read over and enhance your notes in preparation for exam: current construction materials – rate quality, property of materials, and area of use and identify where and how they may degrade or may have been affected already in certain situations. Then explain how to repair, substitute, protect or reverse material deteriorations.
13 (WB 10.02.25)	Revisit your notes and presentations of <b>Task Sheet 2</b> - Read over and enhance your notes in preparation for exam: + vapour penetration + embedded energy + thermal conductance + density + shear +compressive strength/forces +tensile strength/forces / Establish the different types of timber used in construction and why processed timber may be of advantage rather than natural timber. Establish the associated cost and what is technically possible with conventional compared to engineered timber!
12 (WB 17.02.25)	Revisit your notes and presentations of <b>Task Sheet 2</b> – Read over and enhance your notes in preparation for exam: material properties for the most common construction components/materials, including mass and density; tensile, compressive, bending and, shear strength; hardness; toughness;

	malleability; workability; stiffness; fatigue and creep considering how these properties affect the use of materials in construction applications. Establish sustainability issues and embedded energy and the impact on the environment relating to concrete and bricks as a material used in construction. Think of the manufacturing process too.
11 (WB 24.01.25)	HALF TERM
10 (WB 03.03.25)	Revisit your notes and presentations of <b>Task Sheet 3</b> - Read over and enhance your notes in preparation for exam: + Concrete setting process time lapse – 1hr, 24hr, 7 days, 28 days
	<ul> <li>+ Concrete grading and testing (in laboratory) + How can concrete be cured in ideal conditions and what do you have to avoid? +Explain the hydraulic process of cement bonding + What is the water cement ratio? + What is meant by aggregates – are they classified and how, if so? + Explain the ratio of concrete mixes and the importance of getting these right, especially where concrete is to be reinforced - is there anything to consider further then? + the mortar types and where they are commonly used</li> <li>+ Evaluate the main difference between concrete and mortar and research why the use of concrete must be minimised considering sustainability and environmental issues (CO2 output)</li> </ul>
9 (WB 10.03.25)	Revisit your notes and presentations of <b>Task Sheet 3</b> Read over and enhance your notes in preparation for exam: + the properties of gypsum and why it is a suitable material that helps regulate internal climate conditions (moisture) + list how this product is sold and installed and its specific advantages + explain why gypsum is only for internal use + explain if gypsum can be used for wet rooms and if so, how would that be the case? + the properties of redwood, whitewood and cedar and where they are commonly used + the properties of manufactured board types and where they are commonly used + Roofing materials, properties and where suitably used + Steel types / properties and where suitably used + investigate the main difference between iron and steel + Alloys / properties and where suitably used
8 (WB 17.03.25	Revisit your notes and presentations of <b>Task Sheet 3</b> Read over and enhance your notes in preparation for exam: + glass types including characteristics and use + manufacturing process + what determines the choice of glass in buildings, i.e. domestic, schools, hospitals or homes / + insulation materials + associated thermal conductivity W/m2K + area of use + which is the most environmentally friendly
	+ evaluate if we are facing a plastics crisis on a global scale and what the construction industry can do to help - critical thinking required/your evaluation/opinion / Investigate terms such as "natural agents, moisture movement, shrinkage, exposure conditions and loading" + explain chemical degradation + explain corrosion + material failure

7 (WB 24.03.25)	Revisit your notes and presentations of <b>Task Sheet 4</b> Read over and enhance your notes in preparation for exam: Establish what makes a good and efficient building (new) in terms of + Energy use + Human comfort in terms of acceptable heat or a lack of such + Personal factors and requirements + Principles of a buildings heat loss + Principles of a buildings heat gain + Conduction + Convection + How this is measured and controlled + Establish the significance of using the appropriate insulating materials in construction + "Hidden dangers or hazards" of insulation materials + Conclude why at some point the thickness of an insulating material will not work, meaning against its initial purpose of heat transfer (loss or gain) - think of material costs and eventual outcome.
6 (WB 31.03.25)	Revisit your notes and presentations of <b>Task Sheet 5</b> Read over and enhance your notes in preparation for exam: + Air temperature + Relative humidity + Air movement + Air velocity + Dry / Wet - bulb temperature + how thermostats work that control internal temperatures + how electronic control systems work + how remote control systems work and their advantages + condensation and areas affected – prevention/prediction + impact of structural temperature profiles + impact of dew point profiles
5 (WB 07.04.25)	Revisit your notes and presentations of <b>Task Sheet 6</b> Read over and enhance your notes in preparation for exam: Compare and conclude expansion under temperatures for + Steel + Concrete + Lead + Cast Iron + Copper +Aluminium + Timber + Common Brick / Also why certain combinations of materials are possible by relating to your researched values to reach safe structural conditions and suitable / legal U-values for new build homes and structures / Establish lighting requirements of internal environments such as + housing, schools, hospitals etca number of different factors need to be considered such as colour, contrast and glare Explain further: + Utilisation factor + Light loss factor + Day light factor / Also establish the principles of sound transmission within internal and external settings (housing) and what determines the choice and dimensions of materials and how this is optimised. Think of the following terms related to sound + Frequency + Standard units + Reduction Indices + Reverberation time + Flanking transmission
4	EASTER HOLIDAYS
(WB 14.04.25)	
3 (WB 21.04.25)	EASTER HOLIDAYS
2 (WB 28.04.25)	Revisit your notes and presentations of <b>Task Sheet 6</b> Read over and enhance your notes in preparation for exam: + coplanar forces +concurrent forces + non-concurrent forces + compression and tension + stress, strain and modulus of elasticity – Establish Hooke's Law and evaluate why the principle of Young's Modulus leads to the choice of materials in the

	construction sector – also give an example where you think elasticity range matters and what happens if it is surpassed. View the video playlist for load bearing situations and calculate some simple reactional forces / beam load – set yourself some basic examples and check against each other in pairs when suitable.
1	MAY BANK HOLIDAY
05.05.25)	
(WB 12.05.25)	Prepare for week of exam setting and condense your notes/read over these again/practice on areas of need. Throughout the weeks make sure your notes are kept in a secure and accessible space and where the unit 2 research phase starts, check as to where you can utilise specific aspects of your learning for the benefit of the paper in question. 2075K UNIT 1 EXAM 15.5.2025

### **Business Revision**



## Geography

Section	Suggested activities
General revision	<ul> <li>Create a glossary or quiz cards to test your knowledge of the key terms.</li> <li>Create a case study fact sheet or spider diagram which covers the key points of each case study. (Use the case study list to help you.)</li> <li>Plan out some past exam questions.</li> <li>Use the PLC to highlight your areas of weakness then focus on that area.</li> <li>Use Seneca to test your knowledge.</li> </ul>
Globalisation	<ul> <li>Define what is meant by the dimensions of globalisation.</li> <li>Bullet point (and then describe) each of the dimensions.</li> <li>Define what is meant by the factors of globalisation.</li> <li>Bullet point (and then describe) each of the factors.</li> </ul>
Global systems	<ul> <li>Define and describe political, social and environmental interdependence.</li> <li>Describe how and why flows of money are unequal.</li> <li>Describe how and why flows of people are unequal.</li> <li>Use the case study of Uganda to illustrate the unequal flows of people and money.</li> </ul>
International trade	<ul> <li>Make a list of the positives and negatives of international trade.</li> <li>Make a list of the trading organisations and outline what they do.</li> <li>Create a fact file on one of the major trading blocs, include the advantages and disadvantages of membership.</li> <li>Create a table to show the positives and negatives of TNCs in terms of the host and origin countries.</li> <li>Create a case study of a TNC (fact sheet or spider diagram) to show where it operates and what the patterns of production and consumption are.</li> <li>Create a case study of either a food commodity or a manufactured product (fact sheet or spider diagram) to show where it operates and what the patterns of production are.</li> <li>Outline what fair trade is and the benefits and limitations of its use.</li> </ul>
Global governance	<ul> <li>Outline the 'actors' involved in global governance.</li> <li>Outline what is meant by norms and laws.</li> <li>Outline the problems and inequalities in global governance.</li> <li>Create a table to show the successes and limitations of the UN.</li> </ul>
The 'global commons'	<ul> <li>Define what we mean by the global commons.</li> <li>Make a list of the threats to Antarctica.</li> <li>Make a list of reasons why Antarctica is important.</li> <li>Create a table to show the organisations which protect Antarctica, split your table into governmental and non-governmental.</li> <li>Summarise how effective the organisations have been in protecting</li> </ul>

	Antarctica.
Globalisation critique	- Create a table to show the positives and negatives of globalisation.
Useful links	<ul> <li><u>https://www.tutor2u.net/live/aqa-geography-a-level-live-revision-global-systems-global-governance</u></li> <li><u>https://www.physicsandmathstutor.com/geography-revision/a-level-aqa/global-systems-and-governance/</u></li> <li><u>https://www.tutor2u.net/geography/reference/antarctica-as-a-global-common</u></li> </ul>

## Health & Social Unit 4 Revision

Revision checklist – Unit 4	Red	Amber	Green
Anatomy and Physiology			
Cardiovascular system			
Heart diagram			
Heart function, process and			
regulation, tissue fluid			
CHD – causes, diagnosis			
methods, treatments. Lifestyle			
changes			
Respiratory structure			
Cellular respiration			
Cystic fibrosis - causes, diagnosis			
methods, treatments. Lifestyle			
changes			
Parts of the digestive system			
Enzymes			
IBS + Crohns - causes, diagnosis			
methods, treatments. Lifestyle			
changes			
Transverse bone diagram			
Parts of the bone			
Types of joint			

Osteoarthritis - causes, diagnosis		
methods treatments Lifestyle		
changes		
Rheumatoid arthritis - causes,		
diagnosis methods, treatments.		
Lifestyle changes		
Structure of the ear		
Process + function of hearing		
Types of hearing loss + impacts		
Eye - AMD		
Endocrine system		
Liver diagram		
Brain function		
Cirrhosis of the liver -causes,		
diagnosis methods, treatments.		
Lifestyle changes		
Lung diagram		
Kidney structure + process		
Nephrotic syndrome - causes,		
diagnosis methods, treatments.		
Lifestyle changes		
Stroke - causes, diagnosis		
methods, treatments. Lifestyle		
changes		

# **Psychology Revision**

<u>Weeks</u> to exam	What I should be revising?	Revised?
14 (WB	Social influence – types of conformity, explanations of conformity, variables effecting conformity. Asch and Zimbardo	
03.02.25	Explanations of obedience, Milgram and variations, explanations for resistance to social influence	

13 (WB 10.02.25 )	Social Influence – Moscovici and minority influence (consistency, commitment and flexibility), role of social influence processes in social change.	
12 (WB 17.02.25 )	Memory – Multi store model, including coding, capacity and duration, LTM (3 types), working memory model and theories of forgetting (interference and role of cues)	
11	HALF TERM	
(WB		
24.01.25		
)		
10	Memory – EWT (misleading info and anxiety) and cognitive	
(WB	interview	
03.03.25		
9 (\\\/D	Psychopathology – definitions of abnormality (deviation from	
	failure to function adequately. Depression characteristics	
10.03.23	Cognitive evplanations (Beck and Ellis) CBT	
<u> </u>	Psychonathology – phobia characteristics 2 process model	
(WB	systematic desensitisation and flooding OCD characteristics	
17.03.25	genetic and neural explanations, use of SSRIs to treat OCD	
7	Attachment – caregiver-infant interactions, stages of attachment	
(WB	(Schaffer and Emerson), Animal studies (Lorenz and Harlow).	
24.03.25	Explanations of attachment (learning theory and Bowlby's	
)	theory)	
6	Attachment – Ainsworth's strange situation and cultural	
(WB	variations. Bowlby and maternal deprivation, institutionalisation	
31.03.25	and the effects of this, influence of early attachment in	
)	childhood on adulthood.	
5	Approaches- Wundt and introspection. Biological approach,	
(WB	social learning theory, learning theory, psychodynamic,	
07.04.25	humanism and cognitive approach.	
)		
4	EASTER HOLIDAYS	
	Research methods	
14.04.25		
3	EASTER HOUDAYS	
(WB	Biopsychology	
21.04.25	21040101081	
)		
2	Schizophrenia – classifying and diagnosing schizophrenia,	
(WB	explanations of schizophrenia, treatments and the interactionist	
28.04.25	approach. Gender – explanations of gender, gender dysphoria.	
)		
1	MAY BANK HOLIDAY	
(WB	Forensic psychology – offender profiling, explanations of	
05.05.25	offending and treatments for offenders. Issues and debates.	
)		

(WB 12.05.25	Paper 1 recap	PAPER 1 – 16 <sup>th</sup> May am
, (WB 19.05.25 )	Paper 2 recap	<mark>PAPER 2 − 21<sup>st</sup> May am</mark>
(WB 26.05.25 )	MAY HALF TERM	
(WB 02.06.25 )	Paper 3 recap	
(WB 09.06.25 )		PAPER 3 – 9 <sup>™</sup> June am.

# Sports - Cambridge Technical Unit 1 Revision

Learning Outcome	WEEK	Key Topic/Component	Completed?
LO1: Understand the skeletal system in relation to exercise and physical activity	WEEK 1	<ul><li>1.1 The axial and</li><li>appendicular skeleton</li><li>1.2 Know your bones</li><li>1.3 Functions of the</li><li>skeleton</li></ul>	
	WEEK 2	<ul><li>1.2 Classification of joints</li><li>1.5 Types of synovial joints</li><li>1.6 Structure and function of synovial joints</li></ul>	
	WEEK 3	<ul><li>1.7 Joint movements</li><li>1.8 The vertebral column</li><li>1.9 The impact of training</li><li>on the skeletal system</li></ul>	

LO2: Understand the muscular system in relation to exercise and physical activity	WEEK 4	<ul><li>2.1 Main muscles acting at synovial joints</li><li>2.2 &amp; 2.3 Types of muscle function and contraction</li></ul>	
	WEEK 5	<ul><li>2.4 &amp; 2.5 Structure and function of muscle fibre types</li><li>2.6 The impact of training on the muscular system</li></ul>	
LO3: Understand the cardiovascular system in relation to exercise and physical activity	WEEK 6	<ul><li>3.1 Structures of the heart and their roles</li><li>3.2 Stroke volume, heart rate and cardiac output</li></ul>	
	WEEK 7	<ul><li>3.3 Structure of blood vessels</li><li>3.4 Components and functions of blood</li></ul>	
	WEEK 8	<ul> <li>3.5 Vascular shunt mechanism and the role of arterioles and pre-capillary sphincters</li> <li>3.6 The impact of training on the cardiovascular system</li> </ul>	
LO4: Understand the respiratory system in relation to exercise and physical activity	WEEK 9	<ul> <li>4.1 The structures of the lungs and their roles</li> <li>4.2 &amp; 4.3 The mechanics of breathing and the respiratory muscles used during exercise</li> </ul>	
	WEEK 10	<ul> <li>4.4 Gaseous exchange</li> <li>4.5 Tidal volume, breathing</li> <li>frequency and minute</li> <li>ventilation</li> <li>4.6 The impact of training</li> <li>on the respiratory system</li> </ul>	

LO5: Understand the different energy systems in relation to exercise and physical activity	WEEK 11	<ul><li>5.1The three energy</li><li>systems</li><li>5.2 The energy continuum:</li><li>intensity and duration</li></ul>	
	WEEK 12	5.3 The energy continuum: the recovery process	