## Year 13 Mock Examinations

## Monday 9<sup>th</sup> January 2023 and Friday 20<sup>th</sup> January 2023

Subject	Summary of Exam (Type/length)	Topic content
Art	Session 1: 5 hours Session 2: 5 hours	<b>Component 1: Outcome (10hrs)</b> Following on from the tutorial sessions, explore ideas in your sketchbook developing your concept further. It is important to explore themes referencing your focused artists, acting on feedback and next steps prior to the mock exam. You must be at the final development stage with a completed sketchbook to be handed in on completion of the mock. Please note this is the final completion date for coursework. There is no extension to this date.
	Paper 1 90 Minutes Total Marks: 80 marks The paper will have two sections. Section A: 20 marks This will consist of multiple- choice questions Section B: 60 marks This will consist of structured questions. Paper 2: 90 minutes Total Marks: 80 marks The paper will have two sections. Section A: 20 marks This will consist of multiple- choice questions. Section B: 60 marks This will consist of structured	Paper 1         The topics that will be covered are as follows.         • Module 1: Practical Skills         • Module 2: Foundations in Biology         • Module 3: Exchange and Transport         • Module 5: Only Chapter 13 Neuronal Communication         Paper 2         The topics that will be covered are as follows.         • Module 1: Practical Skills         • Module 2: Foundations in Biology         • Module 1: Practical Skills         • Module 2: Foundations in Biology         • Module 4: Biodiversity, Evolution and Diseases         • Module 5: Only Chapter 18, plus 17.1 and 17.2 from Chapter 17

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Business	Paper 1 90 minutes Traditional paper one, only change is, one of the two 25 mark essays has been removed. Paper 3 90 minutes Four questions of: 12, 16, 20 and 24 marks. Based on one case study and you knowledge of business.	Paper 1 Topics         Leadership styles         SWOT         Types of ownership         Strategic decision making (including Ansoff and Porter)         Costs, revenues and profits         Exchange rates         Ratio analysis         Variance analysis         Growth         Elasticity of demand         Capacity and capacity utilisation         Organisation structures         Market size and growth         Labour force calculations         Intrapreneurship         Stakeholders
Chemistry	Paper 1	<ul> <li>External influences</li> <li>Paper 3 Topics         <ul> <li>Stakeholders</li> <li>Measuring business success</li> <li>Leadership styles and objectives</li> <li>CSR</li> </ul> </li> <li>Paper 1 Topics:</li> </ul>
	90 minutes Advanced Inorganic and Physical Chemistry <b>Paper 2</b> 90 minutes Advanced Organic and Physical Chemistry	<ul> <li>Topic 1 Atomic structure and the Periodic Table</li> <li>Topic 2 Bonding and Structure</li> <li>Topic 3 Redox 1</li> <li>Topic 4 Inorganic Chemistry and the Periodic Table</li> <li>Topic 5 Formulae, Equations and Amounts of Substance</li> <li>Topic 8 Energetics I</li> <li>Topic 10 and Topic 11 Equilibrium I &amp; II</li> <li>Topic 12 Acid-Base Equilibria</li> <li>Topic 13 Energetics II</li> <li>Topic 14 Redox II</li> </ul>
		<ul> <li>Paper 2 Topics:</li> <li>Topic 2 Bonding and Structure</li> <li>Topic 3 Redox 1</li> <li>Topic 5 Formulae, Equations and Amounts of Substance</li> <li>Topic 6 Organic Chemistry I</li> <li>Topic 7 Modern Analytical Techniques I</li> <li>Topic 8 Energetics I</li> <li>Topic 9 Kinetics I</li> <li>Topic 13 Energetics II</li> <li>Topic 14 Redox II</li> </ul>

Subject	Summary of Exam (Type/length)	Topic content
Computer Science	Paper 1	Paper 1 Topics:
	Computer Systems	CPU architecture and factors affecting performance
	90 minutes	Fetch – Decode – Execute
	87 Marks	Little Man Computing
		<ul> <li>Databases – SQL and key terms</li> </ul>
	Paper 2	Compression
	Algorithms and Programming	<ul> <li>Object orientated programming</li> </ul>
	90 minutes 84 Marks	<ul> <li>Data representation – binary conversion, floating point, normalization</li> </ul>
		<ul> <li>Artificial Intelligence and its impact on discrimination</li> </ul>
		<ul> <li>Algorithm Tracing</li> </ul>
		<ul> <li>Algorithm Hacing</li> <li>Translating code – compiler and interpreter</li> </ul>
		Stages of compilation
		Character Sets
		Paper 2:
		Binary and Linear Search
		<ul> <li>Sorting algorithms – Bubble, Insertion and Merge</li> </ul>
		Big O Notation
		<ul> <li>Computational Thinking – abstraction, decomposition</li> </ul>
		Passing by value and reference
		Global and Local variables
		<ul> <li>Data Structures – Binary Tree, Graphs (Dijkstra's Algorithm),</li> </ul>
		Stacks
		Programming Techniques – Arrays, Recursion, Functions
Economics	Paper 1	Paper 1 Topics:
	Microeconomics Themes 1 and 3	Supply and demand
	1 hour 30 minutes	Price determination and consumer/producer surplus
	1 Hour 50 minutes	Elasticity
	Paper 2	Consumer spending/producer income
	Macroeconomics	Global warming and externalities
	Themes 2 and 4	<ul> <li>Understanding of microeconomic effects</li> <li>Costs and Revenues – to include calculations</li> </ul>
	1 hour 30 minutes	
		<ul><li>Perfect competition</li><li>Monopoly</li></ul>
		Paper 2 Topics:
		Monetary policy
		Inflation     Multiplier
		<ul><li>Multiplier</li><li>Circular flow of income</li></ul>
		Circular flow of income     AS/AD
		AS/AD     Protectionism
		International competitiveness     Eiscal policy
		<ul><li>Fiscal policy</li><li>Globalisation</li></ul>

Subject	Summary of Exam (Type/length)	Topic content
English Literature	Paper 3	Post 2000 Poetry
	Poetry	You will have a choice of two questions. The questions will each name
	Split over 2 sessions	a poem on the anthology to compare to the unseen poem.
		Please Revise:
	Paper 1	Effects, A Minor Role, On Her Blindness, To My Nine Year Old Self, An
	Post-2000 Poetry	Easy Passage, Genetics, The Deliver, Eat Me, The Gun, The Lammas
	10 named poems to revise	Hireling
	1 hour 15 minutes	Christina Rossetti
		You will have a choice of two questions, each with a named Rossetti
	Paper 2	poem. You will have to pick another poem from the anthology to
	Christina Rossetti	compare it to.
	A group of named poems	
	1 hour	Please Revise: Babylon the Great, Twice, Maude Clare, An Apple –
		Gathering, Remember, At Home, The World
		Consider the following themes:
		• Death
		The way women are portrayed
		Temptation
French	Paper 1	Paper 1 topics:
	Listening and Reading	<ul> <li>Les changement dans les structures familiales</li> </ul>
	Types of questions:	- La musique
	Multiple choice	<ul> <li>L'impact positif de l'immigration</li> </ul>
	Answer in French	- La France sous l'Occupation
	Summarise a recording in	- Les festivals
	French	
		Paper 2 topics:
	Paper 2	- Essay on La Haine
	Writing and translations	- Media
		- Education

Geography	Paper 1	Paper 1
	Physical Geography	Coastal Systems and Landscapes
	90 minutes	Coasts as natural systems - inputs, outputs, stores and
		transfers and how the coast demonstrates dynamic
	Paper 2	equilibrium, factors determining the energy of waves and
	Human Geography	wave types
	90 minutes	<ul> <li>Systems and processes - Sediment cells, erosion,</li> </ul>
		transportation and deposition, weathering and mass movement, wave refraction
		Coastal landscape development - landforms of erosion and
		deposition, and how landscapes change over time
		Coastal Management - hard and soft engineering strategies,
		shoreline management plans and coastline strategies
		• Coastal case studies - UK landscapes = Lyme Regis, Dorset
		and coastline beyond the UK = Odisha, India
		Hazards
		• The concept of hazards in a geographical context - physical
		and human factors determining the impacts of hazards, the
		Park Model and Hazard Management Cycle
		• Plate tectonics - the structure of the earth and the types of
		plate boundaries
		<ul> <li>Volcanic hazards - causes, impacts, responses and</li> </ul>
		management and their relation to plate tectonics
		<ul> <li>Seismic hazards - causes, impacts, responses and</li> </ul>
		management and their relation to plate tectonics
		<ul> <li>Storm Hazards - causes, impacts, responses and</li> </ul>
		management and their relation to plate tectonics
		Fire hazards - causes, impacts, responses and management
		and their relation to plate tectonics
		Hazard case studies
		Eyjafjallajokull volcano 2010
		Mount Merapi, Indonesia 2010
		Haiti earthquake 2010
		Japan Tohoku earthquake 2011
		Hurricane Sandy, 2012
		Typhoon Haiyan, 2013
		Alberta wildfire, Canada, 2016
		Paper 2
		Global Systems and Governance
		Globalisation
		o Dimensions of globalization:
		<ul> <li>Flows of capital, labour, products, service</li> </ul>
		and information
		<ul> <li>Patterns of production, distribution and consumption</li> </ul>
		consumption
		o Factors in globalization:
		<ul> <li>The development of technologies, sytstems</li> <li>and rolationships</li> </ul>
		and relationships
		Trade agreements
		Global Systems     Linequal flows of people, money, ideas and
		o Unequal flows of people, money, ideas and
		technology

a Unaquel neuror relations
o Unequal power relations
International trade and access to markets
o Global features and trends in the pattern of
international trade and investment associated with
globalization.
o Trading relationships
o Differential access to markets associated with levels
of development and trade agreements.
o The nature and role of TNCs (spatial organization,
production, linkages, trading and marketing
patterns)
o World trade in a food commodity
Global governance
o The emergence and developing role of norms, laws
and institutions in regulating and reproducing global
systems
o Agencies promote growth but may also exacerbate
inequalities
The global commons
Antarctica as a global common (threats arising from climate
change, fishing and whaling, mineral resources, tourism and
scientific research.
Contemporary Urban Environments
Urbanisation
o Global patterns
o Urbanisation, suburbanization, counter-
urbanisation, urban resurgence
o Economic, social, technological, political and
demographic processes associated with
urbanization and urban growth.
o Urban change: deindustrialisation, decentralization,
rise of service economy
o Urban policy and regeneration in Britain since 1979
Urban forms
o Contemporary characteristics
o Physical and human factors in urban forms.
o Spatial patterns of land use, economic inequality,
social segregation and cultural diversity in
contrasting urban areas
o New urban landscapes: town center mixed
developments, cultural and heritage quarters.
Fortress developments. Gentrified areas, edge
cities.
o The concept of the post modern western city.
Social and economic issues associated with urbanization
o Issues associated with economic inequality, social
segregation and cultural diversity in contrasting
urban areas.
o Strategies to manage these issues
Urban climate
o The impact of urban forms and processes on local
climate and weather

Subject	Summary of Exam (Type/length)	Topic content
		o Urban temperatures, precipitation, fogs and
		thunderstorms, wind, air quality
		o Pollution reduction policies
		Urban drainage
		o Urban precipitation, surfaces and catchment
		characteristics.
		o Impacts on drainage basin storage areas
		o Urban water cycle and water movement.
		o SUDS and river restoration
		Waste and its disposal
		o Sources and the environmental impacts of
		alternative approaches to waste disposal
		o Comparison of incineration and landfill to a
		specified urban area
		Other contemporary urban environmental issues
		Sustainable urban development

Subject	Summary of Exam (Type/length)	Topic content
Health and Social	Unit 1	Topics to Revise- Unit one
Care	Human lifespan development	Motor skills
	90 marks	Physical development across the life stages
	1 hour30 minutes	Self Concept
		Peer pressure
	Unit 2	Stages of play
	Working in Health and Social	Genetic predisposition / Genetic Inheritance
	Care	<ul> <li>Access to health and social care services</li> </ul>
	80 marks	Alcohol consumption
	1 hour 30 minutes	Environmental & social factors – premature death
		Poor housing
		Menopause
		Socialising in later adulthood
		Emotional and Social experiences across the life stages
		Topics to revise:
		The roles and responsibilities of people who work in the health and social care sector
		<ul> <li>The roles of people who work in health and social care settings</li> </ul>
		• The responsibilities of people who work in health and social
		care settings
		Specific responsibilities of people who work in health and
		social care settings
		Multidisciplinary working in the health and social care sector
		Monitoring the work of people in health and social care
		settings
		The roles of organisations in the health and social care sector
		<ul> <li>The roles of organisations in providing health and social care services</li> </ul>
		<ul> <li>Issues that affect access to services</li> </ul>
		Ways organisations represent interests of service users
		• The roles of organisations that regulate and inspect health
		and social care services
		<ul> <li>Responsibilities of organisations towards people who work in health and social care settings</li> </ul>
		Working with people with specific needs in the health and social care
		sector
		People with specific needs
		Working practices

Subject	Summary of Exam (Type/length)	Topic content
History	(Type/length) Exam Board = AQA Paper 1 The Making of a Superpower, USA 1865-1975 1 hour 30 minutes This will consist of one extracts question (25 marks) and one essay question (25 marks) Paper 2 The Making of Modern Britain, 1951-2007 1 hour 30 minutes This will consist of two essay questions worth 25 marks each.	<ul> <li>Paper 1 topics: <ul> <li>Crisis of Identity</li> <li>Economic Policies of the US government from the 1920s – 1940s during the period of Boom, Bust and Recovery.</li> <li>Political development in the 1890s including the Populist and Progressive movement and their impact on national politics.</li> <li>Social tensions and their impact on US society and politics between the periods of 1890 – 1930.</li> </ul> </li> <li>Paper 2 topics: <ul> <li>The Post War Consensus, 1970-1979</li> <li>Labour governments of Wilson and Callaghan: political, economic and industrial problems and policies; problems of Northern Ireland</li> <li>Society in the 1970s: progress of feminism; the Sex Discrimination Act; race and immigration; youth; environmentalism</li> </ul> </li> <li>The Impact of Thatcherism, 1979-1987 <ul> <li>Thatcher's economic policies and their impact: monetarism; privatisation; deregulation; issues of inflation, unemployment and economic realignment</li> <li>Impact of Thatcherism on society: sale of council houses; miners' strike and other industrial disputes; poll tax; extraparliamentary opposition</li> <li>Towards a new Consensus, 1987-1997</li> <li>Fall of Thatcher and her legacy</li> </ul> </li> <li>There will be revision materials uploaded onto Class Charts to aid you, which includes a checklist of the different topics.</li> <li>Revision Guides are available to purchase from your class teacher for a deposit of £5 per guide (one for each paper). You will receive the money back at the end of Year 13, upon the return of the revision</li> </ul>

Subject	Summary of Exam (Type/length)	Topic content
Law	Paper 1	Paper 1 topics:
	English Legal System and	English Legal System
	Criminal Law	Criminal Courts and juries
	1 hour 30 minutes	<ul> <li>Pre-trial procedures for each classification of offences</li> </ul>
		<ul> <li>Juries including evaluation</li> </ul>
	This will consist of 2 sections.	The Judiciary
	Section A worth 20 marks and Section B worth 40 marks	Inferior and superior judges
	Section B worth 40 marks	Demography of the judiciary
	Paper 2	Orden to all have
	Law Making and Tort Law	Criminal Law
	1 hour 30 minutes	<ul> <li>Property Offences</li> <li>Theft – actus reus and mens rea</li> </ul>
		<ul> <li>Robbery – actus reus and mens rea</li> </ul>
	This will consist of 2 sections.	Attempted Offences
	Section A worth 20 marks and	Actus reus
	Section B worth 40 marks	Mens rea
		Committing the impossible
		General defences
		Self-defence
		Evaluation of self defence
		Paper 2 topics:
		Law Making
		Statutory interpretation
		Extrinsic and intrinsic aids
		Evaluation of the literal rule
		The legislative process
		Types of bills and different stages from first reading down to
		royal ascent
		Evaluation of the law making process
		Tort Law
		Negligence
		Evaluation of duty of care
		<ul> <li>Evaluation of breach of duty and protection offered to algorithm.</li> </ul>
		claimants Occupiers Liability
		<ul> <li>Occupiers Liability</li> <li>Occupiers liability involving lawful visitors</li> </ul>
		<ul> <li>The duty owed to children</li> </ul>
		<ul> <li>Warning signs</li> </ul>
		Rylands v Fletcher
		Rylands v Fletcher
		Accumulation
		Non-natural – Transco
		Likely to cause mischief
		The thing escapes
		Foreseeability
		Defences
		Remedies

Subject	Summary of Exam (Type/length)	Topic content
Mathematics	Paper 1	Paper 1 & 2 Pure Content
	Pure and Mechanics	Functions
	90 minutes	Differentiation
	75 marks	Parametric Equations
		Trigonometry
	Paper 2 Pure and Statistics	Binomial Expansion and Partial Fractions
	90 minutes	Paper 1 Mechanics Content
	75 marks	SUVAT equations
		Variable acceleration
		Projectile Motion
		Paper 2 Statistics Content
		Conditional Probability
		Binomial Distribution (Year 12)
Media Studies	Component 1	Component 1
	Section A	Media language terminology
	c.45 minutes; audio-visual	Codes and conventions of music video
	(music video) question on	Responding to an unseen text
	media language	
	Component 2	Component 2
	75 minutes	All areas of the theoretical framework (media lang, representation,
	Magazines/Online Media	audience, industry) for:
		Magazines: Vogue and the Big Issue
		Online media: Zoella

Subject	Summary of Exam (Type/length)	Topic content
PE	Paper 1	Paper 1 content to revise:
	90 minutes	Analyse Movement: Upper Body
	Covering content from Year	Neural Control
	12 & 13 content (anatomy	Venous Return
	and physiology)	Gaseous Exchange during Exercise
		Energy Systems
	Paper 2	Aerobic Adaptations
	90 minutes	Periodisation
	45 minutes on Paper 2	Recovery
	45 minutes on Paper 3	Altitude
	Covering content from Year	Cardiovascular Drift
	12 & 13 (sports psychology and social culutral studies in	Ergogenic Aids – illegal
	Sport)	Newtons Laws of Motion
	Sporty	Levers
		Angular Motion
		• Bernoulli
		Paper 2 content to revise:
		Stages of learning
		Skills Classification
		Practice methods
		Transfer
		Memory
		Theories of learning
		Guidance and Feedback
		Personality
		Aggression
		Arousal and Anxiety
		Stress Management
		Social Facilitation
		Attitudes
		Motivation
		Groups and Teams
		Leadership
		Paper 3 content to revise:
		Pre-industrial Britain
		Post-industrial Britain
		Public schools – stage 2 & 3
		• 20 <sup>th</sup> century – law and order
		• 21 <sup>st</sup> century (including commercialism and the media, golden
		triangle)
		Modern Olympic Games
		Routes to Sporting excellence

Subject	Summary of Exam (Type/length)	Topic content
Physics	Paper 1 90 minutes 80 marks of short and long answer questions and multiple-choice questions Paper 2 90 minutes 80 marks of short and long answer questions, including questions assessing practical experiments and data analysis.	Paper 1         • Particles and radiation         • Mechanics         • Electrical Circuits         • Waves         Paper 2         • Thermal Physics         • Gas Laws         • Gravitational and Electric Fields         • Capacitors         • SHM         • Practical skills/techniques/error analysis/graphs
Psychology	Paper 1 1 hour 30 minutes worth 70 marks Paper 2 1 hour 15 minutes 54 marks Students need to bring calculators to both papers	<ul> <li>Paper 1:</li> <li>Social</li> <li>Cognitive</li> <li>Biopsychology</li> <li>Learning Theories</li> </ul> Paper 2: <ul> <li>Clinical – 1 hour 15 minutes.</li> </ul>

<b>Religious Studies</b>	A-Level RS	PAPER 1: Philosophy AO1 & AO2 and Christianity AO1		
	Paper 1	Α.	Philosophy Theme 1: Arguments for God's existence	
	Component 1 Philosophy &	В.	Inductive arguments: Cosmological Arguments	
	Christianity	C.	Telological Arguments	
	90 Minutes	D.	The Challenges	
		Ε.	Deductive arguments: Ontological	
	Paper 2	F.	Developments of Ontological arguments	
	Component 2	G.	The Challenges	
	Ethics & Christianity		5	
	90 Minutes	Philoso	phy Theme 2: Challenges to Religious Belief	
	50 Minutes	A.	The problem of Evil and Suffering	
		В.	Religious responses (Augustinian Theodicy)	
		C.	Religious responses (Irenaean)	
		D.		
		E.	Religion as a product of the mind (Yeung)	
		F.	Atheism	
		1.	Attestin	
		Dhiloso	phy Theme 3: Religious Experience	
			Nature of religious experience	
		A. B.	Mystical experience	
		С.	Challenges to religious experience	
		Chuistia	with Thomas 2	
			nity-Theme 2	
		A.	<b>o i ( , ,</b>	
		B.	Religious concepts (The Trinity)	
		C.	Religious concepts (The Atonement)	
		D.	с , , , , , , , , , , , , , , , , , , ,	
		Ε.	Religious life (community of believers)	
		F.	Religious life (key moral principles)	
			L: Ethics AO1 & AO2 and Christianity AO1	
			2: Deontological Ethics	
		А.		
		-	basis of morality	
		В.	Aquinas' Natural Law - the role of virtues and goods in	
		C	supporting moral behaviour:	
		C.	Aquinas' Natural Law - application of the theory:	
		Theme	3: Teleological ethics	
			Joseph Fletcher's Situation Ethics - his rejection of other	
		7.	forms of ethics and his acceptance of agape as the basis of	
			morality:	
		В.	Fletcher's Situation Ethics - the principles as a means of	
			assessing morality:	
		С.	Fletcher's Situation Ethics - application of theory: The	
			application of Fletcher's Situation Ethics to both of the issues	
			listed below:	
		•	homosexual relationships	
		•	polyamorous relationships	
		D.	Classical Utilitarianism - Jeremy Bentham's Act Utilitarianism:	
			happiness as the basis of morality:	
		Ε.	John Stuart Mill's development of Utilitarianism: types of	
			pleasure, the harm principle and the use of rules:	

Subject	Summary of Exam	Topic content		
	(Type/length)			
		F. Bentham's Act Utilitarianism and Mill's Rule Utilitarianism -		
		application of the theory:		
		Christianity- Theme 1		
		A. Jesus – his birth:		
		B. Jesus – his resurrection:		
		C. The Bible as a source of wisdom and authority:		
Sociology	Paper 1	Paper 1 topics:		
	Education with Theory and	Education		
	Methods	Class differences in achievement		
	1 hour 30 minutes	Ethnic differences in achievement		
	60 marks in total	Gender differences in education		
		The role of education		
	This will consist of two short	Education policy and 'closing the gap'		
	answer questions worth 4	Research Methods		
	marks and 6 marks	Choice of method and the research process		
	respectively and two essay	Experiments		
	questions worth 30 marks	Questionnaires		
	and 20 marks respectively.	Interviews		
		Observation		
	The 20 mark question will be	Official statistics		
	a methods in context [MIC]	Documents		
	question	Methods in the context of education research		
	Paper 2	Paper 2 topics:		
	Topics in Sociology	Families and Households		
	1 hour 30 minutes	Couples		
	60 marks in total	Childhood		
		Theories of the family		
	This will consist of two	Demography		
	shorter answer questions	Changing patterns and family diversity		
	[one on Families and	Social policy and the family		
	Households and the other on	Beliefs in Society		
	Beliefs in Society] worth 10	Theories of religion		
	marks each and two essay	Religion and social change		
	questions [one on FAHH and	Secularisation		
	the other on BIS] worth 20 marks each.	Religion, renewal and choice		
	marks edch.	Religion in a global context		
	Total marks for the mock	Organisations, movements and members		
	exam = 120 marks	Ideology and science		
	Focus your revision on those			
	areas that are highlighted!			

Subject	Summary of Exam (Type/length)	Topic content
OCR Sport	Unit 1	Topics to revise:
	Body systems and the effects	The axial and appendicular skeletons
	of physical activity	• The functions of the skeleton and the link to types of bone
	70 marks	Classifications of joint
		The types of synovial joint
	1 hour 30 minutes	<ul> <li>Structures and functions of synovial joints</li> </ul>
		Classifications of joints
		The types of synovial joint
		<ul> <li>Structures and functions of synovial joints</li> </ul>
		<ul> <li>Main muscles acting at synovial joints</li> </ul>
		<ul> <li>Structure and function of muscle fibre types</li> </ul>
		Types of muscle function
		Types of muscle contraction & the link between mix of fibre
		types and performance
		• The impact of physical activity, training and lifestyle on the
		muscular system
		The structures of the heart and their roles
		Stroke volume, heart rate and cardiac output
		Structure of blood vessels
		Components and functions of blood
		<ul> <li>Vascular shunt mechanism and the role of arterioles and pre- capillary sphincters</li> </ul>
		<ul> <li>The impact of physical activity, training and lifestyle on the</li> </ul>
		cardiovascular system
		<ul> <li>The structures of the lungs and their roles</li> </ul>
		<ul> <li>Respiratory muscles used during exercise</li> </ul>
		<ul> <li>The mechanics of breathing</li> </ul>
		<ul> <li>The impact of physical activity, training and lifestyle on the</li> </ul>
		respiratory system
		The three energy systems
		<ul> <li>The energy continuum and how intensity and duration of</li> </ul>
		exercise determines which energy system is predominant