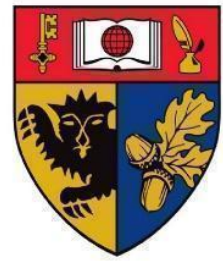


Summer Assessments



Year 9

Assessments are extremely important. This booklet provides you with an outline of knowledge and themes that may come up in your assessments. You must use all resources available to revise. This includes: class notes, knowledge organisers, self-quizzing and home learning tasks.

Contents

Assessment dates	2
Maths Revision Checklist	3
Science Revision Checklist	4
Geography Revision Checklist	9
History Revision Checklist	10
RE Revision Checklist	11
French Revision Checklist	12
Spanish Revision Checklist	13
Computing Revision Checklist	14

Summer Assessments



Schedule Year 9

TT Week 1	Monday 2nd June	Tuesday 3rd June	Wednesday 4th June	Thursday 5th June	Friday 6th June
Period 1				History 9B3	
Period 2	Spanish Writing 9B1 & 9B2 Computing 9B3				
Period 3			Maths A & B Side Paper 1 (Non Calc)	Spanish Reading & Listening 9B1+9B2 Music 9A1	
Period 4			Spanish Writing 9B3	Science B Side 9A1 French Writing	History 9A2 History 9A1 9A1 French Reading & Listening
Period 5		Computing 9B2		Science A Side Computing 9B1 History 9B2 Spanish Reading & Listening 9B3	French Writing 9A2

TT Week 2	Monday 9th June	Tuesday 10th June	Wednesday 11th June	Thursday 12th June	Friday 13th June
Period 1	RE 9B2 RE 9A2	Computing 9A2	Geography 9A1	Geography 9B3	Geography 9B1
Period 2			RE 9A1 RE 9B1 Geography 9B2 Music 9B3	Music 9A2	History 9B1
Period 3				Music 9B2	
Period 4		RE 9B3			Geography 9A2
Period 5	Maths A & B Side Paper 2 (Calc)	French Reading & Listening 9A2	Computing 9A1		Music 9B1

Summer Assessments



Maths Revision Checklist

Topic	SPARX Code	Tick
Converting Fractions, percentages, and decimals	M958, M264	
Powers and roots	M135	
Simplifying Expressions	M531, M795	
Solving Equations	M707, M509, M902	
Two-Way Tables	M899	
Direct Proportion	M478	
Expanding Brackets	M792, M237, M960	
Simplifying / Sharing Ratio and Writing Ratio as a fraction	M525, M85, M801, M267	
Inequalities	M118, M732, M384	
Coordinates	M618, M311	
Multiples, Factors, Highest Common Factor, Lowest Common Multiple	M365, M698, M227	
Factorising	M908	
Standard Form	M719, M678	
Straight Line Graphs	M932	
Index Laws	M120	
Substitution	M417, M327	
Rearranging	M242, M983	
Simultaneous Equations	M852	
Compound Percentages	U332	
Finding the nth term of a sequence	M866, M991, M381	
Equations of straight lines	M544	
Volume of Cuboids and Cylinders	M697, M765	
Area of Trapezium	M705	
Simplifying Surds	U338	

Summer Assessments



Science Revision Checklist

Topic	Sparx code	Tick
Biology Topic 1 Cells		
Use the terms 'eukaryotic' and 'prokaryotic' to describe types of cells	R489	
Describe the features of bacterial (prokaryotic) cells	R489	
Demonstrate an understanding of the scale and size of cells and be able to make order of magnitude calculations, inc standard form	R778	
Use estimations and explain when they should be used to judge the relative size or area of sub-cellular structures	R585	
<i>Required practical 1: use a light microscope to observe, draw and label a selection of plant and animal cells</i>	R585	
Describe the functions of the structures in animal and plant (eukaryotic) cells	R220	
Describe what a specialised cell is, including examples for plants and animals	R220	
Describe what differentiation is, including differences between animals and plants	R220	
Define the terms magnification and resolution	R585	
Compare electron and light microscopes in terms of their magnification and resolution	R585	
Carry out calculations involving magnification using the formula: magnification = size of image/ size of real object -inc standard form	R585	
Describe how genetic information is stored in the nucleus of a cell (inc genes & chromosomes)	R509	
Describe the processes that happen during the cell cycle, including mitosis (inc recognise and describe where mitosis occurs)	R509	
Describe stem cells, including sources of stem cells in plants and animals and their roles	R509	
Describe the use of stem cells in the production of plant clones and therapeutic cloning	R478	
Discuss the potential risks, benefits and issues with using stem cells in	R478	



Summer Assessments

medical research/treatments (inc diabetes and paralysis)		
Describe the process of diffusion, including examples	R264	
Explain how diffusion is affected by different factors	R264	
Define and explain "surface area to volume ratio", and how this relates to single-celled and multicellular organisms (inc calculations)	R359	
Explain how the effectiveness of an exchange surface can be increased, inc examples of adaptations for small intestines, lungs, gills roots & leaves	R359	
Describe the process of osmosis (inc calculation of water uptake & percentage gain and loss of mass of plant tissue)	R949	
<i>Required practical 3: investigate the effect of a range of concentrations of salt or sugar solutions on the mass of plant tissue</i>	R110	
Describe the process of active transport, including examples - gut and roots	R786	
Explain the differences between diffusion, osmosis and active transport	R786	
Chemistry Topic 1 Atoms and the Periodic Table		
State that everything is made of atoms and recall what they are	R139	
Describe what elements and compounds are	R447	
State that elements and compounds are represented by symbols; and use chemical symbols and formulae to represent elements and compounds	R994	
Write word equations and balanced symbol equations for chemical reactions, including using appropriate state symbols	R994	
Describe what a mixture is	R616	
Describe how the atomic model has changed over time due to new experimental evidence, inc discovery of the atom and scattering experiments (inc the work of James Chadwick)	R793	
Describe the difference between the plum pudding model of the atom and the nuclear model of the atom	R793	



Summer Assessments

State the relative charge of protons, neutrons and electrons and describe the overall charge of an atom		
State the relative masses of protons, neutrons and electrons and describe the distribution of mass in an atom	R945	
Calculate the number of protons, neutrons and electrons in an atom when given its atomic number and mass number	R786	
Describe isotopes as atoms of the same element with different numbers of neutrons	R945	
Define the term relative atomic mass and why it takes into account the abundance of isotopes of the element	R365	
Calculate the relative atomic mass of an element given the percentage abundance of its isotopes	R365	
Describe how electrons fill energy levels in atoms, and represent the electron structure of elements using diagrams and numbers	R945	
Recall how the elements in the periodic table are arranged	R684	
Describe how elements with similar properties are placed in the periodic table	R684	
Explain why elements in the same group have similar properties and how to use the periodic table to predict the reactivity of elements	R684	
Describe the early attempts to classify elements	R842	
Explain the creation and attributes of Mendeleev's periodic table	R842	
Identify metals and non-metals on the periodic table, compare and contrast their properties	R468	
Explain how the atomic structure of metals and non-metals relates to their position in the periodic table	R468	
Describe noble gases (group 0) and explain their lack of reactivity	R572	
Describe the properties of noble gases, including boiling points, predict trends down the group and describe how their properties depend on the outer shell of electrons	R572	
Describe the reactivity and properties of group 1 alkali metals with reference to their electron arrangement and predict their reactions	R925	



Summer Assessments

Describe the properties of group 7 halogens and how their properties relate to their electron arrangement, including trends in molecular mass, melting and boiling points and reactivity	R580	
Describe the reactions of group 7 halogens with metals and non-metals	R580	
Physics Topic 1 Energy		
Define a system as an object or group of objects and state examples of changes in the way energy is stored in a system	R606	
Describe how all the energy changes involved in an energy transfer and calculate relative changes in energy when the heat, work done or flow of charge in a system changes	R606	
Use calculations to show on a common scale how energy in a system is redistributed	R606	
Calculate the kinetic energy of an object by recalling and applying the equation: $[E_k = \frac{1}{2}mv^2]$	R707	
Calculate the amount of elastic potential energy stored in a stretched spring by applying, but not recalling, the equation: $[E_e = \frac{1}{2}ke^2]$	R802	
Calculate the amount of gravitational potential energy gained by an object raised above ground level by recalling and applying, the equation: $[E_e = mgh]$	R751	
Calculate the amount of energy stored in or released from a system as its temperature changes by applying, but not recalling, the equation: $[\Delta E = mc\Delta\theta]$	R527	
Define the term 'specific heat capacity'	R527	
<i>Required practical 1: investigation to determine the specific heat capacity of one or more materials.</i>	R527	
Define power as the rate at which energy is transferred or the rate at which work is done and the watt as an energy transfer of 1 joule per second	R602	
Calculate power by recalling and applying the equations : $[P = E/t \text{ \& } P = W/t]$	R602	
Explain, using examples, how two systems transferring the same amount of energy can differ in power output due to the time taken	R602	
State that energy can be transferred usefully, stored or dissipated,	R606	



Summer Assessments

but cannot be created or destroyed and so the total energy in a system does not change		
Explain that only some of the energy in a system is usefully transferred, with the rest 'wasted', giving examples of how this wasted energy can be reduced	R666	
Explain ways of reducing unwanted energy transfers and the relationship between thermal conductivity and energy transferred	R666	
Describe how the rate of cooling of a building is affected by the thickness and thermal conductivity of its walls	R666	
Calculate efficiency by recalling and applying the equation: [<i>efficiency = useful power output / total power input</i>]	R666	
HT ONLY: Suggest and explain ways to increase the efficiency of an intended energy transfer	R666	
List the main renewable and non-renewable energy resources and define what a renewable energy resource is	R476	
Compare ways that different energy resources are used, including uses in transport, electricity generation and heating	R476	
Explain why some energy resources are more reliable than others, explaining patterns and trends in their use	R476	
Evaluate the use of different energy resources, taking into account any ethical and environmental issues which may arise	R911	
Justify the use of energy resources, with reference to both environmental issues and the limitations imposed by political, social, ethical or economic considerations	R911	

Summer Assessments



Geography Revision Checklist

Topic	Code for KO	Tick
Resources		
What is a resource?	9.3.1	
How are resources distributed globally?	9.3.2	
Impacts of food security	9.3.3	
Ecosystem Exploitation		
The location of global ecosystems	9.2.1	
Why are ecosystems exploited?	9.2.2	
Rainforest exploitation - Coltan	9.2.4	
Coasts		
Coastal Process	9.2.8	
Erosional Landforms	9.2.10	
Longshore Drift	9.2.11	
Coastal management	9.2.15	
Economic Geography		
UK Employment	B	
Global Trade	I	
TNC's- Coca Cola	E, F, H	
Global Waterways		
Threats to Global Waterways	B	



Summer Assessments

History Revision Checklist

Topic	Code for KO	Tick
The Birth of the Modern World		
Timeline	9.3.A	
Transatlantic Slave Trade	9.3.B and C	
The 20th century		
Timeline	9.3.D	
First World War	9.3.E	
India	9.3.F	
Soviet Russia	9.3.G	
Weimar Republic	9.3.H	
Second World War	9.3.I	

Summer Assessments



RE Revision Checklist

Topic	Code for KO	Tick
Social justice	9.1	
UDHR successes and failures	9.1 C	
Homosexuality	9.1 G/H/I/J	
Sanctity of Life v Quality of Life	9.2 A/B/C	
Contraception	9.2 E/F/G	
Infertility Treatments	9.2 J/K	
Abortion	9.2 L/M/N/O	
Euthanasia	9.2 P/Q/R	
Capital punishment	9.2 Z/AA/BB	

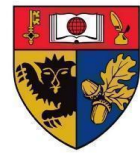
Summer Assessments



French Revision Checklist

Topic	Code for KO	Tick
Module 3 - Environmental and social issues	Sentence Builder	
Talking about global and social issues	SB5	
Describing the weather in your region	SB5	
Saying what you can do to protect the environment	SB6	
Module 4 - Social media and gaming	Sentence Builder	
Saying how you use technology	SB7	
Using present tense time phrases	SB7	
Giving your opinion about the internet	SB7	
Using <i>pour</i> + infinitive verbs	SB7	
Saying what you do with your phone	SB8	
Module 5 - Work	Sentence Builder	
Talking about your families' jobs	SB9	
Saying what your family did in the past for work	SB9	
Talking about your future career plans	SB10	
Saying where you would like to work and who with	SB10	

Summer Assessments



Spanish Revision Checklist

Topic	Code for KO	Tick
Module 3 - Environmental and social issues	Sentence Builder	
Talking about global and social issues	SB5	
Describing the weather in your region	SB5	
Saying what you can do to protect the environment	SB6	
Module 4 - Social media and gaming	Sentence Builder	
Saying how you use technology	SB7	
Using present tense time phrases	SB7	
Giving your opinion about the internet	SB7	
Using <i>para</i> + infinitive verbs	SB7	
Saying what you do with your phone	SB8	
Module 5 - Work	Sentence Builder	
Talking about your families' jobs	SB9	
Saying what your family did in the past for work	SB9	
Talking about your future career plans	SB10	
Saying where you would like to work and who with	SB10	



Summer Assessments

Computing Revision Checklist

Revision booklets for Computing will be handed out in class.

Topic	Revision Booklet Page	Tick
Networks and Protocols		
Network Roles	3	
Network Types (PAN, LAN & WAN)	4	
Network Hardware	6	
Network Topology	7	
The Internet	8	
Protocols	9	
Cyber Security		
Laws Related to Computers	10	
Social Engineering	11	
Cyber Attacks	12	
Malware	14	
HTML and CSS		
What is HTML?	16	
Tags	17	
What is CSS?	19	
Introduction to Python		
Functions	20	
Variable	20	
Data Types	21	
Selection	22	
Iteration	23	