

Head of Year Mrs Cotton

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A Message from Ms Milner

Dear Student,

This booklet has been put together to help you prepare fully for your Y10 End of Year Assessments which are taking place from the 10th - 26th June.

As you know, at ICA we have the highest academic expectations of all students, and this should be reflected daily through good learning habits in every lesson - working hard with determination to succeed. At this point you are halfway through your GCSE courses and we hope these assessments will be a good opportunity for you to demonstrate how much you have learnt so far. Your teachers will use your results to see whether you are working towards your full potential and to identify areas where you may need support to do so. They are critical in preparing you for the demands of Year 11 and it is important that you prepare yourself fully to do your best on these assessments. It is important to get into good habits for revising as soon as possible. Use the following pages to form a revision timetable which will help you to ensure you have looked over all the relevant information before your exam. If you are not sure about any of the topics or content listed then please speak to your teacher and ask for more guidance. They will be happy to help! When revising try to use a variety of strategies and formats to help you. This could include making mindmaps, writing out key term definitions (and testing yourself!), doing practice questions on Pearson Online, Seneca or Sparx, making flashcards with key facts, watching Youtube videos and much more. When used together they will ensure you are fully prepared for your assessments. Don't forget to also use your knowledge organisers. Have a look for more tips on BBC Bitesize by following this link **Top revision techniques for exams - BBC Bitesize**

Remember, the effort that you put in will be reflected in your achievements. In the long-term working hard now will put you in an excellent position for Year 11 and ultimately your GCSE's. We are all here to support you to achieve your full potential and if you need any additional guidance or have any concerns please speak to your subject teacher, form tutor or Head of Year.

All the best

Miss Milner

Assistant Principal

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Top Revision Tips

- HABIT Get into the habit of working in a regular routine.
- PLAN Plan your weekly revision, homework and leisure time on the timetables provided. Make sure you can realistically keep to the schedule that you have planned.
- PLACE Make sure that you work in the best possible environment:
 - The room should be well lit to reduce eye strain
 - Quiet with few distractions no TV or Phones. Sit on a chair at a table or desk rather than lounging on your bed or so close to a window that you might get distracted.
 - Identify a set time and place for studying most people study best in the mornings and evenings, but you need to work out the best time for yourself.

ORGANISATION

- Be fully prepared. Books, paper, pens, drinks etc. should all be organised before you start.
- Break each subject down into manageable chunks so that you can read over a topic once or twice in about 20 to 30 minutes. If you come across topics that you really don't understand, make a note of them and ask the subject teacher for help.
- VARIETY Get some variety into your revision. Vary your use of revision materials: notes, revision cards, books, websites, podcasts and videos. Keep a record of what you have done in this booklet to make sure you cover all topics and don't avoid the more difficult ones.
 - Begin your revision by re-reading your notes from the previous session. This will improve
 your recall. At the end of the week revise the whole week's work. Revision should involve
 checking your notes and writing down the main points may help you learn them more than
 you would by just reading them.
 - As the exam draws nearer have 'key words' which trigger your memory.
 - Saying things out loud can help you to learn and can improve your use of appropriate vocabulary. It is important to test yourself after each piece of work. Identify some questions you might think will be on the paper and write an outline answer for each one.
- **RELAX** Try to stop revising at least an hour before you go to bed. Relax to help you sleep. Working late will make you feel tired the next day. Only watch TV programmes that you enjoy rather than to fill in time. Get up early to make good use of your time.
- **HONESTY** Always be honest with yourself. Teachers can help you but they cannot do the work for you. Ask for help when you need it.
- PERSEVERE Don't give up: it really is not a long time and it will be worth it! Good luck!

English Language

English Language Paper 1 – 1hr 45 minutes – 80 marks

Section A - 40 marks.

Creative reading and writing

There will be 4 questions on the reading section of this paper:

Question 1 - write down 4 things you learn - 4 marks

Question 2 – How does the writer use language to...? - 8 marks

Question 3 – How does the writer structure the text to interest you as a reader? (8 marks)

Question 4 – 'A student having read this said: '_____' How far do you agree? - 20 marks

Creative writing

Students will be asked to create a narrative or a descriptive piece, they will be given an image, a title or a sentence as a stimulus. They must practise their writing regularly at home.

Language Paper 1



English Literature

English Literature Paper 1 – 1hr 45 minutes

Section A

Macbeth – You will be given an extract from Macbeth and a question. You should look at the extract and answer the question. - **50 minutes** -You should spend 50 minutes on this part of the paper.

You must discuss context and quotations in detail and think carefully about what Shakespeare's intentions are.

It will look like this:

You can achieve 30 marks for this question.

You can achieve 4 marks for SPaG

Section B

A Christmas Carol - You will be given an extract from A Christmas Carol and a question. You should look at the extract and answer the question. 50 minutes - You should spend **50 minutes** on this part of the paper.

You must discuss context and quotations in detail and think carefully about what Dickens' intentions are.

Your question will look like this:

You can achieve 30 marks for this question.

Maths 10F

Year 10 Foundation 10x2/10x3/10y2 Maths Paper 1 (non-calc) - 1hr 30mins - 80 marks Maths Paper 2 (calc) - 1hr 30mins - 80 marks

Topic		Sparx Topic
Solving equations and rearranging formulae	Solve linear equations up to and including those with the unknown on both sides of the equation. Changing the subjects of formulae.	U755, U325, U870, U505, U556, U221, U373
Linear Graphs	Recognise, plot and interpret straight line graphs. Find approximate solutions from graphs including real life graphs. Identify and interpret gradients and y intercepts including from the form $y = mx + cy = mx + c$	U789, U741, U933, U889, U638, U669, U315, U377, U477, U848, U862
Linear Simultaneous Equations	Solve two simultaneous equations algebraically and graphically. Derive two simultaneous equations from a situation in context.	U760, U757, U836, U137
Volume 2	Find and problem solve with volume of cubes, cuboids, prisms, cylinders, spheres, pyramids, cone and composite solids.	U786, U174, U915, U484, U116, U617, U426, U350, U543
Compound Measures	Interpret distance-time graphs. Change between standard units of measure and compound units of measure.	U914, U462, U896, U902, U388, U248, U468, U151, U256, U403, U914, U462, U966, U910, U527
Quadratics - graphical	Recognise, sketch and interpret graphs of quadratic functions. Find approximate solutions from graphs.	U989, U667, U601, U178, U963
Quadratics - algebraic	Factorise quadratic expressions and solve quadratic equations by factorising where the coefficient of $x2x2$ is 1.	U228
Further graphs	Recognise and be able to sketch cubic, reciprocal, inverse, and direct proportion graphs.	U980, U593, U238

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Maths 10F

Topic		Sparx Topic
Probability 2	Work with experimental and theoretical probability, knowing that probability sums to 1. Use probability tree diagrams for independent and dependent events. Find probabilities from Venn diagrams.	U803, U408, U510, U280, U166, U683, U580, U476, U748, U104, U558, U729, U296, U369
Statistics 2	Understand and draw types of charts, including bar charts, pictograms, stem and leaf diagrams and pie charts. Calculate and problem solve with averages and range. Plot, read and use scatter graphs.	U981, U363, U557, U508, U172, U653, U506, U200, U909, U291, U260, U456, U526, U569, U854, U877, U717, U322, U162, U590, U193, U199, U277, U128
Standard Form	Convert between normal numbers and standard form. Calculate with standard form.	U330, U534, U290, U264, U161
Ratio 2	Convert between ratio, fractions, and percentages. Write, simplify, and combine ratios. Share amounts given a ratio. Problem solve with ratio.	U687, U577, U753, U176
Growth & Decay	Set up, solve and interpret the answer of growth and decay problems including compound interest. Compare simple and compound interest.	U332, U988
Pythagoras Review	Calculate a missing side length from a right angled triangle. Use three side lengths of a triangle to determine if it's right angled.	U851, U385
Bearings & Scale Drawings	Measure and draw bearings. Draw and interpret scale diagrams. Calculate bearings using angles rules.	U257, U525, U107
Questions for my	teacher and topics I would like to revise more	

Maths 10H

Year 10 Higher - 10x1/10y1

Maths Paper 1 (non-calc) - 1hr 30mins - 80 marks

Maths Paper 2 (calc) - 1hr 30mins - 80 marks

Topic		Sparx Topic
Rearranging formulae	Changing the subjects of formulae including complex formulae involving fractions, roots and powers and where the subject appears on both sides of the formula	U556, U221, U373
Linear Graphs	Recognise, plot, and interpret straight line graphs. Find approximate solutions from graphs including real life graphs. Identify and interpret gradients and y intercepts including from the form y=mx+c.	U789, U741, U933, U889, U638, U238, U669, U315, U377, U477, U848, U862, U898
Linear Simultaneous Equations	Solve two simultaneous equations algebraically and graphically. Derive two simultaneous equations from a situation in context.	U760, U757, U836, U137
Volume 2	Find and problem solve with volume of cubes, cuboids, prisms, cylinders, spheres, pyramids, cone and composite solids.	U786, U174, U915, U484, U116, U617, U426, U350, U543
Compound Measures	Interpret distance-time graphs. Change between standard units of measure and compound units of measure.	U914, U462, U896, U902, U388, U248, U468, U151, U256, U403, U910, U527
Quadratics - graphical	Recognise, sketch and interpret graphs of quadratic functions, including where rearranging is needed. Find approximate solutions from graphs.	U989, U667, U601, U178, U963
Quadratics - algebraic	Factorise quadratic expressions and solve quadratic equations by factorising where the coefficient of $x2x2$ is ≥ 1 . Factorise by completing the square or using the quadratic formula. Deduce turning points. Use factorisation to simplify algebraic fractions. Multiply, divide, add and subtract algebraic fractions.	U228
Further graphs	Recognise and be able to sketch cubic, reciprocal, inverse, and direct proportion graphs. Expand triple brackets.	U980, U593, U238

Maths 10H

Topic		Sparx Topic
Probability 2	Work with experimental and theoretical probability, knowing that probability sums to 1. Use probability tree diagrams for independent and dependent events, including conditional probability and tree diagrams with algebraic expressions. Find probabilities from Venn diagrams.	U803, U408, U510, U280, U166, U683, U580, U476, U748, U104, U558, U729, U296, U369
Statistics 2	Understand and draw types of charts, including bar charts, pictograms, stem and leaf diagrams and pie charts. Calculate and problem solve with averages and range. Plot, read and use scatter graphs.	U981, U363, U557, U508, U172, U653, U506, U200, U909, U291, U260, U456, U526, U569, U854, U877, U717, U322, U162, U590, U193, U199, U277, U128
Cumulative Frequency and Box Plots	Calculate cumulative frequency. Draw and interpret cumulative frequency graphs. Draw, interpret and compare box plots. Find the range, quartiles and inter-quartile range.	U642, U182, U837, U879, U507
Standard Form	Convert between normal numbers and standard form. Calculate with standard form.	U330, U534, U290, U264, U161
Growth & Decay	Set up, solve and interpret the answer of growth and decay problems including compound interest. Compare simple and compound interest.	U332, U988
Ratio 2	Convert between ratio, fractions, and percentages. Write, simplify, and combine ratios. Share amounts given a ratio. Problem solve with ratio.	U687, U577, U176, U753, U921, U676, U865
Ratio 3	Solve complex multi-step problems involving algebraic terms.	U595
Similar shapes	Identify and use scale factors to find missing lengths in 2D and 3D shapes. Understand the effect of enlargement on angles, perimeter, area and volume of shapes and solids.	U551, U578, U630, U110, U350, U334
Algebraic proportion	Interpret equations and graphs that describe direct and inverse proportion. Construct equations for direct and inverse proportions including with word problems.	U640, U364, U238, U407, U138, U721, U357

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Maths 10H

Topic		Sparx Topic
Surds	Simplify and manipulate surds. Simplify surd expressions with factors that are square. Expand and simplify brackets with surds. Rationalise the denominator.	U633, U872, U338, U499, U707, U281
Right angled Trigonometry	Know the exact trig values. Find unknown lengths and angles using the sin, cos and tan.	U605, U283, U545, U627
Questions for my	teacher and topics I would like to revise more	

Science Trilogy

Combined Science Trilogy

Exam format: 3 x 1hr 15mins Exams (Biology, Chemistry Physics) 70 Marks each

Biology Paper 1

B1- Cells

- Microscopy
- Animal and Plant Cells
- Eukaryotic and Prokaryotic Cells
- Specialisation in Animal and Plant Cells
- Diffusion, Osmosis and Active Transport
- Osmosis in Plants
- Exchanging Materials (surface area to volume ratio, adaptations of exchange surfaces)
- Cell Division (Mitosis)
- · Growth and Differentiation
- Stem Cells
- · Stem Cell Dilemmas

RP Microscopy- Use a light microscope to observe, draw and label a selection of plant and animal cells. A scale magnification must be included

RP Osmosis - Investigate the effect of a range of concentrations of salt or sugar solutions on the mass of plant tissue

B2-Organisation

- · Tissues and Organs
- The Human Digestive System
- Catalysts and Enzymes
- Factors affecting Enzymes
- The Blood & The Blood Vessels
- The Heart & Helping the Heart
- Breathing and Gas Exchange
- Tissues and Organs in Plants
- Transport Systems in Plants
- Evaporation and Transpiration
- Factors affecting Transpiration
- Non-communicable diseases
- Cancer -Smoking, Diet, Exercise and Disease
- Alcohol and other Carcinogens

RP Food Tests - Use qualitative reagents to test for a range of carbohydrates, lipids and proteins. To include: Benedict's test for sugars; iodine test for starch; Biuret reagent for protein

RP Enzymes - Investigate the effect of pH on the rate of reaction of amylase enzyme. Students should use a continuous sampling technique to determine the time taken to completely digest a starch solution at a range of pH values. Iodine reagent is to be used to test for starch every 30 seconds. Temperature must be controlled by use of a water bath or electric heater

B3-Infection and Response

- Health and Disease
- Pathogens and Disease
- Preventing Infections
- Viral Diseases & Bacterial Diseases
- Disease caused by Fungi and Protists
- Human Defence Responses
- Vaccination
- Antibiotics and Painkillers
- Discovering Drugs & Developing Drugs

B4 - Bioenergetics

- Photosynthesis and The Rate of Photosynthesis
- How Plants use Glucose
- Making the most of photosynthesis (H only)
- Aerobic Respiration & The Response to Exercise
- Anaerobic Respiration
- Metabolism and the Liver (Liver H Only)
- RP Photosynthesis Investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed

Science Trilogy

Physics Paper 1

P1- Energy

- Energy calculations (e.g. Kinetic energy and gravitational potential energy).
- The law of conservation of energy.
- Energy stores and transfers
- Efficiency
- Improving efficiency(H)
 - Conduction
 - Specific heat capacity
 - Heating and insulating buildings
 - Energy demands
 - Renewable and non-renewable energy resources
 - Advantages and disadvantages of the different energy resources
 - The national grid

RP: Specific heat capacity- Investigate and determine the specific heat capacity of a metal block of known mass by measuring the energy transferred to the block and its temperature rise, using the equation for specific heat capacity.

P2- Electricity

- · Circuit symbols and functions
- Drawing circuit diagrams
- Calculating charge (Q=It)
- Ohm's law (V=IR)
- · Calculating power
- · Rules about series and parallel circuits
- Electricity uses in the home/mains electricity and the plug, AC/DC
- Fuses and circuit breakers
- Calculating energy transferred in an appliance

RP: Determining resistance of a length of wire. Set up circuits and investigate the resistance of a wire, and of resistors in series and parallel.

RP: Investigating Resistance Characteristics. Correctly assemble a circuit and investigate the potential difference -current characteristics of circuit components.

P3- Particle Model of Matter

- Calculating density of materials
- Changes of state
- Internal energy and temperature changes
- Changes of state and specific latent heat including use of graphs
- Particle motion of gases and gas pressure
- RP: Calculating Densities-Measure the mass and volume of objects and liquids and calculate their densities using the density equation

P4- Atomic Structure

- The structure of the atom, subatomic particles characteristics and development of the atomic model
- Mass number, atomic number and isotopes
- Radioactive decay and nuclear radiation including types of radiation
- Investigation and identification of each type of radiation
- Nuclear equations
- Half-lives and the random nature of radioactive decay
- Radioactive contamination

Science Trilogy

Chemistry Paper 1

C1- Atomic structure & The Periodic Table:

- Atoms
- Chemical equations
- Structure of the atom
- Electronic structure
- Ions and isotopes
- History of the atom
- Separation techniques
- Development of the periodic table
- Group1 alkali metals
- Group 7 halogens and trends.
- The Noble gases

C2- Bonding

- · States of matter
- Atoms into ions
- Ionic bonding
- Covalent bonding
- Simple molecules
- Giant covalent structures
- Fullerenes and graphene
- Bonding in metals.
- Alloys

C3- Quantitative Chemistry

- · Relative atomic mass
- Relative formula mass
- -Mole calculations (H)
- Calculating concentrations.

C4- Chemical changes

- The reactivity series
- Displacement reactions
- Extracting metals
- · Salts from metals
- Salts from insoluble bases
- Neutralisation and the pH scale.
- Strong and weak acids (H)
- Changes at the electrode
- Extraction of aluminium
- Electrolysis of aqueous solutions.

RP 2- Investigate what happens when aqueous solutions are electrolysed using inert electrodes. This should be an investigation involving developing a hypothesis.

RP 1-Preparation of a pure, dry sample of a soluble salt from an insoluble oxide or carbonate, using a Bunsen burner to heat dilute acid and a water bath or electric heater to evaporate the solution.

C5- Energy Changes

- Identifying endothermic and exothermic reactions
- Calorimetry investigation
- Drawing reaction profile diagrams for exothermic and endothermic reactions
- Bond energy calculations(H)

RP 3 - Investigate the variables that affect temperature changes in reacting solutions such as, e.g. acid plus metals, acid plus carbonates, neutralisations, displacement of metals. You should be able to use simple calorimetry equipment to measure a temperature change and evaluate the procedure.

Triple Science

Exam format: 3 x 1hr 45mins Exams (Biology, Chemistry Physics) 100 Marks each

Biology Paper 1

B1- Cells

- Microscopy
- · Animal and Plant Cells
- Eukaryotic and Prokaryotic Cells
- Specialisation in Animal and Plant Cells
- Diffusion
- Osmosis
- Osmosis in Plants
- Active Transport
- Exchanging Materials (surface area to volume ratio, adaptations of exchange surfaces)
- Cell Division (Mitosis)
- Growth and Differentiation
- Stem Cells
- Stem Cell Dilemmas

RP Microscopy- Use a light microscope to observe, draw and label a selection of plant and animal cells. A scale magnification must be included

RP Osmosis - Investigate the effect of a range of concentrations of salt or sugar solutions on the mass of plant tissue

B2-Organisation

- Tissues and Organs
- The Human Digestive System
- The Chemistry of Food
- · Catalysts and Enzymes
- · Factors affecting Enzymes
- How the Digestive System Works
- Making Digestion Efficient
- The Blood & The Blood Vessels
- The Heart & Helping the Heart
- Breathing and Gas Exchange
- Tissues and Organs in Plants
- Transport Systems in Plants
- Evaporation and Transpiration
- Factors affecting Transpiration
- Non-communicable diseases
- Cancer
- Smoking and the Risk of Disease
- Diet, Exercise and Disease
- Alcohol and other Carcinogens

RP Food Tests - Use qualitative reagents to test for a range of carbohydrates, lipids and proteins. To include: Benedict's test for sugars; iodine test for starch; Biuret reagent for protein

RP Enzymes - Investigate the effect of pH on the rate of reaction of amylase enzyme. Students should use a continuous sampling technique to determine the time taken to completely digest a starch solution at a range of pH values. Iodine reagent is to be used to test for starch every 30 seconds. Temperature must be controlled by use of a water bath or electric heater

Biology Paper 1

B3-Infection and Response

- · Health and Disease
- Pathogens and Disease
- Growing Bacteria in a Lab & Preventing Bacterial Growth
- Preventing Infections
- Viral Diseases & Bacterial Diseases
- Disease caused by Fungi and Protists

Human Defence Responses

• More about Plant Diseases

Plant Defence Responses

- Vaccination
- Antibiotics and Painkillers
- Discovering Drugs
- Developing Drugs
- Making Monoclonal Antibodies
- Uses of Monoclonal Antibodies

RP Microbiology (Biology Only) - Investigate the effect of antiseptics or antibiotics on bacterial growth using agar plates and measuring zones of inhibition

B4 - Bioenergetics

- Photosynthesis
- The Rate of Photosynthesis
- How Plants use Glucose
- Making the most of photosynthesis (H only)
- Aerobic Respiration
- The Response to Exercise
- Anaerobic Respiration
- Metabolism and the Liver (Liver H Only)

RP Photosynthesis - Investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed

Physics Paper 1

P1- Energy

- Energy Stores & Energy Transfer
- Conservation of Energy, useful and waste energy, energy dissipation
- Efficiency and efficiency calculations
- Improving efficiency
- Gravitational Potential Energy and GPE calculations
- Kinetic Energy and Kinetic Energy calculations
- Elastic Potential Energy and Elastic Potential Energy calculations
- · Weight and mass
- · Work done and work done calculations
- Power and power calculations (power equation 1)
- Conduction and Conductivity
- Insulating the home
- Specific Heat Capacity and Specific Heat Capacity calculations
- Advantages and disadvantages of each energy resource
- The uses of energy resources to generate electricity, for transport and for heating
- Changing patterns and trends in the use of energy resources
- Meeting base load demand and peak demand
- -Start up times and pumped storage systems

RP: Specific heat capacity- Investigate and determine the specific heat capacity of a metal block of known mass by measuring the energy transferred to the block and its temperature rise, using the equation for specific heat capacity.

RP: The Effectiveness of Different Materials as Thermal Insulators

P2- Electricity

- Atomic Structure
- Charging insulators
- Electric fields and the forces between 2 charged objects
- Electrostatic discharge
- The uses and dangers of electrostatically charged objects
- Circuit symbols
- Current and calculating current
- Potential difference and calculating potential difference
- Resistance and calculating resistance
- Components which change resistance in a circuit
- Current potential difference graphs
- Alternating and direct current
- Calculating Period and Frequency
- · Electrical cables and the role of the earth wire
- Plugs and fuses
- Circuit breakers and residual current circuit breakers
- Power and calculating power (equations 2 and 3);
 choosing the correct fuse
- Energy transferred by appliances and calculating energy transferred by appliances
- National Grid

RP: Determining resistance of a length of wire. Set up circuits and investigate the resistance of a wire, and of resistors in series and parallel.

RP: Investigating Resistance Characteristics. Correctly assemble a circuit and investigate the potential difference -current characteristics of circuit components.

Investigating the current – potential difference graphs of different components

RP: Patterns of resistance in series and parallel circuits

Physics Paper 1

P3- Particle Model of Matter

- Kinetic Theory and Using Kinetic Theory to explain the properties of the states of matter
- Density and calculating density
- Changes of state
- Internal energy
- Internal energy and temperature rise (linked to specific heat capacity)
- Internal energy and changes of state (linked to specific latent heat)
- Specific latent heat and calculating specific latent heat
- Interpreting heating and cooling graphs
- Gas Pressure and Temperature, Gas Pressure and Volume; Boyle's Law and Boyle's Law Calculations

RP: Calculating Densities-Measure the mass and volume of objects and liquids and calculate their densities using the density equation

P4- Atomic Structure

- Atomic structure, Ion formation and isotopes
- Development of the theory of the nuclear atomic model
- Radioactive decay
- Measuring radiation & Background radiation
- Types of radiation, their formation and their nature
- · Properties of different types of radiation
- Decay equations
- Half-life; interpreting half-life graphs; half-life calculations
- Contamination and irradiation; safety precautions
- Uses of radiation, including medical uses
- Fission & Fusion

Chemistry Paper 1

C1- Atomic structure & The Periodic Table:

- Atoms
- Chemical equations
- Structure of the atom
- Electronic structure
- Ions and isotopes
- History of the atom
- Separation techniques
- Paper chromatography
- Development of the periodic table
- · Group1 alkali metals
- Group 7 halogens and trends.
- The Noble gases
- Explaining trends in reactivity.
- Transition Metals

C2- Bonding

- · States of matter
- Atoms into ions
- Ionic bonding
- Covalent bonding
- Simple molecules
- Giant covalent structures
- Fullerenes and graphene
- Bonding in metals.
- Alloys

Nanoparticles and their applications.

Chemistry Paper 1

C3- Quantitative Chemistry

- · Relative atomic mass
- Relative formula mass
- -Mole calculations (H)
- Calculating concentrations.
- Yield of a chemical reaction
- Atom economy
- Titrations and titration calculations

Calculating volume of gases

C4- Chemical changes

- · The reactivity series
- Displacement reactions
- Extracting metals
- · Salts from metals
- Salts from insoluble bases
- Neutralisation and the pH scale.
- -Strong and weak acids (H)
- · Changes at the electrode
- · Extraction of aluminium
- Electrolysis of aqueous solutions.
- RP 2- Investigate what happens when aqueous solutions are electrolysed using inert electrodes. This should be an investigation involving developing a hypothesis.

RP 1-Preparation of a pure, dry sample of a soluble salt from an insoluble oxide or carbonate, using a Bunsen burner to heat dilute acid and a water bath or electric heater to evaporate the solution.

C5- Energy Changes

- · Identifying endothermic and exothermic reactions
- Calorimetry investigation
- Drawing reaction profile diagrams for exothermic and endothermic reactions
- Bond energy calculations(H)
- Chemical cells and batteries
- Fuel Cells

RP 3 - Investigate the variables that affect temperature changes in reacting solutions such as, e.g. acid plus metals, acid plus carbonates, neutralisations, displacement of metals. You should be able to use simple calorimetry equipment to measure a temperature change and evaluate the procedure.

Geography

Geography Paper 1 – 1hr 30mins (88 marks)

Topics Covered:

Living with Natural Hazards

- Natural hazards
- · Plate boundaries
- Tectonic hazards in contrasting countries Chilie and Nepal
- Managing tectonic hazards
- Tropical storms
- UK weather hazards

Living World

- Biomes and locations
- Tropical rainforests
- Tropical rainforests adaptions
- Tropical rainforests deforestation and management
- Cold environments
- · Cold environments adaptions
- Cold environments challenges, opportunities and management

Physical Landscapes

- UK physical landscapes
- Rivers drainage basins, long profile, erosion and transportation
- River landforms
- · Case Study of a River
- · River flood management
- Coasts waves, erosion and transportation
- Coastal landforms
- · Coastal management

REVISION

- Complete the revision topics and practice exam questions set on Seneca
- Use BBC Bitesize Geography AQA
- Make revision mind maps and notes to supplement your learning.
- https://www.bbc.co.uk/bitesize/topics/zcdrbk7

History

History Paper – Paper 1: Germany 1890 to 1945 and Conflict & Tension The First World War 1894 to 1918

Length of Exam: 2 hours long

Below is a checklist for the key content in the exam. You will find all the information in the bespoke revision guides handed out to you before the half term. As you read the revision guide complete the points tests to consolidate key knowledge.

Paper One Checklist

Germany	Tick when completed	World War One	Tick when completed
Germany before WW1		The alliance systems	
Impact of WW1 on Germany		Militarism	
How was the Weimar Republic run		Morocco 1905/1911	
The Treaty of Versailles		Problems in the Balkans	
Weimar economic problems- hyperinflation		Franz Ferdinand assassination	
Weimar political problems- Spartacists/Kapp Putsch		The July Crisis	
Munich Putsch		Schlieffen Plan/Battle of the Marne	
The Stresemann Years		Life in the Trenches	

History

Paper One Checklist

Germany	Tick when completed	World War One	Tick when completed
Why did people vote for Hitler		Verdun/The Somme	
Who voted for the Nazis		Gallipoli	
Hitler's consolidation of power		Passchendaele	
The Nazis and young people		War at Sea/ Battle of Jutland	
The Nazis and religion		Technology and weapons in WW1	
Women in Nazi Germany		USA enters the war 1917	
Economic changes in Nazi Germany		Russia leaves the war 1917	
Impact of WW2 on German economy		Ludendorff Offensive and its failure	
Propaganda and censorship		Why was Germany defeated in WW1	
Fear and terror in Nazi Germany			
Persecution against Jews			
Resistance to the Nazis			

French

Paper 1: Listening

Paper 2: Speaking

Paper 3: Reading

Paper 4: Writing

Below is a checklist for the key content in each exam as well as the total marks for that exam and the timings. The total marks for all exams are 230.

Reading

Foundation – 45mins (50 marks) Higher – 1 hour (50 marks)

Topics

- Friendships
- Volunteering
- Ambitions
- The school day

Listening

Foundation -35 mins (50 marks) Higher - 45 mins (50 marks)

Topics

- school subjects
- ambitions
- places in town
- free-time
- holidays

Writing

Foundation – 1hr 15 (60 marks) Higher – 1hr 20 (60 marks)

Topics

- School
- Ambitions for the future
- Work

Speaking

Foundation – 20mins (70marks) Higher – 25mins (70 marks)

Topics

- School
- Work
- Ambitions
- Free-time

Engineering

Unit 1 - Written Exam: (50min)

Topics to be covered in the exam:

- Engineering Disciplines
- Chemical, Mechanical, Automotive, Civil, Aerospace, Electrical, Biomedical, Communications, Software
- Engineering Tools
- Health and Safety
- Health and Safety at Work legislation
- Risk assessments
- PPE
- COSHH
- MHOR
- HASAWA
- RIDDOR
- Engineering Materials
- Woods
- Metals
- Plastics
- Composite Material
- · Manufacturing techniques and processes
- CAD Computer Aided Design
- Environmental issues
- SI Units of Measurement
- Engineering Drawing
- · Maths in engineering

Students will need to revise the sections above using the revision guide provided and the following websites

- www.technologystudent.com
- www.bbcbitesize

Unit 2 - Coursework Assessment

Truss Bridge Project

Students do not need to prepare any work in advance for work in this unit. All work will be completed in class.

The following pieces of work will be assessed;

- · Isometric drawing of the truss bridge
- Orthographic drawing
- Scale model of the truss bridge

Sport Studies

Assessment Format: Unit R185 Performance and leadership in sports activities.

Topics to be covered:

R185 TA1: Performance in two selected activities

- Performance of skills and techniques
- Appropriate use of tactics, strategies, compositional ideas and creativity
- Decision making
- Manage and maintain own performance (Individual activities)
- Awareness of role and contribution to the team (team activities)

R185 TA2: Applying practice methods to support improvement in a sporting activity

- Strengths and weaknesses skills/techniques/tactics/strategies
- Types of practice and progressive drills
- Altering the context of performance
- Measuring improvement in performance

Coursework Requirements:

Week	Торіс	Revision
1	 R185 TA1: Performance in two selected activities Practical log books for both sports showing extensive participation in chosen activity. Bare minimum of 12 sessions. 	Teams Lesson Resources
2	R185 TA2: Applying practice methods to support improvement in a sporting Activity Review of strengths and weaknesses in key components for the sport, considering: • Current level of ability • Why these have been identified as strengths or weaknesses • When are these important in a chosen sporting activity • How this will have an impact during training or performance • Tactics, strategies and compositional ideas to be used where applicable, depending on the chosen activity	Teams Lesson Resources

Sport Studies

Unit R185 – Topic Area 1: Key components of performance			
For individual activities			
MB1: 1–4 marks	MB2: 5-10 marks	MB3: 11–14 marks	
Demonstrates limited application of skills and techniques as an individual performer in a sporting activity.	Demonstrates sound application of skills and techniques as an individual performer in a sporting activity.	Demonstrates comprehensive application of skills and techniques as an individual performer in a sporting activity.	
Creativity, use of tactics/strategies/ compositional ideas and decision- making often shows limited accuracy and fluency.	Creativity, use of tactics/strategies/ compositional ideas and decision- making shows some accuracy and fluency.	Creativity, use of tactics/strategies/ compositional ideas and decision- making shows accuracy and fluency on most occasions.	
Ability to maintain performance is inconsistent.	Ability to maintain performance with some consistency .	Ability to maintain performance is consistent and confident.	
	For team activities		
MB1: 1–4 marks	MB2: 5-10 marks	MB3: 11–14 marks	
Demonstrates limited application of skills and techniques as a team performer in a sporting activity.	Demonstrates sound application of skills and techniques as a team performer in a sporting activity.	Demonstrates comprehensive application of skills and techniques as a team performer in a sporting activity.	
Creativity, use of tactics/strategies/ compositional ideas and decision- making shows limited accuracy and fluency.	Creativity, use of tactics/strategies/ compositional ideas and decision- making shows some accuracy and fluency.	Creativity, use of tactics/strategies/ compositional ideas and decision- making shows accuracy and fluency on most occasions.	
Limited awareness of role within the team/ contribution and communication with the team.	Some awareness of role within the team/ contribution and communication with the team.	Clear and well-developed awareness of role within the team/ contribution and communication with the team.	

Unit R185 – Topic Area 2: Applying practice methods to support improvement in a sporting activity		
MB1: 1–4 marks	MB2: 5–10 marks	MB3: 11–14 marks
The review of their performance is basic .	The review of their performance is sound in some aspects.	The review of their performance is detailed in most aspects.
Outlines strengths and weaknesses, with limited explanation.	Describes strengths and weaknesses with some explanation and justification.	Comprehensively describes the strengths and weaknesses with indepth analysis and justification.
The application of practice methods is basic and addresses in a limited way the weaknesses where improvement is needed.	The application of practice methods is sound and adequately addresses the weaknesses where improvement is needed.	The application of practice methods is considered and comprehensively addresses the weaknesses where improvement is needed.

Childcare

Year 10 - Childcare

Exam Format: 1hr 30 mins exam with total 80 total marks. The exam will cover all 9 content areas listed below.

Theme/ Topic	Revision Content
Child Development	Aspects of holistic development: Physical Cognitive Communication and language Social and emotional
Factors that influence the child's development	Nature and nurture Biological and environmental factors Effects of biological and environmental factors Transitions: Types of transition The impact of transitions on the child's development Support strategies
Care routines, play and activities to support the child	Basic care needs Basic care routines and play activities to support the child's development Basic care routines Play activities
Early years provision	Types of early years provision The purpose of early years provision Types of early years settings Variation in early years provision
Legislation, policies and procedures in the early years	Legislation and frameworks which underpin policy and procedure: Legislation, framework, policy and procedure definitions Legislation Health and safety procedure Equality and inclusion procedure Safeguarding procedure Confidentiality procedure OFSTED

Childcare

Theme/ Topic	Revision Content
Expectations of the early years practitioner	 Appearance Behaviour Attendance and punctuality
Roles and responsibilities within early years settings	 Early years practitioner roles Partnership working in the early years: How partnership working benefits the child, family and practitioner Specialist roles within early years settings Specialist roles outside the early years settings
The importance of observations in early years childcare	Observation and recording methods How observations support child development Objective and subjective observation Components of recording observations Different methods of observation Sharing observations
Planning in early years childcare	 The purpose of a child-centred approach The purpose of the planning cycle The planning cycle

Hospitality and Catering

Unit 1

Written Exam: 1 Hour (65 marks)
Topics to be covered in the exam:

The structure of the hospitality and catering industry

- · Residential Commercial Sector
- · Non Residential Commercial Sector
- · Residential Non Commercial Sector
- Non Residential Non Commercial Sector

Job roles in the Hospitality and Catering industry

- · Front- of- house staff
- · Back -of the house staff
- Activities/Job Roles of front/Back of the house and explain how they can meet customer needs
- The kitchen brigade
- · Kitchen workflow, FIFO
- · Small and Large Equipment

Working conditions across the hospitality and catering industry

- Full-time Contracts of employment (Advantages/Disadvantages)
- Part-time Contracts of employment (Advantages/Disadvantages
- Temporary Work (Advantages/Disadvantages)
- Casual Work (Advantages/Disadvantages)

Food related causes of ill health

- · Food allergens and food intolerances
- Common types of food poisoning and Symptoms comparison
- What is RIDDOR, Health and Safety Executive (HSE)
- Environmental Health Officer roles and responsibilities

Revision:

- https://www.wjec.co.uk/
- Catering revision guide

Hospitality and Catering

Unit 2

Practical Exam: 3 Hour (66 marks)

Task

Prepare, cook and present two dishes (The dishes can be a starter, main course or a desert)

Assessment Objectives:

- Demonstrate how to work safety, follow correct food safety and hygiene practices.
 (8 marks)
- Prepare the dishes, demonstrating a variety of basic, medium and complex preparation and knife techniques (24 marks)
- Cook the dishes, demonstrating a variety of basic, medium and complex cooking techniques.
 (26 marks)
- Present the dishes in a way that is appropriate for the brief (creativity, garnish and decoration, Portion control, accompaniments (8 marks)

Music

Context

1 hour 15 minute listening assessment.

Students will complete an exam style end of unit assessment focusing on AoS2 (Music for Ensemble). There are 8 questions each marked out of 12.

Topic Content

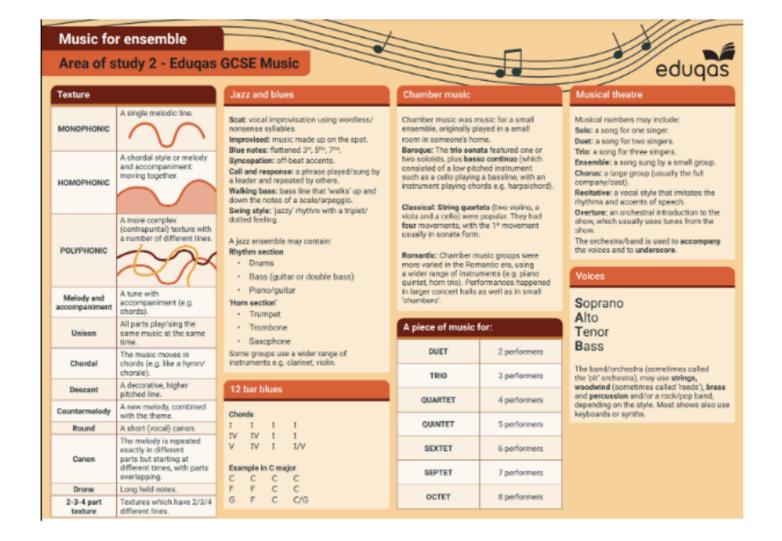
Area of Study 2 – Music for Ensemble

Marks

96

Recommended Revision

Revision via Course Notes and Focus on Sound



Year 10 ICT

Exam format: 1hr 20mins exam with 90 total marks. The exam will cover all topics of theory from the ICT in Society unit.

The following topics will be covered in the exam:

ne following topics will be covered in the exam:								
Theme/ Topic	Revision Content							
Functionality of different hardware devices	 Computing devices Input devices Output devices Storage devices Basic internal components Ports 							
Functionality of different software	 System software Applications software Utility software Specialist software Information handling software Open source software Communication software 							
Why data must be fit for purpose	 That data consists of raw facts and figures That information is data which has been processed by the computer That knowledge is derived from information by applying rules to it The need for good quality data The potential benefits of encoding data and the reasons for doing it Improvements in speed of access to data and increased storage Advantages and disadvantages of using information and Communication technology for storing data File types Data compression File properties 							
How input data is checked for errors	 Data capture methods Methods used for validation and verification and where they are appropriate Possible sources of error which could exist Techniques used to overcome these errors 							

Theme/ Topic	Revision Content
Services provided by IT	 You should be aware of how each service Improves efficiency/productivity for Businesses and/or individual users: Smart tv Gaming Image capture and manipulation Webcam services Social networking: information needed to create accounts; services available Music and sound including downloading from the internet and related issues Mobile phones Banking E-commerce systems Payroll Modern mail handling methods Control processes (feedback) Robotics and bionics Artificial intelligence (ai) and expert systems Online shopping and searching for products on websites Booking online Registration systems Management information systems Weather forecasting systems Remote storage technologies Online education and blended learning Security systems Accessibility Virtual reality and augmented reality 3d printing Wearable technologies Cloud computing Disabled accessibility Emerging technologies

Theme/ Topic Revision Content • The differences between local (LAN) and wide area (WAN) networks The purpose of protocols Computer network operation Network topologies including bus, star and ring How data transfers over Internet/extranet/intranet different types of network Devices within a network How data is transferred over a network Potential threats to data transfer (e.g., packet sniffing) · Cloud computing vs in-house servers • Emerging technologies Connection methods • Short range wireless connection (802.11 bluetooth), near-field **Different types of** • Communication (nfc) and radio-frequency identification (rfid) connectivity Medium range wireless connection (3g/4g/5g) • Long range wireless connection (microwave, satellite) • Ethernet, usb, micro usb and usb c emerging technologies Accidental damage Unintended disclosure by incorrectly assigned access levels · Malicious software including viruses, worms, trojan horses, spyware, **Risks to information held** ransomware, ddos and key logging on computers • Hacking (e.g., white, black and grey hat) Social engineering • Emerging threats Financial implications Moral and legal implications (including competitor advantage, breaking of The impact of data loss, gdpr/dpa, open to blackmail) theft or manipulation on Data manipulation individuals and businesses Loss of service

Loss of intellectual property

· Loss of reputation

Theme/ Topic	Revision Content
Methods used to protect information	 Logical protection including access levels, authentication, firewalls, antimalware applications, password protection and Encryption Physical protection including locks, biometrics, location of hardware, backup systems and security staff Security policies including disaster recovery, staff responsibilities, acceptable use policy and staff training
How moral and ethical issues affect computer users	 Privacy and security Cookies and data collection by multinational companies Monitoring of individuals Impact of data loss or damage
How legal issues protect computer users	 General data protection regulation (GDPR) 2018 Data protection act (DPA) 1998 Computer misuse act 1990 Communications act 2003 Regulation of investigatory powers act 2016 Copyright, designs and patents act 1988 Health and safety legislation.

Drama

BTEC Performing Arts: Component 3 Responding to a Brief

Activity 3: Workshop performance

You must present your group workshop performance or pitch/presentation to an invited audience. The group workshop performance must be between 7 to 15 minutes long. You will need to perform as part of a group and work together.

Each design candidate must give a pitch/presentation of between 5 to 10 minutes at the start of the workshop performance.

You will be assessed on your individual skills and techniques, your collaboration with others and your communication of creative ideas to the audience through your role.

(Total for Activity 3 = 18 marks)

The Brief

You have been commissioned by your local Primary Care Trust (PCT) to contribute to a new performing arts health education project.

This project aims to explore health education messages to improve the health and well-being of people living in your area.

They have set the stimulus for the performance as: 'Too good to be true'
In response to this stimulus, you must work as part of a group of 3-7
performers, to contribute to a Workshop Performance (10 to 15 minutes) that communicates ideas and creative
intentions to a specific target audience on aspects of health and well-being. Throughout the task you must participate
in discussions and practical activities to shape and develop original material.

Mark	0	1-4	5-9	10-14	15-18
Activity Number 3: Workshop Performance		Limited delivery and communication of ideas through their role.	 Appropriate delivery and communication of ideas through their role. 	Effective delivery and communication of ideas through their role.	Confident delivery and communication of ideas through their role.
		Demonstrates limited ability to communicate with others.	Demonstrates some ability to communicate with others.	Demonstrates competent ability to communicate others.	 Demonstrates assured ability to communicate with others.
		Limited application of skills and techniques according rol e.	Appropriate application of skills and techniques according to role.	Effective application of skills and techniques according to role.	Fluent application of performance skills and techniques according to role.
	No rewardable material				

Art & Textiles

Year 10 GCSE Art, Craft & Design and GCSE Textiles Design 3 hours- 30 marks

Both Art and Textiles use OCR as their exam board. The course is split onto two components: Portfolio

- Coursework
- Worth 60%
- This is developed throughout Year 10 and the start of Year 11
- All work must be submitted by December 2024

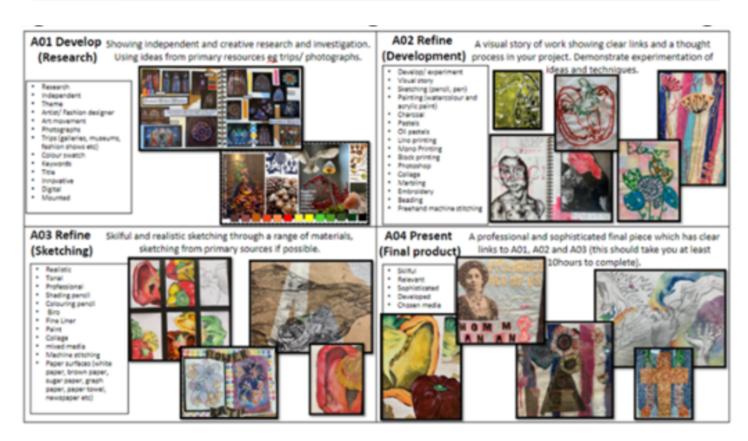
Set task

- Coursework and controlled assessment
- Worth 40%
- This is the second project which is started in January of year 11.
- All work must be submitted 20th April 2025
- Controlled assessment 10 hour exam in April of year 11

Art & Textiles

Students are assessed on four criteria:

	Assessment Objectives										
A01	Develop ideas through investigations, demonstrating critical understanding of sources.										
AO2	Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.										
AO3	Record ideas, observations and insights relevant to intentions as work progresses.										
A04	Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.										



For the exam, students will focus on A02 and sit a 3 hour exam in the classroom. Students will independently produce a piece of artwork or textiles sample which clearly links to their project. This piece of work should showcase their skills and be a finished piece of work. There is no set materials or mediums which can be used as this is their interpretation and showcases their chosen ability. Students can prep their work in lessons running up to the exam and ask for support prior to the exam.

My Revision Planner

	9am	10am	11am	12am	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	md6
Monday													
Tuesday													
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My Revision Planner

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My Revision Planner

	9am	10am	11am	12am	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	md6
Monday													
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Timetable

Week 1

	Monday 10th June	Tuesday 11th June	Wednesday 12th June	Thursday 13th June	Friday 14th June
Registration and Revision (8.00am)	Y10 English revision	Y10 Geography revision	Y10 Maths revision	Y10 Biology revision	
Period 1 Exam start 9.00am			Y10 Maths P1 (1h 30m)	Y10 Biology Triple (1h 45m)	Y10 Drama
Period 2		(1h 30m)		Combined (1h 15m	Y10 Art
Break					
Period 3	Y10 English			Y10 French	Y10 Art
Period 4	Language (1h 45m)	Y10 Geography (1 h 30m)	Y10 Catering Practical	Writing H – 1h 20m F – 1h 15m	
Lunch			Group B		
Period 5 Exam starts at 2pm					
Revision (3-4pm)	Y10 Geography revision	Y10 Maths revision	Y10 French revision	Y10 English revision	Y10 Chemistry revision

Timetable

Week 2

	Monday 17th June	Tuesday 18th June	Wednesday 19th June	Thursday 20th June	Friday 21st June
Registration and Revision (8.00am)	Y10 English revision	Y10 History/ICT revision	Y10 Engineering revision	Y10 Maths revision	Y10 Physics revision
Period 1 Exam start 9.00am	Y10 English Literature (1h 45m)	Y10 History (2 hours)		Y10 Maths Paper	Y10 Physics Triple
Period 2	(111 43111)			2 (1h 30m)	(1h 45m) Combined (1h 15m
Break					
Period 3		Y10 Music (1h 15m –			
Period 4	Y10 Chemistry Triple (1h 45m) Combined (1h 15m)	classroom) Y10 Childcare (1h 30m) Y10 ICT (1h 20 min)	Y10 Engineering (1h)	Y10 Hospitality & Catering (1h)	Y10 French Reading and Listening
Lunch					
Period 5 Exam starts at 2pm					
Revision (3-4pm)	Y10 History Revision	Y10 Engineering revision	Y10 Maths revision	Y10 Physics revision	

Timetable

Week 3

	Monday 24th June	Tuesday 25th June	Wednesday 26th June	Thursday 27th June	Friday 28tht June
Registration and Revision (8.00am)					
Period 1 Exam start 9.00am					
Period 2					
Break					
Period 3					
Period 4	Y10 Catering Practical				
Lunch	Group D				
Period 5 Exam starts at 2pm					
Revision (3-4pm)					

