



**The Ellesmere Port**  
C of E College

# **Year 11 Summer Exam Adaptations Information**



Part of the  
**Frank Field**  
Education Trust

## EDUQAS GCSE ENGLISH LANGUAGE

### **Component 1 – 20<sup>th</sup> Century Literature Prose Reading and Creative Writing** **1 hour and 45 minutes**

#### **40% of qualification**

- Section A (20%) – Reading comprehension (40 marks)
- Section B (20%) – Writing a story (40 marks)

### **Component 2 – 19<sup>th</sup> and 21<sup>st</sup> Century Non-Fiction Reading and Transactional/Persuasive Writing**

**2 hours**

#### **60% of qualification**

- Section A (30%) – Reading comprehension (40 marks)
- Section B (30%) – Two writing tasks (40 marks)

#### **Summary of EDUQAS alterations:**

- **Component 1** – no changes
- **Component 2 Section A Reading:** Eduqas have confirmed that the reading materials will be a 21st century article from newspaper and a 19th century extract from non-fiction book.
- **Component 2 Section B Writing:** Eduqas have confirmed that the two writing tasks will consist of a formal letter and a magazine article.

## EDUQAS GCSE ENGLISH LITERATURE

### Component 1:

**Shakespeare (*Macbeth*) and Post 1914 Prose (*An Inspector Calls*)**

**2 hours**

**50% of qualification**

There will be two separate one-hour papers.

- Shakespeare (*Macbeth*) (25%)  
One extract question and one essay question
- Post 1914 Prose (*An Inspector Calls*) (25%)  
One source-based question

### Component 2:

**19<sup>th</sup> Century Prose (*A Christmas Carol*) and Unseen Poetry**

**2 hours**

**50% of qualification**

There will be two separate one-hour papers.

- 19<sup>th</sup> Century Prose (*A Christmas Carol*) (25%)  
One source-based question
- Unseen Poetry from the 20<sup>th</sup> or 21<sup>st</sup> Century (25%)  
Two questions on unseen poems, one of which involves comparison

### Summary of EDUQAS alterations:

- Removal of one element of the exam. We have chosen to remove Poetry Anthology.
- More time allocated (extra 15 minutes) for responses to questions on *An Inspector Calls* and *A Christmas Carol*.

**HIGHER TIER - EDEXCEL**

	Paper 1	Paper 2	Paper 3
<b>Number (*see Ratio – some overlap of topic areas)</b>			
Arithmetic			Negative number
Fractions	Fraction of an amount		
	Fraction arithmetic		
	Recurring decimal to fraction		
Properties	Product of prime factors		
	Negative and fractional indices		Laws of indices
Powers and roots	Simplification of surds		
Standard Form	Conversion		
	Calculation		
Approximation and Estimation		Error interval	
			Bounds
Other		Use of a calculator	
			Product rule for counting

**Algebra**

Manipulation	Simplification	Simplification	Simplification
	Expansion of bracket	Expansion of bracket	Expansion of bracket
		Factorisation	
		Laws of indices	
			Substitute values
			Change subject of a formula
			Forming an expression
			Expansion of brackets
	Algebraic fractions		Difference of two squares
Equations and inequalities		Linear equation	
	Form an equation	Form an equation	
	Linear inequality		
	Quadratic equation		
		Quadratic inequality	
		Equations of parallel lines	
	Equation of a tangent to a circle		
		Set up and solve equation	
		Simultaneous equations linear /quadratic	
Graphs		Coordinates	
	Quadratic graph		
			Gradient of a straight line graph
	Gradients of parallel and perpendicular lines		
	Speed-time graph		
	Gradient of a curve		
Functions		Transformations of functions	
		Graphs of trigonometric functions	
		Inverse and composite functions	

**Ratio, proportion, and rates of change (\*see Number – some overlap of topic areas)**

Conversion		Area	Time
Percentages	Percentage of an amount		Percentage decrease
		Depreciation	Depreciation
			Reverse percentage
Ratio	Write as a ratio		Write as a ratio
	Use of ratio	Use of ratio	
	Share in a ratio		1 : n form
	Ratio to fraction		Share in a ratio
Proportion		Direct proportion	Direct proportion
		Currency conversion	
		Inverse proportion	
	Equations of proportion		
Compound Measures	Density		Average speed
		Pressure	
Growth and decay			General iterative processes

Geometry and measures

Shape		Transformations	
Angles	Angles in a polygon		
		Circle theorems	Circle theorems
Length, area and volume		Area of a rectangle	
	Area of a triangle		Area of a trapezium
	Area of a sector		
	Surface area of a cuboid		
	Volume of a cube		
		Volume of composite solid	
Pythagoras's Theorem and Trigonometry	Pythagoras's Theorem		Similar triangles Pythagoras's Theorem Trigonometry
		Sine and Cosine Rules	
			Trigonometry in 3-D
	Exact trigonometric values		
Vectors			Column vectors
	Vector geometry		

Probability

Probability	Probability		
		Venn diagram	
		Probability from a Venn diagram	
	Independent combined events		Dependent combined events

Statistics

Diagrams			Frequency polygon
	Cumulative frequency graph		
		Box Plot	
Measures			Histogram
	Mean		
	Inter-quartile range	Lower and upper quartiles	
Population		Compare distributions	
		Capture-recapture method	

**FOUNDATION TIER - EDEXCEL**

	Paper 1	Paper 2	Paper 3
<b>Number (*see Ratio – some overlap of topic areas)</b>			
Arithmetic	Money	Money	Four Operations
	Negative numbers	Negative numbers	Negative numbers
Fractions	Order fractions, decimals, percentages		Fraction of an amount
	Fraction of an amount		One amount as a fraction of another
	Fraction arithmetic	Fraction arithmetic	
		Order fractions	Equivalent fractions
Properties	Place value		
		Order integers	
		Multiples	Factors
			Lowest Common Multiple
Powers and roots			Square root
Standard Form	Conversion		
	Calculation		
Approximation and Estimation		Rounding	Rounding
	Estimation		
		Error Intervals	
Other		Mathematical symbols	Calculator use

**Algebra**

Manipulation	Simplification	Simplification	Simplification
		Expansion of bracket	Expansion of bracket
		Factorisation	Factorisation
	Substitute values		Substitute values
			Change subject of a formula
		Laws of indices	Forming an expression
Equations and inequalities			Linear equation
	Linear inequality		
		Linear simultaneous equations	
	Quadratic equation		Form an equation
Graphs		Coordinates	
		Straight line graph	
	Quadratic graph		
Functions			
Sequences	Linear sequence	Number machines	Linear sequence

**Ratio, proportion, and rates of change (\*see Number – some overlap of topic areas)**

Conversion	Length	Mass, time, area	Time
			Compound units
		Scale drawing	Scale drawing
Percentages			Percentage to fraction
		Decimal to percentage	
	Percentage of an amount		
	Percentage increase		Percentage decrease
		Percentage profit	
		Depreciation	One quantity as a percentage of another
Ratio			Reverse percentage
	Write as a ratio	Write as a ratio	Write as a ratio
	Share in a ratio		
		Use of ratio	
Proportion			1 : n form
	Direct proportion	Direct proportion	Direct proportion
Compound Measures		Currency conversion	
	Speed		Average speed
	Density		

**Geometry and measures**

Shape			Triangle properties
			Quadrilaterals
		Polygons	
			Triangular prism
		Circles	
		Parallel and perpendicular lines	
	Reflection		
		Transformations	
Angles		Angles in a triangle	Angles in a triangle
		Vertically opposite angles	Vertically opposite angles
			Angle properties of parallel lines
	Angles in a polygon		
			Bearings
Length, area and volume		Area of a rectangle	
			Area of a triangle
			Area of a trapezium
	Volume of a cube		
	Volume of a cylinder		
Pythagoras's Theorem and Trigonometry			Pythagoras's Theorem
	Exact trigonometric values		

**Probability**

Probability			Probability scale
	Probability		Probability
	Frequency tree		
		Tree diagram	
		Combined events	

**Statistics**

Diagrams	Pictogram		
	Bar chart		
		Interpret graph	
		Two-way table	
		Frequency table	
	Stem and leaf diagram		
Measures		Mode, median, mean	Frequency polygon
Population			Median and range
			Comparison of distributions

## GCSE Art

Students will only complete component 1 (Portfolio) only for GCSE Art and Design: Art, Craft and Design. This means that students won't need to start or complete Component 2 (Externally Set Assignment). Students will need to complete Component 1 in the normal way and will be marked out of 96 as usual. The assessment criteria in the specification remains the same.



# AQA GCSE Biology: Higher tier

Advance Information of Assessed Content 2022

Link to specification:

[GCSE Biology Specification](#)

Link to advance information document:

[AQA Advanced information - GCSE Biology](#)

## Triple Biology Paper 1

These specification points will be the **major focus** of this paper.

**Exam date: 17<sup>th</sup> May**

All other specification points from B1, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP Biology revision guide pages	Bitesize	YouTube
4.1.1 Cell Structure	<ul style="list-style-type: none"> <li>- Difference between prokaryotic and eukaryotic cells</li> <li>- Comparison of plant cells and animal cells</li> <li>- Function of organelles</li> <li>- Cell differentiation and specialised plant cells and animal cells</li> </ul>	11, 14	<a href="https://www.bbc.co.uk/bitesize/guides/z84jtv4/revision/1">https://www.bbc.co.uk/bitesize/guides/z84jtv4/revision/1</a>	<a href="#">Prokaryotic and eukaryotic cells</a> <a href="#">Animal cells</a> <a href="#">Plant cells</a>
<b>Required practical 1:</b> use of light microscope to observe cells	<ul style="list-style-type: none"> <li>- How to prepare slides</li> <li>- How to use the microscope to improve field of view, clarify, change magnification</li> <li>- Microscopy calculations</li> <li>- Unit conversions (mm, micrometres etc)</li> </ul>	12-13	<a href="https://www.bbc.co.uk/bitesize/guides/z84jtv4/revision/1">https://www.bbc.co.uk/bitesize/guides/z84jtv4/revision/1</a>	<a href="#">Required practical - Use of microscopes</a> <a href="#">Microscopy</a> <a href="#">Orders of magnitude</a>
4.1.3 Transport in cells	<ul style="list-style-type: none"> <li>- Diffusion</li> <li>- Factors affecting the rate of diffusion</li> <li>- Osmosis</li> <li>- Active transport</li> </ul>	20-22	<a href="https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/4">https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/4</a>	<a href="#">Osmosis</a> <a href="#">Diffusion</a> <a href="#">Active transport</a>
<b>Required practical 3:</b> Investigate the effect of a range of concentrations of salt solution on the mass of plant tissue	<ul style="list-style-type: none"> <li>- Calculate rate of water uptake</li> <li>- Identify independent, dependent and control variables</li> <li>- Calculate percentage change in mass</li> <li>- Interpret graph to find salt/ sugar concentration in potato</li> </ul>	21	<a href="https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/5">https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/5</a>	<a href="#">Required practical link</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.2.2 Animal tissues, organs and organ systems	<ul style="list-style-type: none"> <li>- Functions of tissues and organs in the digestive system</li> <li>- Digestive enzymes</li> <li>- Functions of tissues and organs in the circulatory system</li> <li>- Pathway of blood through the heart</li> <li>- adaptations of components of the blood</li> <li>- risk factors of non-communicable diseases</li> </ul>	28, 30, 31, 33, 34, 35, 37, 38 - 40	<a href="#">Digestion</a> <a href="#">Animal transport systems</a>	<a href="https://www.youtube.com/watch?v=4ui4oSHHzA">https://www.youtube.com/watch?v=4ui4oSHHzA</a> <a href="https://www.youtube.com/watch?v=VLK2wANjQm0">https://www.youtube.com/watch?v=VLK2wANjQm0</a> <a href="https://www.youtube.com/watch?v=bpYaKM2hVFY">https://www.youtube.com/watch?v=bpYaKM2hVFY</a>
<b>Required practical 4:</b> Use qualitative reagents to test for a range of carbohydrates, lipids and proteins	<ul style="list-style-type: none"> <li>- Reagents used to test for sugars, starch, proteins and lipids</li> <li>- Positive result for each food test</li> <li>- Conditions required to carry out food test</li> </ul>	32	<a href="#">Food tests</a>	<a href="#">Food tests – video summary</a> <a href="#">Food tests - detailed methods</a>
4.2.3 Plant tissues, organs and systems	<ul style="list-style-type: none"> <li>- cross section of a leaf</li> <li>- functions and adaptations of xylem and phloem</li> <li>- transpiration</li> <li>- translocation</li> </ul>	42 - 44	<a href="#">Plant organisation</a>	<a href="#">Plant organisation</a> <a href="#">Transpiration</a> <a href="#">Plant cell specialisations</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.3.1 Communicable Diseases	<ul style="list-style-type: none"> <li>- definition and examples of pathogen</li> <li>- how viruses and bacteria make us ill</li> <li>- examples of diseases caused by each type of pathogen</li> <li>- human defence mechanisms</li> <li>- what happens in a vaccine</li> <li>- comparing antibody production after active and passive immunity</li> </ul>	46 – 50	<a href="https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1</a>	<a href="https://www.youtube.com/watch?v=rAJGnS_ktk4">https://www.youtube.com/watch?v=rAJGnS_ktk4</a>
4.3.2 Monoclonal antibodies	<ul style="list-style-type: none"> <li>- Describe what a monoclonal antibody is</li> <li>- Describe how monoclonal antibodies are produced</li> <li>- Describe how monoclonal antibodies can be used</li> </ul>	53 – 54	<a href="https://www.bbc.co.uk/bitesize/guides/zt8t3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/zt8t3k7/revision/1</a>	<a href="#">Monoclonal antibodies</a> <a href="#">Uses of monoclonal antibodies</a>

## Triple Biology Paper 1

Exam date: 17<sup>th</sup> MayThese specification points will **not be assessed** on this paper.

Spec point	CGP Biology Revision Guide Pages
4.2.2.3 Blood	36
4.2.2.7 Cancer	41
4.3.1.8 Antibiotics and painkillers	51
4.3.1.9 Discovery and the development of drugs	52
4.4.2.2 Response to exercise	63

## Triple Biology Paper 2

Exam date: 15<sup>th</sup> JuneThese specification points will be the **major focus** of this paper.

All other specification points from B2, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.5.2 The human nervous system	<ul style="list-style-type: none"> <li>- Function of the NS</li> <li>- Control of body temperature</li> <li>- Response to high/ low temperatures</li> </ul>	72	<a href="https://www.bbc.co.uk/bitesize/guides/zttqfcw/revision/1">Controlling body temperature.</a>	<a href="https://www.youtube.com/watch?v=WoMPARSQP2w">https://www.youtube.com/watch?v=WoMPARSQP2w</a>
4.5.3 Hormonal control in humans	<ul style="list-style-type: none"> <li>- The endocrine system</li> <li>- Function of hormones within the endocrine system</li> <li>- Control of blood glucose</li> <li>- Diabetes</li> <li>- Kidneys and the role of ADH</li> <li>- Adrenaline and thyroxine</li> </ul>	73 – 76, 80	<a href="https://www.bbc.co.uk/bitesize/guides/zttqfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zttqfcw/revision/1</a>	<a href="#">Endocrine system</a>
4.5.4 Plant hormones	<ul style="list-style-type: none"> <li>- Site of auxin production</li> <li>- Role of auxin in producing phototropism / gravitropism</li> </ul>	81	<a href="https://www.bbc.co.uk/bitesize/guides/zc6cqhvr/revision/1">https://www.bbc.co.uk/bitesize/guides/zc6cqhvr/revision/1</a>	<a href="https://www.youtube.com/watch?v=-BF5WKEMB5o">https://www.youtube.com/watch?v=-BF5WKEMB5o</a>
<b>Required practical 8</b> – Investigate the effect of light on the growth of newly germinated seedlings	<ul style="list-style-type: none"> <li>- identify independent, dependent and control variables</li> <li>- Describe how variables can be controlled</li> </ul>	81	<a href="https://www.bbc.co.uk/bitesize/guides/zc6cqhvr/revision/3">https://www.bbc.co.uk/bitesize/guides/zc6cqhvr/revision/3</a>	<a href="https://www.youtube.com/watch?v=FEo21LbnJIM">https://www.youtube.com/watch?v=FEo21LbnJIM</a>

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## Triple Biology Paper 2

These specification points will be the **major focus** of this paper.

**Exam date: 15<sup>th</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.6.1 Reproduction	<ul style="list-style-type: none"> <li>- Sexual and asexual reproduction</li> <li>- Gametes</li> <li>- Meiosis</li> </ul>	87-89	<a href="https://www.bbc.co.uk/bitesize/guides/z9pkmsg/revision/1">https://www.bbc.co.uk/bitesize/guides/z9pkmsg/revision/1</a>	<a href="https://www.youtube.com/watch?v=Fh9b6a-3DLQ">https://www.youtube.com/watch?v=Fh9b6a-3DLQ</a>
4.7.2 Organisation of an ecosystem	<ul style="list-style-type: none"> <li>-interpret food chains and webs</li> <li>-identify producers, consumers, predators and prey from food chains and webs</li> <li>-describe the carbon and water cycles</li> </ul>	86, 89-90	<a href="https://www.bbc.co.uk/bitesize/guides/zqskv9g/revision/1">https://www.bbc.co.uk/bitesize/guides/zqskv9g/revision/1</a>	<a href="https://www.youtube.com/watch?v=dRFQ8rZCK6Q">https://www.youtube.com/watch?v=dRFQ8rZCK6Q</a> <a href="https://www.youtube.com/watch?v=urzpnjwazV0">https://www.youtube.com/watch?v=urzpnjwazV0</a>
<b>Required Practical 7:</b> Measure the population size of a common species in a habitat. Use sampling techniques to investigate the effect of a factor on the distribution of this species	<ul style="list-style-type: none"> <li>-Using transects and quadrats are used by ecologists to determine the distribution and abundance of species in an ecosystem.</li> <li>-Understand the terms mean, mode and median</li> <li>-Calculate arithmetic means</li> </ul>	110-111	<a href="https://www.bbc.co.uk/bitesize/guides/zqskv9g/revision/3">https://www.bbc.co.uk/bitesize/guides/zqskv9g/revision/3</a>	<a href="https://www.youtube.com/watch?v=2MW6nwf80XM">https://www.youtube.com/watch?v=2MW6nwf80XM</a> <a href="https://www.youtube.com/watch?v=RhMOCXcDrQ">https://www.youtube.com/watch?v=RhMOCXcDrQ</a> <a href="https://www.youtube.com/watch?v=vLHz2Ea10Mg&amp;t=2s">https://www.youtube.com/watch?v=vLHz2Ea10Mg&amp;t=2s</a>

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## Triple Biology Paper 2

These specification points will **not be assessed** on this paper.

**Exam date: 15<sup>th</sup> June**

Spec point	CGP Revision Guide Pages
<b>Topic 5: Homeostasis and response</b>	
4.5.2.1 Structure and function	66 – 68
4.5.2.2 The brain	69
4.5.2.3 The eye	70-71
4.5.2.3 Hormones in human reproduction	77- 79
4.5.3.5 Contraception	78
4.5.3.6 The use of hormones to treat infertility	78
4.5.3.7 Negative feedback	65
4.5.4.2 Uses of plant hormones	82
<b>Topic 6: Inheritance, variation and evolution</b>	
4.6.1.3 Advantages/ Disadvantages of sexual and asexual reproduction	89 (top half)
4.6.1.8 Sex determination	90
4.6.2 Variation and evolution	95-97
4.6.3 The development of understanding of genetics and evolution	94
4.6.4 Classification of living organisms	104

## Triple Biology Paper 2

Exam date: 15<sup>th</sup> JuneThese specification points will **not be assessed** on this paper.

Spec point	CGP Revision Guide Pages
<b>Topic 7: Ecology</b>	
4.7.1.4 Adaptations	108
4.7.2.4 Impact of environmental change	112
4.7.3.1 Biodiversity	116
4.7.3.4 Deforestation	118
4.7.4.1 Trophic levels	120
4.7.4.2 Pyramids of Biomass	121
4.7.5.3 Sustainable fisheries	123 (middle section)
4.7.5.4 Role of biotechnology	124

# AQA GCSE Chemistry: Higher

Advance Information of Assessed Content 2022

Link to specification: [GCSE Chemistry Specification Specification for first teaching in 2016 \(aqa.org.uk\)](https://www.aqa.org.uk/qualifications/gcse-chemistry/specification)

Link to advance information document: [Advanced information June 2022 - GCSE Chemistry \(8462\) \(aqa.org.uk\)](https://www.aqa.org.uk/qualifications/gcse-chemistry/advance-information)

## Chemistry Paper 1 - H

These specification points will be the **major focus** of this paper.

**Exam date: 27<sup>th</sup> May**

All other specification points from C1, other than those on the [next slide](#) that are explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.1.2 The Periodic Table	<ul style="list-style-type: none"> <li>-The Periodic Table is arranged in order of proton number</li> <li>-What atoms of elements in the same group have in common</li> <li>-What atoms of elements in the same period have in common</li> <li>-development in the Periodic Table</li> <li>-ions formed from metals and non-metals</li> <li>-trends in physical and chemical properties of group 1, 7 and 0 elements</li> <li>- Reactions of group 1 and 7 elements</li> </ul>	20-26	<a href="https://www.bbc.co.uk/bitesize/guides/z3sg2nb/revision/1">https://www.bbc.co.uk/bitesize/guides/z3sg2nb/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zg923k7/revision/1">https://www.bbc.co.uk/bitesize/guides/zg923k7/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zqwtcj6/revision/1">https://www.bbc.co.uk/bitesize/guides/zqwtcj6/revision/1</a>	<a href="https://www.youtube.com/watch?v=idS9row7izM&amp;t=119s">https://www.youtube.com/watch?v=idS9row7izM&amp;t=119s</a> <a href="https://www.youtube.com/watch?v=uwzXfZoCP_k">https://www.youtube.com/watch?v=uwzXfZoCP_k</a> <a href="https://www.youtube.com/watch?v=dZGDUKQa_6g">https://www.youtube.com/watch?v=dZGDUKQa_6g</a> <a href="https://www.youtube.com/watch?v=HT1zAPQIBAQ">https://www.youtube.com/watch?v=HT1zAPQIBAQ</a>
4.2.1 Chemical bonds, ionic, covalent and metallic	<ul style="list-style-type: none"> <li>-Describe the process of ionic bonding</li> <li>-Describe the process of covalent bonding</li> <li>-Describe the process of metallic bonding</li> <li>-explain chemical bonding in terms of electrostatic forces and the transfer or sharing of electrons.</li> <li>-work out the charge on the ions of metals and non-metals from the group number of the element, limited to the metals in Groups 1 and 2, and non-metals in Groups 6 and 7</li> <li>-Describe the structure of ionic compounds</li> <li>-draw dot and cross diagrams for the molecules of hydrogen, chlorine, oxygen, nitrogen, hydrogen chloride, water, ammonia and methane</li> <li>-Describe the structure of metals</li> </ul>	28-31,35	<a href="https://www.bbc.co.uk/bitesize/guides/zvydng8/revision/1">https://www.bbc.co.uk/bitesize/guides/zvydng8/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zcpjfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zcpjfcw/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z8db7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/z8db7p3/revision/1</a>	<a href="https://www.youtube.com/watch?v=6DtrrWASnKE">https://www.youtube.com/watch?v=6DtrrWASnKE</a> <a href="https://www.youtube.com/watch?v=lenvzEcMc60">https://www.youtube.com/watch?v=lenvzEcMc60</a> <a href="https://www.youtube.com/watch?v=IhEm7aAKIDg">https://www.youtube.com/watch?v=IhEm7aAKIDg</a> <a href="https://www.youtube.com/watch?v=5I_1jRGS99E">https://www.youtube.com/watch?v=5I_1jRGS99E</a> <a href="https://www.youtube.com/watch?v=b1y2G6YX1bQ">https://www.youtube.com/watch?v=b1y2G6YX1bQ</a> <a href="https://www.youtube.com/watch?v=A-wTlPLiCd0&amp;t=13s">https://www.youtube.com/watch?v=A-wTlPLiCd0&amp;t=13s</a>

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## Chemistry Paper 1 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.2.2 How bonding and structure are related to the properties of a substance	<ul style="list-style-type: none"> <li>-interpreting melting and boiling point data to determine state at a certain temp</li> <li>-link energy needed to change state to strength of forces between particles</li> <li>-state symbols</li> <li>-describe &amp; explain properties of ionic compounds</li> <li>-describe &amp; explain properties of simple covalent molecules</li> <li>-describe &amp; explain properties of polymers</li> <li>-describe &amp; explain properties of metals and alloys</li> </ul>	28-32, 35-37	<a href="https://www.bbc.co.uk/bitesize/guides/zvvdng8/revision/1">https://www.bbc.co.uk/bitesize/guides/zvvdng8/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zcpjfw/revision/1">https://www.bbc.co.uk/bitesize/guides/zcpjfw/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z9twsrd/revision/1">https://www.bbc.co.uk/bitesize/guides/z9twsrd/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z8ab7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/z8ab7p3/revision/1</a>	<a href="https://www.youtube.com/watch?v=leVxy7cjZMU">https://www.youtube.com/watch?v=leVxy7cjZMU</a> <a href="https://www.youtube.com/watch?v=DECGNyC-x_s">https://www.youtube.com/watch?v=DECGNyC-x_s</a> <a href="https://www.youtube.com/watch?v=EPQzfm_FVqc">https://www.youtube.com/watch?v=EPQzfm_FVqc</a> <a href="https://www.youtube.com/watch?v=A-wTpLPCd0">https://www.youtube.com/watch?v=A-wTpLPCd0</a>
4.2.3 Structure and bonding of carbon	<ul style="list-style-type: none"> <li>-describe and explain the properties of diamond, graphite, graphene and fullerenes</li> </ul>	33-34	<a href="https://www.bbc.co.uk/bitesize/guides/z9twsrd/revision/1">https://www.bbc.co.uk/bitesize/guides/z9twsrd/revision/1</a>	<a href="https://www.youtube.com/watch?v=tGH0mXCcEFU">https://www.youtube.com/watch?v=tGH0mXCcEFU</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.3.2 Use of amount of substance in relation to masses of pure substances	<ul style="list-style-type: none"> <li>-calculating relative formula mass</li> <li>-calculating the number of moles in a given mass of a substance, calculating the mass of a certain no. of moles of a substance</li> <li>-Avogadro's constant – the number of particles in 1 mole of every substance</li> <li>-calculate the masses of reactants and products from the balanced symbol equation and the mass of a given reactant or product.</li> <li>-using molar ratios to balance equations</li> <li>-identifying limiting reactants and explaining the effect on yield of products</li> <li>-define concentration of a solution</li> <li>-calculate the concentration of a solution, or the mass of a solute dissolved in a given volume to create a solution of given concentration</li> </ul>	41-47	<a href="https://www.bbc.co.uk/bitesize/guides/zgcyw6f/revision/1">https://www.bbc.co.uk/bitesize/guides/zgcyw6f/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z3kg2nb/revision/1">https://www.bbc.co.uk/bitesize/guides/z3kg2nb/revision/1</a>	<a href="https://www.youtube.com/watch?v=q49NwIraFw">https://www.youtube.com/watch?v=q49NwIraFw</a> <a href="https://www.youtube.com/watch?v=wPGVQu3UXpw">https://www.youtube.com/watch?v=wPGVQu3UXpw</a> <a href="https://www.youtube.com/watch?v=TV6n5MFH6IU">https://www.youtube.com/watch?v=TV6n5MFH6IU</a> <a href="https://www.youtube.com/watch?v=YKvUQ2cPmJg">https://www.youtube.com/watch?v=YKvUQ2cPmJg</a> <a href="https://www.youtube.com/watch?v=MuzOmFhIE8o">https://www.youtube.com/watch?v=MuzOmFhIE8o</a> <a href="https://www.youtube.com/watch?v=3G3KQIyoZDI">https://www.youtube.com/watch?v=3G3KQIyoZDI</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.4.1 The Reactivity of Metals	<ul style="list-style-type: none"> <li>-Metals + oxygen</li> <li>-Reduction and oxidation in terms of oxygen</li> <li>-reduction and oxidation in terms of electrons</li> <li>-identify in a given reaction, symbol equation or half equation which species are oxidised and which are reduced</li> <li>-The Reactivity Series</li> <li>- Displacement reactions</li> <li>- Extraction of metals by reduction</li> </ul>	55-57	<a href="https://www.bbc.co.uk/bitesize/guides/zsm7v9q/revision/1">https://www.bbc.co.uk/bitesize/guides/zsm7v9q/revision/1</a>	<a href="https://www.youtube.com/watch?v=Lk1V0buHEFs">https://www.youtube.com/watch?v=Lk1V0buHEFs</a> <a href="https://www.youtube.com/watch?v=gnbuTl2aril">https://www.youtube.com/watch?v=gnbuTl2aril</a> <a href="https://www.youtube.com/watch?v=2l5Lm7BMtpo">https://www.youtube.com/watch?v=2l5Lm7BMtpo</a> <a href="https://www.youtube.com/watch?v=MXTSels6e2Y">https://www.youtube.com/watch?v=MXTSels6e2Y</a>
4.4.2 Reactions of Acids	<ul style="list-style-type: none"> <li>-Naming Salts</li> <li>-products of the reactions of acids and metals</li> <li>-explain the reactions of metals and acids in terms of loss and gain of electrons</li> <li>-produces of the reactions of acids and alkalis and insoluble bases</li> <li>-products of the reactions of acids and metal carbonates</li> <li>-pH scale and neutralisation</li> <li>-difference between strong and weak acids</li> </ul>	51,53-54	<a href="https://www.bbc.co.uk/bitesize/guides/zcijfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zcijfcw/revision/1</a>	<a href="https://www.youtube.com/watch?v=ofw6oHSYGF1">https://www.youtube.com/watch?v=ofw6oHSYGF1</a> GCSE Science Revision Chemistry "Acids Reacting with Metals 2" - YouTube <a href="https://www.youtube.com/watch?v=QlSsle_jSQ8">https://www.youtube.com/watch?v=QlSsle_jSQ8</a>
4.4.2.3 and Required Practical 1: preparation of a pure, dry sample of soluble salts	<ul style="list-style-type: none"> <li>-method of producing solid salt crystals from insoluble oxide or carbonate and acids</li> <li>-identifying errors in methods and reagents</li> </ul>	Bottom half pg 54	<a href="https://www.bbc.co.uk/bitesize/guides/zcijfcw/revision/6">https://www.bbc.co.uk/bitesize/guides/zcijfcw/revision/6</a>	<a href="https://www.youtube.com/watch?v=9GH95172js8&amp;t=16s">https://www.youtube.com/watch?v=9GH95172js8&amp;t=16s</a> GCSE Science Revision Chemistry "Strong and Weak Acids" - YouTube

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## Chemistry Paper 1 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.4.2.5 and Required practical 2: determination of the reacting volumes of solutions of a strong acid and a strong alkali by titration.	<ul style="list-style-type: none"> <li>-Method</li> <li>-control variables and how to monitor them</li> <li>-quantitative analysis of results</li> </ul>	52	<a href="https://www.bbc.co.uk/bitesize/guides/zx98pbk/revision/1">https://www.bbc.co.uk/bitesize/guides/zx98pbk/revision/1</a>	<a href="https://www.youtube.com/watch?v=saRBT5ozfh8">https://www.youtube.com/watch?v=saRBT5ozfh8</a> <a href="https://www.youtube.com/watch?v=vn3R3g1VPk">https://www.youtube.com/watch?v=vn3R3g1VPk</a> <a href="https://www.youtube.com/watch?v=x8DLLCNMKAs">https://www.youtube.com/watch?v=x8DLLCNMKAs</a> <a href="https://www.youtube.com/watch?v=yC4oKteRIUJ">https://www.youtube.com/watch?v=yC4oKteRIUJ</a>
4.4.3 Electrolysis	<ul style="list-style-type: none"> <li>-The process of electrolysis</li> <li>-identifying oxidation and reduction in terms of electrons</li> <li>-writing half equations for oxidation/reduction reactions occurring at each electrode</li> <li>-Electrolysis of molten ionic compounds</li> <li>-Electrolysis of aluminium oxide</li> <li>-Electrolysis of aqueous solutions, predicting products formed</li> </ul>	58-59	<a href="https://www.bbc.co.uk/bitesize/guides/zcsyw6f/revision/1">https://www.bbc.co.uk/bitesize/guides/zcsyw6f/revision/1</a>	<a href="https://www.youtube.com/watch?v=AhTRiL6xjBA&amp;t=2s">https://www.youtube.com/watch?v=AhTRiL6xjBA&amp;t=2s</a> <a href="https://www.youtube.com/watch?v=iINOpROacf0">https://www.youtube.com/watch?v=iINOpROacf0</a> <a href="https://www.youtube.com/watch?v=YcyMEIBEzAY">https://www.youtube.com/watch?v=YcyMEIBEzAY</a> <a href="https://www.youtube.com/watch?v=6WJC_Vi4roA">https://www.youtube.com/watch?v=6WJC_Vi4roA</a> <a href="https://www.youtube.com/watch?v=W9ngXNzSyoo">https://www.youtube.com/watch?v=W9ngXNzSyoo</a>

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## Chemistry Paper 1 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.5.1 Exothermic and endothermic reactions	<ul style="list-style-type: none"> <li>-describe the law of the conservation of energy</li> <li>-define exo and endothermic reactions and describe their features</li> <li>-give examples of exo and endothermic reactions</li> <li>-define activation energy</li> <li>-represent exo and endothermic reactions with reaction profiles</li> <li>-describe bond breaking in the reactants as an endothermic process</li> <li>-describe bond formation in the products as an exothermic process</li> <li>-calculate the energy transferred in chemical reactions using bond energies supplied</li> <li>-Use energy change values to identify if a reaction is exo/endothermic</li> </ul>	61-63	<a href="https://www.bbc.co.uk/bitesize/guides/zwfr2nb/revision/1">https://www.bbc.co.uk/bitesize/guides/zwfr2nb/revision/1</a>	<a href="https://www.youtube.com/watch?v=4HS6D0hTzdg">https://www.youtube.com/watch?v=4HS6D0hTzdg</a>  <a href="https://www.youtube.com/watch?v=dstRL5x80Sk">https://www.youtube.com/watch?v=dstRL5x80Sk</a>  <a href="https://www.youtube.com/watch?v=itOHGXhxD-s">https://www.youtube.com/watch?v=itOHGXhxD-s</a>  <a href="https://www.youtube.com/watch?v=eExCBkp4jB4">https://www.youtube.com/watch?v=eExCBkp4jB4</a>  <a href="https://www.youtube.com/watch?v=PdValXAVUOc">https://www.youtube.com/watch?v=PdValXAVUOc</a>
<b>Required Practical 4:</b> investigate the variables that affect temperature changes in reacting solutions such as, eg acid plus metals, carbonates, neutralisations, displacement of metals	<ul style="list-style-type: none"> <li>-Identifying independent, dependent, control variables</li> <li>-Analysing results</li> <li>-identifying exo and endothermic reactions from experimental results</li> </ul>	62	<a href="https://www.bbc.co.uk/bitesize/guides/zwfr2nb/revision/2">https://www.bbc.co.uk/bitesize/guides/zwfr2nb/revision/2</a>	<a href="https://www.youtube.com/watch?v=Bz0C9mmF2tw">https://www.youtube.com/watch?v=Bz0C9mmF2tw</a>

## Chemistry Paper 1 - H

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**Exam date: 20<sup>th</sup> June**

Spec point	CGP Revision Guide Pages
4.2.4 Bulk and surface properties of matter including nanoparticles	38-39

## Chemistry Paper 2 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.6.1 Rate of Reaction	<ul style="list-style-type: none"> <li>-Calculating the rate of a reaction</li> <li>-Calculate the gradient of a tangent to the curve on these graphs as a measure of rate of reaction at a specific time.</li> <li>-Describe collision theory</li> <li>-Define activation energy</li> <li>-Describe and explain the factors that increase the rate of reaction</li> <li>-Describe and explain the effect of catalysts on rate of reaction</li> </ul>	67-71	<a href="https://www.bbc.co.uk/bitesize/guides/z3nbqhv/revision/1">https://www.bbc.co.uk/bitesize/guides/z3nbqhv/revision/1</a>	<a href="https://www.youtube.com/watch?v=UkrBJ6-uGFA">https://www.youtube.com/watch?v=UkrBJ6-uGFA</a> <a href="https://www.youtube.com/watch?v=GCR5xeduq2o">https://www.youtube.com/watch?v=GCR5xeduq2o</a> <a href="https://www.youtube.com/watch?v=4HXaUBbv04">https://www.youtube.com/watch?v=4HXaUBbv04</a> <a href="https://www.youtube.com/watch?v=heI8fQxcO8">https://www.youtube.com/watch?v=heI8fQxcO8</a>
<b>Required Practical 5:</b> investigate how concentration affects the rates of reaction by a method involving measuring the volume of a gas produced/change in colour	<ul style="list-style-type: none"> <li>-identify independent, dependent and control variables</li> <li>-describe how to measure the dependent variable</li> <li>-analyse results and draw conclusions from graphed data</li> <li>-calculate rate of reaction from data</li> </ul>	70	<a href="#">Required practical - measure the production of a gas - Rates of reaction - AQA - GCSE Chemistry (Single Science) Revision - AQA - BBC Bitesize</a>	<a href="https://www.youtube.com/watch?v=N5p06i9ilmo">https://www.youtube.com/watch?v=N5p06i9ilmo</a> <a href="https://www.youtube.com/watch?v=GI6LV17oAIIU">https://www.youtube.com/watch?v=GI6LV17oAIIU</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.6.2 Reversible reactions and dynamic equilibrium	<ul style="list-style-type: none"> <li>-Identify and give examples of reversible reactions</li> <li>-Apply the conservation of energy to reversible reactions</li> <li>-Define dynamic equilibrium</li> <li>-Describe Le Chatelier's principle</li> <li>-Describe and explain the effect of changing the following conditions on equilibrium; concentration, temperature, pressure</li> </ul>	72-73	<a href="https://www.bbc.co.uk/bitesize/guides/zyhwv6f/revision/1">https://www.bbc.co.uk/bitesize/guides/zyhwv6f/revision/1</a>	<a href="https://www.youtube.com/watch?v=66qcNNJFy6E">https://www.youtube.com/watch?v=66qcNNJFy6E</a> <a href="#">GCSE Science Revision Chemistry "Concentration and Reversible Reactions" - YouTube</a> <a href="#">GCSE Science Revision Chemistry "Pressure and Reversible Reactions" - YouTube</a> <a href="#">GCSE Science Revision Chemistry "Temperature and reversible reactions" - YouTube</a> <a href="#">GCSE Chemistry - Le Chatelier's Principle #42 (Higher Tier) - YouTube</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.7.1 Carbon compounds as fuels and feedstock	<ul style="list-style-type: none"> <li>-describe crude oil as a mixture of different length hydrocarbons</li> <li>-define the term hydrocarbon</li> <li>-identify the first 4 alkanes from their chemical formula and name them</li> <li>-Describe the trend in properties as hydrocarbon chain length increases</li> <li>-Describe and explain the process of fractional distillation</li> <li>-describe the process of cracking</li> <li>-describe the use of alkenes</li> </ul>	75-78	<a href="https://www.bbc.co.uk/bitesize/guides/zshvw6f/revision/1">https://www.bbc.co.uk/bitesize/guides/zshvw6f/revision/1</a>	<a href="https://www.youtube.com/watch?v=CX2IYWggEBc">https://www.youtube.com/watch?v=CX2IYWggEBc</a> <a href="https://www.youtube.com/watch?v=3I7yCkSXPos">https://www.youtube.com/watch?v=3I7yCkSXPos</a> <a href="https://www.youtube.com/watch?v=7AWWjkbRa_o">https://www.youtube.com/watch?v=7AWWjkbRa_o</a>
<b>Required practical 7:</b> use of chemical tests to identify the ions in unknown single ionic compounds covering the ions from sections Flame tests through to Sulfates.	<ul style="list-style-type: none"> <li>-Describe reagents and positive results for each ion</li> <li>-Describe method of flame tests</li> </ul>	88-89	<a href="https://www.bbc.co.uk/bitesize/guides/zxtvw6f/revision/1">https://www.bbc.co.uk/bitesize/guides/zxtvw6f/revision/1</a>	<a href="https://www.youtube.com/watch?v=Bd0A44iv20I&amp;t=96s">https://www.youtube.com/watch?v=Bd0A44iv20I&amp;t=96s</a> <a href="https://www.youtube.com/watch?v=4iZRs4XUJOE">https://www.youtube.com/watch?v=4iZRs4XUJOE</a> <a href="https://www.youtube.com/watch?v=mWTgHidea4Y">https://www.youtube.com/watch?v=mWTgHidea4Y</a> <a href="https://www.youtube.com/watch?v=fC2ztwJmAl0">https://www.youtube.com/watch?v=fC2ztwJmAl0</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.9.1 The composition and evolution of the Earth's Atmosphere	<ul style="list-style-type: none"> <li>-describe the composition of the current atmosphere</li> <li>-describe the composition of the early atmosphere and explain theories of how the early atmosphere formed</li> <li>-explain how the early atmosphere changed to that of the present atmosphere</li> </ul>	91	<a href="https://www.bbc.co.uk/bitesize/guides/zg4qfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zg4qfcw/revision/1</a>	<a href="https://www.youtube.com/watch?v=t123GInIdLA">https://www.youtube.com/watch?v=t123GInIdLA</a> <a href="https://www.youtube.com/watch?v=l0H_-3M0Pso">https://www.youtube.com/watch?v=l0H_-3M0Pso</a>
4.10.1 Using the Earth's resources and obtaining potable water	<ul style="list-style-type: none"> <li>-Describe the renewable and non-renewable resources that we get from the Earth and its atmosphere</li> <li>-Define the term potable water</li> <li>-Describe how potable water can be produced.</li> <li>-Describe the differences in the treatment of waste water, salt water and ground water</li> <li>-Describe and evaluate alternative methods of extracting metals e.g. phytomining and bioleaching</li> </ul>		<a href="https://www.bbc.co.uk/bitesize/guides/zgqhcj6/revision/1">https://www.bbc.co.uk/bitesize/guides/zgqhcj6/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zpcjsrd/revision/1">https://www.bbc.co.uk/bitesize/guides/zpcjsrd/revision/1</a> Biological methods of metal extraction - Higher - Ways of reducing the use of resources - AQA - GCSE Chemistry (Single Science) Revision - AQA - BBC Bitesize	<a href="https://www.youtube.com/watch?v=-XczTGavTZU">https://www.youtube.com/watch?v=-XczTGavTZU</a> <a href="https://www.youtube.com/watch?v=n7pYRQs20bl">https://www.youtube.com/watch?v=n7pYRQs20bl</a> <a href="https://www.youtube.com/watch?v=b5RVPauf4oM">https://www.youtube.com/watch?v=b5RVPauf4oM</a>

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## Chemistry Paper 2 - H

These specification points will be the **major focus** of this paper.

**Exam date: 20<sup>th</sup> June**

All other specification points from C2, other than those on the [next slide](#) that are explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.10.4 The Haber process and the use of NPK fertilisers	<ul style="list-style-type: none"> <li>-Describe the purpose of the Haber process, the reaction and raw materials involved</li> <li>-interpret graphs of reaction conditions versus rate</li> <li>-apply the principles of dynamic equilibrium in Reversible reactions and dynamic equilibrium (4.6.2) to the Haber process</li> <li>-explain the trade-off between rate of production and position of equilibrium</li> <li>-explain how the commercially used conditions for the Haber process are related to the availability and cost of raw materials and energy supplies, control of equilibrium position and rate</li> <li>-Describe NPK fertilisers as formulations of various salts containing appropriate percentages of the elements.</li> <li>-Describe the composition of NPK fertilisers and how they are made</li> <li>-recall the names of the salts produced when phosphate rock is treated with nitric acid, sulfuric acid and phosphoric acid</li> </ul>	104-105	<a href="https://www.bbc.co.uk/bitesize/guides/z9tw6f/revision/1">https://www.bbc.co.uk/bitesize/guides/z9tw6f/revision/1</a>	<a href="https://www.youtube.com/watch?v=1_HoWz5Kxfk">https://www.youtube.com/watch?v=1_HoWz5Kxfk</a> <a href="https://www.youtube.com/watch?v=HAKaD6-7fgQ">https://www.youtube.com/watch?v=HAKaD6-7fgQ</a> <a href="https://www.youtube.com/watch?v=rKzt9BvvEeQ">https://www.youtube.com/watch?v=rKzt9BvvEeQ</a>

## Chemistry Paper 2 - H

These specification points will **not be assessed** on this paper.

**Exam date: 20<sup>th</sup> June**

Spec point	CGP Revision Guide Pages
4.9.2 Carbon dioxide and methane as greenhouse gases	92-94

# AQA GCSE Combined Science Trilogy: Foundation

## Advance Information of Assessed Content 2022

Link to specification: <https://filestore.aqa.org.uk/resources/science/specifications/AQA-8464-SP-2016.PDF>

Link to advance information document: <https://filestore.aqa.org.uk/content/summer-2022/AQA-8464-AI-22.PDF>

Link to revised Physics equation sheet: <https://filestore.aqa.org.uk/resources/science/AQA-8464-8465-ES-INS.PDF>

## Biology Paper 1 - F

These specification points will be the **major focus** of this paper.

**Exam date: 17<sup>th</sup> May**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.1.2 Cell Division	-How DNA is arranged as chromosomes -Series of stages in the cell cycles inc. mitosis -Definition and uses of stem cells	15-16	<a href="https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/2">https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/2</a> <a href="https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/3">https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/3</a>	<a href="https://www.youtube.com/watch?v=RHvZVmbIA78">https://www.youtube.com/watch?v=RHvZVmbIA78</a> <a href="https://www.youtube.com/watch?v=Kh27evjxvYM&amp;t=24s">https://www.youtube.com/watch?v=Kh27evjxvYM&amp;t=24s</a>
<b>Required practical 1:</b> use of light microscope	-How to prepare slides -How to use the microscope to improve field of view, clarify, change magnification - Microscopy calculations	12-13	<a href="https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/1">https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/1</a>	<a href="https://www.youtube.com/watch?v=iBVxo5T-ZQM&amp;t=8s">https://www.youtube.com/watch?v=iBVxo5T-ZQM&amp;t=8s</a>
4.2.2 Animal tissues, organs and organ systems	- Functions of tissues and organs in the digestive system -Digestive enzymes -Functions of tissues and organs in the circulatory system -Pathway of blood through the heart -adaptations of components of the blood -risk factors of non-communicable diseases	24, 27, 30-32 35-37	<a href="https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zsnscrd/revision/1">https://www.bbc.co.uk/bitesize/guides/zsnscrd/revision/1</a>	<a href="https://www.youtube.com/watch?v=4ui4oSHHzA">https://www.youtube.com/watch?v=4ui4oSHHzA</a> <a href="https://www.youtube.com/watch?v=VLK2wANJQm0">https://www.youtube.com/watch?v=VLK2wANJQm0</a> <a href="https://www.youtube.com/watch?v=bpYaKM2hVFY">https://www.youtube.com/watch?v=bpYaKM2hVFY</a>
<b>Required practical 3:</b> test for carbohydrates, lipids and proteins	-Reagent and positive result for carbohydrates, proteins and lipids	28	<a href="https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/3">https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/3</a>	<a href="https://www.youtube.com/watch?v=SqWTJWOBww4">https://www.youtube.com/watch?v=SqWTJWOBww4</a>

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## Biology Paper 1 - F

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**Exam date: 17<sup>th</sup> May**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.3.1 Communicable Diseases	-definition and examples of pathogen -how viruses and bacteria make us ill -examples of diseases caused by each type of pathogen -human defence mechanisms -what happens in a vaccine -comparing antibody production after active and passive immunity -role of antibiotics -stages in the development of drugs	42-49	<a href="https://www.bbc.co.uk/bitesize/topics/z9kww6f">https://www.bbc.co.uk/bitesize/topics/z9kww6f</a>	<a href="https://www.youtube.com/watch?v=dbd5Ydu3EY">https://www.youtube.com/watch?v=dbd5Ydu3EY</a> <a href="https://www.youtube.com/watch?v=5X9MkLVhW">https://www.youtube.com/watch?v=5X9MkLVhW</a> <a href="https://www.youtube.com/watch?v=HSrrPdJDqM">https://www.youtube.com/watch?v=HSrrPdJDqM</a> <a href="https://www.youtube.com/watch?v=uPeZBhuYInU">https://www.youtube.com/watch?v=uPeZBhuYInU</a> <a href="https://www.youtube.com/watch?v=w3ykU52K-Hw">https://www.youtube.com/watch?v=w3ykU52K-Hw</a>
4.4.1 Photosynthesis	-photosynthesis equation -factors affecting rate of photosynthesis	50-52 Not inc. bottom half of 50	<a href="https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1</a>	<a href="https://www.youtube.com/watch?v=rAJGnS_ktk4">https://www.youtube.com/watch?v=rAJGnS_ktk4</a>
<b>Required Practical 5:</b> effect of light intensity on rate of photosynthesis	-independent, dependent, control variables -How to measure the dependent variable -method -analysing results	52	<a href="https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/5">https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/5</a>	<a href="https://www.youtube.com/watch?v=cBCKedXDFeE">https://www.youtube.com/watch?v=cBCKedXDFeE</a>

## Biology Paper 1 - F

These specification points will **not be assessed** on this paper.

**Exam date: 17<sup>th</sup> May**

Spec point	CGP Revision Guide Pages
4.1.3.2 Osmosis	18
4.1.3.3 Active Transport	19
4.2.2.4 Coronary Heart Diseases	33-34
4.4.1.3 Uses of Glucose from Photosynthesis	Bottom half of pg 50
4.4.2 Respiration	53-55

## Chemistry Paper 1 - F

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**Exam date: 27<sup>th</sup> May**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.1.2 The Periodic Table	<ul style="list-style-type: none"> <li>-The Periodic Table is arranged in order of proton number</li> <li>-What atoms of elements in the same group have in common</li> <li>-What atoms of elements in the same period have in common</li> <li>-development in the Periodic Table</li> <li>-ions formed from metals and non-metals</li> <li>-trends in physical and chemical properties of group 1, 7 and 0 elements</li> <li>-Reactions of group 1 and 7 elements</li> </ul>	106-111	<a href="https://www.bbc.co.uk/bitesize/guides/zwt2k2p/revision/1">https://www.bbc.co.uk/bitesize/guides/zwt2k2p/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/ztrdxs/revision/1">https://www.bbc.co.uk/bitesize/guides/ztrdxs/revision/1</a>	<a href="https://www.youtube.com/watch?v=idS9roW7izM&amp;t=119s">https://www.youtube.com/watch?v=idS9roW7izM&amp;t=119s</a> <a href="https://www.youtube.com/watch?v=uwzXFzoCP_k">https://www.youtube.com/watch?v=uwzXFzoCP_k</a> <a href="https://www.youtube.com/watch?v=dZGDUKQa_6g">https://www.youtube.com/watch?v=dZGDUKQa_6g</a> <a href="https://www.youtube.com/watch?v=HT1zAPQlBAQ">https://www.youtube.com/watch?v=HT1zAPQlBAQ</a>
5.2.2 How bonding and structure are related to the properties of a substance	<ul style="list-style-type: none"> <li>-interpreting melting and boiling point data to determine state at a certain temp</li> <li>-state symbols</li> <li>-describe and explain properties of ionic compounds</li> <li>-describe and explain properties of simple covalent molecules</li> <li>-describe and explain properties of polymers</li> <li>-describe and explain properties of metals and alloys</li> </ul>	115, 117-118, 120	<a href="https://www.bbc.co.uk/bitesize/topics/z33rrwx">https://www.bbc.co.uk/bitesize/topics/z33rrwx</a>	<a href="https://www.youtube.com/watch?v=leVxy7cjZMU">https://www.youtube.com/watch?v=leVxy7cjZMU</a> <a href="https://www.youtube.com/watch?v=DECGNyC-x_s">https://www.youtube.com/watch?v=DECGNyC-x_s</a> <a href="https://www.youtube.com/watch?v=EP0zfm_FVqc">https://www.youtube.com/watch?v=EP0zfm_FVqc</a> <a href="https://www.youtube.com/watch?v=A-wTlPICd0">https://www.youtube.com/watch?v=A-wTlPICd0</a>
5.2.3 Structure and bonding of carbon	<ul style="list-style-type: none"> <li>-describe and explain the properties of diamond, graphite, graphene and fullerenes</li> </ul>	118-119	<a href="https://www.bbc.co.uk/bitesize/guides/zgq8b82/revision/2">https://www.bbc.co.uk/bitesize/guides/zgq8b82/revision/2</a>	<a href="https://www.youtube.com/watch?v=tGH0mXCcEFU">https://www.youtube.com/watch?v=tGH0mXCcEFU</a>

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## Chemistry Paper 1 - F

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.4.1 The Reactivity of Metals	<ul style="list-style-type: none"> <li>-Metals + oxygen</li> <li>-Reduction and oxidation in terms of oxygen</li> <li>-The Reactivity Series</li> <li>-Displacement reactions</li> <li>-Extraction of metals by reduction</li> </ul>	130-131	<a href="https://www.bbc.co.uk/bitesize/guides/zy7dgd/revision/1">https://www.bbc.co.uk/bitesize/guides/zy7dgd/revision/1</a>	<a href="https://www.youtube.com/watch?v=Lk1V0buHEFs">https://www.youtube.com/watch?v=Lk1V0buHEFs</a> <a href="https://www.youtube.com/watch?v=2i5Lm7BMtpo">https://www.youtube.com/watch?v=2i5Lm7BMtpo</a> <a href="https://www.youtube.com/watch?v=MXTSels6e2Y">https://www.youtube.com/watch?v=MXTSels6e2Y</a>
5.4.2 Reactions of Acids	<ul style="list-style-type: none"> <li>-Naming Salts</li> <li>-products of the reactions of acids and metals</li> <li>-products of the reactions of acids and alkalis and insoluble bases</li> <li>-products of the reactions of acids and metal carbonates</li> <li>-pH scale and neutralisation</li> </ul>	128-129	<a href="https://www.bbc.co.uk/bitesize/guides/ztv2dxx/revision/1">https://www.bbc.co.uk/bitesize/guides/ztv2dxx/revision/1</a>	<a href="https://www.youtube.com/watch?v=ofw6oHSYGFI">https://www.youtube.com/watch?v=ofw6oHSYGFI</a> <a href="https://www.youtube.com/watch?v=QISsle_jSQ8">https://www.youtube.com/watch?v=QISsle_jSQ8</a>
5.4.2.3 and Required Practical 8: preparation of a pure, dry sample of soluble salts	<ul style="list-style-type: none"> <li>-method of producing solid salt crystals from insoluble oxide or carbonate and acids</li> <li>-identifying errors in methods and reagents</li> </ul>	129	<a href="https://www.bbc.co.uk/bitesize/guides/ztv2dxx/revision/5">https://www.bbc.co.uk/bitesize/guides/ztv2dxx/revision/5</a>	<a href="https://www.youtube.com/watch?v=9GH95172Jis8&amp;t=16s">https://www.youtube.com/watch?v=9GH95172Jis8&amp;t=16s</a>

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## Chemistry Paper 1 - F

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.4.3 Electrolysis	-The process of electrolysis -Electrolysis of molten ionic compounds -Electrolysis of aluminium oxide -Electrolysis of aqueous solutions	130-131	<a href="https://www.bbc.co.uk/bitesize/guides/z9h9v9q/revision/1">https://www.bbc.co.uk/bitesize/guides/z9h9v9q/revision/1</a>	<a href="https://www.youtube.com/watch?v=AhTRiL6xjBA&amp;t=2s">https://www.youtube.com/watch?v=AhTRiL6xjBA&amp;t=2s</a> <a href="https://www.youtube.com/watch?v=iINOpROacf0">https://www.youtube.com/watch?v=iINOpROacf0</a> <a href="https://www.youtube.com/watch?v=YcyMEIBEzAY">https://www.youtube.com/watch?v=YcyMEIBEzAY</a> <a href="https://www.youtube.com/watch?v=6WjC_Vi4roA">https://www.youtube.com/watch?v=6WjC_Vi4roA</a>
<b>Required Practical 9:</b> : investigate what happens when aqueous solutions are electrolysed using inert electrodes.	-Developing a hypothesis -Planning an investigation	128-129	<a href="https://www.bbc.co.uk/bitesize/guides/z9h9v9q/revision/3">https://www.bbc.co.uk/bitesize/guides/z9h9v9q/revision/3</a>	<a href="https://www.youtube.com/watch?v=ukbtTTG1Kew">https://www.youtube.com/watch?v=ukbtTTG1Kew</a>
<b>Required Practical 10:</b> investigate the variables that affect temperature changes in reacting solutions such as, eg acid plus metals, carbonates, neutralisations, displacement of metals	-Identifying independent, dependent, control variables -Analysing results -identifying exo and endothermic reactions from experimental results	135	<a href="https://www.bbc.co.uk/bitesize/guides/z2b2k2p/revision/2">https://www.bbc.co.uk/bitesize/guides/z2b2k2p/revision/2</a>	<a href="https://www.youtube.com/watch?v=Bz0C9mmF2tw">https://www.youtube.com/watch?v=Bz0C9mmF2tw</a>

## Physics Paper 1 - F

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**Exam date: 9<sup>th</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.1.1 Energy Changes in a system, and the ways energy is stored before and after such changes	-identifying the energy changes in systems -Calculate, using equations, the amount of energy associated with a moving object, a stretched spring and an object raised above ground level. -Calculate, using an equation, the amount of energy stored in or released from a system as its temperature changes -Calculate Power	167-172	<a href="https://www.bbc.co.uk/bitesize/guides/zskp7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/zskp7p3/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zv8g3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/zv8g3k7/revision/1</a>	<a href="https://www.youtube.com/watch?v=JGwDCeYRYo">https://www.youtube.com/watch?v=JGwDCeYRYo</a> <a href="https://www.youtube.com/watch?v=zy9eWzmGe4">https://www.youtube.com/watch?v=zy9eWzmGe4</a> <a href="https://www.youtube.com/watch?v=Qw_9kX9PARc">https://www.youtube.com/watch?v=Qw_9kX9PARc</a> <a href="https://www.youtube.com/watch?v=63OTldNb-TE">https://www.youtube.com/watch?v=63OTldNb-TE</a> <a href="https://www.youtube.com/watch?v=EDTODPhaaMY">https://www.youtube.com/watch?v=EDTODPhaaMY</a>
<b>Required Practical 14:</b> an investigation to determine the specific heat capacity of one or more materials.	linking the decrease of one energy store (or work done) to the increase in temperature and subsequent increase in thermal energy stored	171	<a href="https://www.bbc.co.uk/bitesize/guides/zv8g3k7/revision/4">https://www.bbc.co.uk/bitesize/guides/zv8g3k7/revision/4</a>	<a href="https://www.youtube.com/watch?v=Hs5x0-U2F4">https://www.youtube.com/watch?v=Hs5x0-U2F4</a> <a href="https://www.youtube.com/watch?v=loeRLKNeUsc">https://www.youtube.com/watch?v=loeRLKNeUsc</a>
6.1.3 National and global energy resources	-describe renewable and non-renewable energy resource -compare advantages and disadvantages of different energy resources	176-179	<a href="https://www.bbc.co.uk/bitesize/guides/z2wfxfr/revision/1">https://www.bbc.co.uk/bitesize/guides/z2wfxfr/revision/1</a>	<a href="https://www.youtube.com/watch?v=1dJKvxhGEGa">https://www.youtube.com/watch?v=1dJKvxhGEGa</a> <a href="https://www.youtube.com/watch?v=pqzvUur7QRw">https://www.youtube.com/watch?v=pqzvUur7QRw</a>

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## Physics Paper 1 - F

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.2.1 Current, potential difference and resistance	<ul style="list-style-type: none"> <li>-circuit diagram symbols</li> <li>-definition and units of electrical current and charge</li> <li>-calculating charge flow using an equations</li> <li>-definition and units of potential difference</li> <li>-definition and units of resistance</li> <li>-relationship between current, potential difference and resistance</li> <li>-calculate current, potential difference or resistance using an equation</li> <li>-IV graphs of resistor at constant temp, filament lamp, diode</li> <li>-applications of LDRs and thermistors</li> </ul>	180-184	<a href="https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/1">https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/1</a>	<a href="https://www.youtube.com/watch?v=sFUmuujAcw">https://www.youtube.com/watch?v=sFUmuujAcw</a> <a href="https://www.youtube.com/watch?v=ts7WumFAa5g">https://www.youtube.com/watch?v=ts7WumFAa5g</a> <a href="https://www.youtube.com/watch?v=hRojfU77c38">https://www.youtube.com/watch?v=hRojfU77c38</a>
<b>Required Practical 16:</b> construct appropriate circuits to investigate the I–V characteristics of circuit elements, inc. a filament lamp, diode and a resistor at constant temp.	<ul style="list-style-type: none"> <li>-placing ammeter and voltmeter in the correct place in a circuit to measure the current through and potential difference across a component</li> <li>-Plotting graphs</li> <li>-Describing and explaining patterns shown in graphed data</li> </ul>	183	<a href="https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/5">https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/5</a>	<a href="https://www.youtube.com/watch?v=A1SyKvdHogY&amp;t=29s">https://www.youtube.com/watch?v=A1SyKvdHogY&amp;t=29s</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.3.1 Changes of state and the particle model	<ul style="list-style-type: none"> <li>-Define and calculate the density of a substance or object</li> <li>-recognise/draw simple diagrams to model the difference between solids, liquids and gases</li> <li>-explain the differences in density between the different states of matter in terms of the arrangement of atoms or molecules.</li> <li>-describe how, when substances change state mass is conserved.</li> <li>-Describe changes of state as physical changes</li> </ul>	193-195	<a href="https://www.bbc.co.uk/bitesize/guides/zqjy6yc/revision/1">https://www.bbc.co.uk/bitesize/guides/zqjy6yc/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zwwxfxr/revision/1">https://www.bbc.co.uk/bitesize/guides/zwwxfxr/revision/1</a>	<a href="https://www.youtube.com/watch?v=hkBrw2fG75U">https://www.youtube.com/watch?v=hkBrw2fG75U</a> <a href="https://www.youtube.com/watch?v=EZmXVO5a20">https://www.youtube.com/watch?v=EZmXVO5a20</a>
6.4.2 Atoms and nuclear radiation	<ul style="list-style-type: none"> <li>-radioactive decay, types of nuclear radiation and their properties</li> <li>-definition and units of activity and count rate</li> <li>-nuclear equations</li> <li>-half lives</li> <li>-contamination and irradiation</li> </ul>	198-201	<a href="https://www.bbc.co.uk/bitesize/guides/zxbnh39/revision/1">https://www.bbc.co.uk/bitesize/guides/zxbnh39/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zp4vfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zp4vfcw/revision/1</a>	<a href="https://www.youtube.com/watch?v=F_Y1-jieCrg">https://www.youtube.com/watch?v=F_Y1-jieCrg</a> <a href="https://www.youtube.com/watch?v=nWOS1C6wVrg">https://www.youtube.com/watch?v=nWOS1C6wVrg</a> <a href="https://www.youtube.com/watch?v=wj9BzGFao8k">https://www.youtube.com/watch?v=wj9BzGFao8k</a> <a href="https://www.youtube.com/watch?v=teGuVAPiOo">https://www.youtube.com/watch?v=teGuVAPiOo</a>

## Physics Paper 1 - F

Exam date: 9<sup>th</sup> JuneThese specification points will **not be assessed** on this paper.

Spec point	CGP Revision Guide Pages
6.2.3 Domestic uses and safety	188
6.3.3 Particle Model and Pressure	Bottom half of pg 193
6.4.1 Atoms and Isotopes	

## Biology Paper 2 - F

Exam date: 15<sup>th</sup> JuneThese specification points will be the **major focus** of this paper.All other specification points from B2, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.5.3 Hormonal Control in Humans	<ul style="list-style-type: none"> <li>-definition of 'hormone'</li> <li>-function of the tissues and organs of the endocrine system</li> <li>-identifying position of glands, and the hormones secreted from them</li> <li>-hormones involved in control of blood glucose concentration</li> <li>-Type 1 and Type 2 diabetes</li> </ul>	61-62	<a href="https://www.bbc.co.uk/bitesize/guides/zq4mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/zq4mk2p/revision/1</a> (1 to 5)	<a href="https://www.youtube.com/watch?v=c6olhi88KZs">https://www.youtube.com/watch?v=c6olhi88KZs</a> <a href="https://www.youtube.com/watch?v=77oyUdN2054">https://www.youtube.com/watch?v=77oyUdN2054</a>
4.6.1 Reproduction	<ul style="list-style-type: none"> <li>-describe the structure of DNA</li> <li>-define 'genome'</li> <li>-structure of a chromosome</li> <li>-definition of 'gene'</li> <li>-definition of key inheritance terms e.g. heterozygous, recessive allele, phenotype</li> <li>-construct punnett squares</li> <li>-determine probability</li> <li>-inherited disorders</li> <li>-make informed judgements about the economic, social and ethical issues concerning embryo screening,</li> </ul>	66, 70-72	<a href="https://www.bbc.co.uk/bitesize/guides/zycmk2p/revision/3">https://www.bbc.co.uk/bitesize/guides/zycmk2p/revision/3</a> <a href="https://www.bbc.co.uk/bitesize/guides/zcdfmsg/revision/1">https://www.bbc.co.uk/bitesize/guides/zcdfmsg/revision/1</a>	<a href="https://www.youtube.com/watch?v=ww1TOXBQ6wQ">https://www.youtube.com/watch?v=ww1TOXBQ6wQ</a> <a href="https://www.youtube.com/watch?v=zNEtVaNQ0s8">https://www.youtube.com/watch?v=zNEtVaNQ0s8</a> <a href="https://www.youtube.com/watch?v=mvWY5lbUoHA">https://www.youtube.com/watch?v=mvWY5lbUoHA</a> <a href="https://www.youtube.com/watch?v=sYPwWHszLDo">https://www.youtube.com/watch?v=sYPwWHszLDo</a>

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## Biology Paper 2 - F

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**Exam date: 15<sup>th</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.7.1 Adaptations, interdependence and competition	-Describe the different levels of organisation in an ecosystem -Describe the importance of interdependence and competition in a community. -Identify biotic and abiotic factors -Suggest the factors for which organisms are competing in a given habitat	83-84	<a href="https://www.bbc.co.uk/bitesize/guides/z86gpbk/revision/1">https://www.bbc.co.uk/bitesize/guides/z86gpbk/revision/1</a>  (1 to 7)	<a href="https://www.youtube.com/watch?v=XVD5izWXmKo">https://www.youtube.com/watch?v=XVD5izWXmKo</a>  <a href="https://www.youtube.com/watch?v=0mjafH5pVLA">https://www.youtube.com/watch?v=0mjafH5pVLA</a>
4.7.2 Organisation of an ecosystem	-interpret food chains and webs -identify producers, consumers, predators and prey from food chains and webs -describe the carbon and water cycles	86, 89-90	<a href="https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/1">https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/1</a>	<a href="https://www.youtube.com/watch?v=dRFQ8rZCK6Q">https://www.youtube.com/watch?v=dRFQ8rZCK6Q</a>  <a href="https://www.youtube.com/watch?v=urzpnjwazV0">https://www.youtube.com/watch?v=urzpnjwazV0</a>
Required Practical 7: measure the population size of a common species in a habitat. Use sampling techniques to investigate the effect of a factor on the distribution of this species	-Using transects and quadrats are used by ecologists to determine the distribution and abundance of species in an ecosystem. -Understand the terms mean, mode and median -Calculate arithmetic means	87-88	<a href="https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/3">https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/3</a>	<a href="https://www.youtube.com/watch?v=2MW6nwf80XM">https://www.youtube.com/watch?v=2MW6nwf80XM</a>  <a href="https://www.youtube.com/watch?v=RhMOCXcDrQ">https://www.youtube.com/watch?v=RhMOCXcDrQ</a>  <a href="https://www.youtube.com/watch?v=yLHz2Ea10Mg&amp;t=2s">https://www.youtube.com/watch?v=yLHz2Ea10Mg&amp;t=2s</a>

## Biology Paper 2 - F

These specification points will **not be assessed** on this paper.

**Exam date: 15<sup>th</sup> June**

Spec point	CGP Revision Guide Pages
4.5.2 The human nervous system	58-60
4.5.3.3 Hormones in human reproduction	63-65
4.5.3.4 Contraception	65
4.6.1.1 Sexual and asexual reproduction	67
4.6.1.2 Meiosis	68
4.6.1.6 Sex Determination	69
4.6.2.1 Variation	73
4.6.2.2 Evolution	74
4.6.2.3 Selective Breeding	77
4.6.3.3 Extinction	
4.6.3.4 Resistant Bacteria	75-76
4.7.1.4 Adaptations	85
4.7.3.1 Biodiversity	91
4.7.3.3 Land Use	93
4.7.3.4 Deforestation	93
4.7.3.5 Global Warming	92
4.7.3.6 Maintaining Biodiversity	94

## Chemistry Paper 2 - F

These specification points will be the **major focus** of this paper.

**Exam date: 20<sup>th</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.6.1 Rate of Reaction	<ul style="list-style-type: none"> <li>-Calculating the rate of a reaction</li> <li>-Describe collision theory</li> <li>-Define activation energy</li> <li>-Describe and explain the factors that increase the rate of reaction</li> <li>-Describe and explain the effect of catalysts on rate of reaction</li> </ul>	138-139, 142-143	<a href="https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/1</a>	<a href="https://www.youtube.com/watch?v=UkrBJ6-uGFA">https://www.youtube.com/watch?v=UkrBJ6-uGFA</a> <a href="https://www.youtube.com/watch?v=GCR5xeduq2o">https://www.youtube.com/watch?v=GCR5xeduq2o</a> <a href="https://www.youtube.com/watch?v=4HXaUBbv04">https://www.youtube.com/watch?v=4HXaUBbv04</a> <a href="https://www.youtube.com/watch?v=hel8fQjxcO8">https://www.youtube.com/watch?v=hel8fQjxcO8</a>
<b>Required Practical 11:</b> Investigate how concentration affects the rates of reaction by a method involving measuring the volume of a gas produced/change in colour	<ul style="list-style-type: none"> <li>-Identify independent, dependent and control variables</li> <li>-Describe how to measure the dependent variable</li> <li>-Analyse results and draw conclusions from graphed data</li> <li>-Calculate rate of reaction from data</li> </ul>	140-141, 142-143	<a href="https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/6">https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/6</a>	<a href="https://www.youtube.com/watch?v=N5p06i9ilmo">https://www.youtube.com/watch?v=N5p06i9ilmo</a> <a href="https://www.youtube.com/watch?v=G16LV17oA1U">https://www.youtube.com/watch?v=G16LV17oA1U</a>
5.6.2 Reversible reactions and dynamic equilibrium	<ul style="list-style-type: none"> <li>-Identify and give examples of reversible reactions</li> <li>-Apply the conservation of energy to reversible reactions</li> <li>-Define dynamic equilibrium</li> </ul>	144	<a href="https://www.bbc.co.uk/bitesize/guides/z32bpbk/revision/1">https://www.bbc.co.uk/bitesize/guides/z32bpbk/revision/1</a> Only page 1	<a href="https://www.youtube.com/watch?v=66qcNNJFy6E">https://www.youtube.com/watch?v=66qcNNJFy6E</a>

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## Chemistry Paper 2 - F

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.7.1 Carbon compounds as fuels and feedstock	<ul style="list-style-type: none"> <li>-Describe crude oil as a mixture of different length hydrocarbons</li> <li>-Define the term hydrocarbon</li> <li>-Identify the first 4 alkanes from their chemical formula and name them</li> <li>-Describe the trend in properties as hydrocarbon chain length increases</li> <li>-Describe and explain the process of fractional distillation</li> <li>-Describe the process of cracking</li> <li>-Describe the use of alkenes</li> </ul>	146-149	<a href="https://www.bbc.co.uk/bitesize/guides/zxd4y4j/revision/1">https://www.bbc.co.uk/bitesize/guides/zxd4y4j/revision/1</a>	<a href="https://www.youtube.com/watch?v=CX2IYWggEBc">https://www.youtube.com/watch?v=CX2IYWggEBc</a> <a href="https://www.youtube.com/watch?v=317yCk5XPos">https://www.youtube.com/watch?v=317yCk5XPos</a> <a href="https://www.youtube.com/watch?v=7AWWjKbRa_o">https://www.youtube.com/watch?v=7AWWjKbRa_o</a>
5.8.1 Purity, formulations and chromatography	<ul style="list-style-type: none"> <li>-Define the term pure substance in chemistry</li> <li>-Use melting and boiling point data to identify pure and impure substances</li> <li>-Define the term formulation and give examples</li> </ul>	150	<a href="https://www.bbc.co.uk/bitesize/guides/zp2wrwx/revision/1">https://www.bbc.co.uk/bitesize/guides/zp2wrwx/revision/1</a>	<a href="https://www.youtube.com/watch?v=3oixWwcnfjY">https://www.youtube.com/watch?v=3oixWwcnfjY</a>
<b>Required Practical 12:</b> Investigate how paper chromatography can be used to separate and tell the difference between coloured substances.	<ul style="list-style-type: none"> <li>-Describe the properties of the mixtures that chromatography can be used to separate</li> <li>-Describe and explain the experimental process of chromatography</li> <li>-Explain how substances are separated using chromatography</li> <li>-Interpret chromatograms +</li> <li>-Calculate R<sub>f</sub> values</li> </ul>	151-152	<a href="https://www.bbc.co.uk/bitesize/guides/zp2wrwx/revision/3">https://www.bbc.co.uk/bitesize/guides/zp2wrwx/revision/3</a>	<a href="https://www.youtube.com/watch?v=TdJ57SQ6GAQ">https://www.youtube.com/watch?v=TdJ57SQ6GAQ</a> <a href="https://www.youtube.com/watch?v=pnTGNAfu6GE">https://www.youtube.com/watch?v=pnTGNAfu6GE</a>

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## Chemistry Paper 2 - F

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.9.1 The composition and evolution of the Earth's Atmosphere	<ul style="list-style-type: none"> <li>-describe the composition of the current atmosphere</li> <li>-describe the composition of the early atmosphere and explain theories of how the early atmosphere formed</li> <li>-explain how the early atmosphere changed to that of the present atmosphere</li> </ul>	155	<a href="https://www.bbc.co.uk/bitesize/guides/z9pk3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/z9pk3k7/revision/1</a>	<a href="https://www.youtube.com/watch?v=t1Z3GInldLA">https://www.youtube.com/watch?v=t1Z3GInldLA</a> <a href="https://www.youtube.com/watch?v=I0h-3M0Pso">https://www.youtube.com/watch?v=I0h-3M0Pso</a>
5.9.3 Common atmospheric pollutants and their sources	<ul style="list-style-type: none"> <li>-State the atmospheric pollutants released into the atmosphere from the complete and incomplete combustion of fossil fuels</li> <li>-Describe the negative impacts of these pollutants on health and the environment</li> </ul>	158	<a href="https://www.bbc.co.uk/bitesize/guides/zq3797h/revision/1">https://www.bbc.co.uk/bitesize/guides/zq3797h/revision/1</a>	<a href="https://www.youtube.com/watch?v=yLp6LOgPHml">https://www.youtube.com/watch?v=yLp6LOgPHml</a>
5.10.1 Using the Earth's resources and obtaining potable water	<ul style="list-style-type: none"> <li>-Describe the renewable and non-renewable resources that we get from the Earth and its atmosphere</li> <li>-Define the term potable water</li> <li>-Describe how potable water can be produced.</li> <li>-Describe the differences in the treatment of waste water, salt water and ground water</li> </ul>	159, 163-165	<a href="https://www.bbc.co.uk/bitesize/guides/zswfxfr/revision/1">https://www.bbc.co.uk/bitesize/guides/zswfxfr/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zg6cfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zg6cfcw/revision/1</a>	<a href="https://www.youtube.com/watch?v=-XczTGavTZU">https://www.youtube.com/watch?v=-XczTGavTZU</a> <a href="https://www.youtube.com/watch?v=n7pYRQs20bl">https://www.youtube.com/watch?v=n7pYRQs20bl</a>

## Chemistry Paper 2 - F

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**Exam date: 20<sup>th</sup> June**

Spec point	CGP Revision Guide Pages
5.9.2 Carbon dioxide and methane as greenhouse gases	156-157

## Physics Paper 2 - F

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**Exam date: 23<sup>rd</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.5.1 Forces and their interactions	<ul style="list-style-type: none"> <li>-Describe the difference between scalar and vector quantities and give examples</li> <li>-give examples of contact and non-contact forces</li> <li>-Describe the relationship between mass, weight and gravitational field strength</li> <li>-Use an equation to calculate weight</li> <li>-Calculate the resultant force acting on an object</li> <li>-use free body diagrams to describe qualitatively examples where several forces lead to a resultant force on an object, including balanced forces when the resultant force is zero</li> </ul>	203-205	<a href="https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1">https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zcxfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zcxfcw/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/1">https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/1</a>	<a href="https://www.youtube.com/watch?v=P3ISWWUKMdQ">https://www.youtube.com/watch?v=P3ISWWUKMdQ</a> <a href="https://www.youtube.com/watch?v=xxK8N23nx9M">https://www.youtube.com/watch?v=xxK8N23nx9M</a> <a href="https://www.youtube.com/watch?v=W2aBVbCh_r_k">https://www.youtube.com/watch?v=W2aBVbCh_r_k</a> <a href="https://www.youtube.com/watch?v=PL8ATKip0B4">https://www.youtube.com/watch?v=PL8ATKip0B4</a>
6.5.4.1: Describing motion along a line	<ul style="list-style-type: none"> <li>-Describe the difference between distance and displacement</li> <li>-Use an equation to calculate speed</li> <li>-describe the difference between speed and velocity</li> <li>-Interpret distance-time graphs and velocity-time graphs</li> <li>-Use an equation to calculate acceleration</li> <li>-Describe how an object reaches terminal velocity</li> </ul>	208-211	<a href="https://www.bbc.co.uk/bitesize/guides/z2wy6vc/revision/1">https://www.bbc.co.uk/bitesize/guides/z2wy6vc/revision/1</a>	<a href="https://www.youtube.com/watch?v=QaU9IMHh7gE">https://www.youtube.com/watch?v=QaU9IMHh7gE</a> <a href="https://www.youtube.com/watch?v=M_0FRiX8wiM">https://www.youtube.com/watch?v=M_0FRiX8wiM</a> <a href="https://www.youtube.com/watch?v=DkCw2C-DkTO">https://www.youtube.com/watch?v=DkCw2C-DkTO</a> <a href="https://www.youtube.com/watch?v=b0VKjpetP9A">https://www.youtube.com/watch?v=b0VKjpetP9A</a> <a href="https://www.youtube.com/watch?v=Kzx8GBTISVM">https://www.youtube.com/watch?v=Kzx8GBTISVM</a>

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## Physics Paper 2 - F

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.5.4.2 Force, accelerations and Newton's Laws of motion	<ul style="list-style-type: none"> <li>-Describe Newton's first law of motion</li> <li>-Describe Newton's second law of motion and use an equation to calculate the force required to make an object with a certain mass accelerate at a certain speed</li> <li>-Describe Newton's third law of motion</li> </ul>	212-213	<a href="https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/1">https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/1</a>	<a href="https://www.youtube.com/watch?v=I5PtaCJFjw">https://www.youtube.com/watch?v=I5PtaCJFjw</a> <a href="https://www.youtube.com/watch?v=DpQ_ikFKru0">https://www.youtube.com/watch?v=DpQ_ikFKru0</a>
6.5.4.3: Forces and braking	<ul style="list-style-type: none"> <li>-Describe the stopping distance of a car</li> <li>-Define thinking distance</li> <li>-Describe factors that affect a driver's reaction time</li> <li>-evaluate measurements from methods to measure the different reaction times</li> <li>-Define braking distance</li> <li>-Describe factors that affect a car's braking distance</li> <li>-Explain the dangers caused by large decelerations</li> </ul>	215-217	<a href="https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/7">https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/7</a>	<a href="https://www.youtube.com/watch?v=drMKdcMq3o0">https://www.youtube.com/watch?v=drMKdcMq3o0</a>
6.6.2 Electro-magnetic Waves	<ul style="list-style-type: none"> <li>-Describe the order of the electromagnetic spectrum</li> <li>-Describe the properties of the different parts of the EM spectrum</li> <li>-Describe the uses of the different parts of the EM spectrum</li> <li>-Describe the hazards associated with the different parts of the EM spectrum</li> <li>- Describe how changes in atoms and the nuclei of atoms can result in EM waves being generated</li> </ul>	223-225, 228	<a href="https://www.bbc.co.uk/bitesize/guides/z3yq4qt/revision/3">https://www.bbc.co.uk/bitesize/guides/z3yq4qt/revision/3</a>	<a href="https://www.youtube.com/watch?v=u5vkYjV1V1A&amp;t=3s">https://www.youtube.com/watch?v=u5vkYjV1V1A&amp;t=3s</a> <a href="https://www.youtube.com/watch?v=L0iivbacqU&amp;list=RDLVu5vkYjV1V1A&amp;index=2">https://www.youtube.com/watch?v=L0iivbacqU&amp;list=RDLVu5vkYjV1V1A&amp;index=2</a>

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## Physics Paper 2 - F

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>Required Practical 21</b> investigate how the amount of infrared radiation absorbed or radiated by a surface depends on the nature of that surface.	-Identify dependent, independent and variables -Plan a method to ensure valid results are collected -Draw conclusions from data	226-227	<a href="https://www.bbc.co.uk/bitesize/guides/ztpm7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/ztpm7p3/revision/1</a>	<a href="https://www.youtube.com/watch?v=LFwio38EK9s">https://www.youtube.com/watch?v=LFwio38EK9s</a>
<b>6.7.1:</b> Permanent and induced magnetism, magnetic forces and fields	-Describe the difference between a permanent and an induced magnet -Describe the attraction and repulsion between unlike and like poles for permanent magnets . -Define the 'magnetic field'. -Describe the properties of the magnetic field of a magnet -Describe how to plot the magnetic field of a magnet using a compass -Draw the magnetic field pattern of a bar magnet -Explain how a compass behaves when not in the magnetic field of a magnet	229	<a href="https://www.bbc.co.uk/bitesize/guides/zpt9v99a/revision/1">https://www.bbc.co.uk/bitesize/guides/zpt9v99a/revision/1</a>	<a href="https://www.youtube.com/watch?v=sRy7-jEu3Q">https://www.youtube.com/watch?v=sRy7-jEu3Q</a>
<b>6.7.2</b> The motor effect	-Describe how an electromagnet is made -Describe how to change the strength of the electromagnet	230	<a href="https://www.bbc.co.uk/bitesize/guides/zg43y4j/revision/1">https://www.bbc.co.uk/bitesize/guides/zg43y4j/revision/1</a> (just page 1)	<a href="https://www.youtube.com/watch?v=79_SF5AZtzo">https://www.youtube.com/watch?v=79_SF5AZtzo</a>

## Physics Paper 2 - F

These specification points will **not be assessed** on this paper.

**Exam date: 23<sup>rd</sup> June**

Spec point	CGP Revision Guide Pages
<b>6.5.3</b> Forces and elasticity	206-207

# AQA GCSE Combined Science Trilogy: Higher

## Advance Information of Assessed Content 2022

Link to specification: <https://filestore.aqa.org.uk/resources/science/specifications/AQA-8464-SP-2016.PDF>

Link to advance information document: <https://filestore.aqa.org.uk/content/summer-2022/AQA-8464-AI-22.PDF>

Link to revised Physics equation sheet: <https://filestore.aqa.org.uk/resources/science/AQA-8464-8465-ES-INS.PDF>

### Biology Paper 1 - H

These specification points will be the **major focus** of this paper.

**Exam date: 17<sup>th</sup> May**

All other specification points from B1, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.1.2 Cell Division	<ul style="list-style-type: none"> <li>-How DNA is arranged as chromosomes</li> <li>-Series of stages in the cell cycles inc. mitosis</li> <li>-Definition and uses of stem cells</li> </ul>	15-16	<a href="https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/2">https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/2</a> <a href="https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/3">https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/3</a>	<a href="https://www.youtube.com/watch?v=RHyZVmbiA78">https://www.youtube.com/watch?v=RHyZVmbiA78</a> <a href="https://www.youtube.com/watch?v=Kh27evjxvYM&amp;t=24s">https://www.youtube.com/watch?v=Kh27evjxvYM&amp;t=24s</a>
4.2.2 Animal tissues, organs and organ systems	<ul style="list-style-type: none"> <li>- Functions of tissues and organs in the digestive system</li> <li>-Digestive enzymes</li> <li>-Functions of tissues and organs in the circulatory system</li> <li>-Pathway of blood through the heart</li> <li>-adaptations of components of the blood</li> <li>-risk factors of non-communicable diseases</li> <li>-Explain the cause of CHD</li> <li>-Evaluate the advantages and disadvantages of treating cardiovascular diseases by drugs, mechanical devices or transplant</li> </ul>	24 - 38	<a href="https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zsnscrd/revision/1">https://www.bbc.co.uk/bitesize/guides/zsnscrd/revision/1</a>	<a href="https://www.youtube.com/watch?v=4ui4oSjHHzA">https://www.youtube.com/watch?v=4ui4oSjHHzA</a> <a href="https://www.youtube.com/watch?v=VLK2wANiQm0">https://www.youtube.com/watch?v=VLK2wANiQm0</a> <a href="https://www.youtube.com/watch?v=bpYaKM2hVFY">https://www.youtube.com/watch?v=bpYaKM2hVFY</a> GCSE Biology - Why Do We Get Heart Disease and How to Treat It? - Cardiovascular Disease (CVD) #20 - YouTube
<b>Required practical 3:</b> test for carbohydrates, lipids and proteins	<ul style="list-style-type: none"> <li>-Reagent and positive result for carbohydrates, proteins and lipids</li> </ul>	29	<a href="https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/3">https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/3</a>	<a href="https://www.youtube.com/watch?v=SqWTJWOBww4">https://www.youtube.com/watch?v=SqWTJWOBww4</a>

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## Biology Paper 1 - H

These specification points will be the **major focus** of this paper.

**Exam date: 17<sup>th</sup> May**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>Required Practical 4</b> investigate the effect of pH on the rate of reaction of amylase enzyme.	<ul style="list-style-type: none"> <li>-action of enzymes</li> <li>-describe and explain the effect of extreme pH on rate of enzymes</li> <li>-testing for starch</li> <li>-identify independent, dependent, control variables</li> <li>-How to measure the dependent variable</li> <li>-method</li> <li>-analysing results</li> </ul>	25-27	<a href="#">Required practical activity - Animal organisation - digestion - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">GCSE Science Revision Biology "Required Practical 5: Effect of pH on Amylase" - YouTube</a>  <a href="#">Enzymes - GCSE Science Required Practical - YouTube</a>
<b>4.4.1</b> Photosynthesis	<ul style="list-style-type: none"> <li>-photosynthesis equation</li> <li>-factors affecting rate of photosynthesis</li> <li>-explain graphs of photosynthesis rate involving 2/3 factors and decide which is the limiting factor.</li> <li>-understand and use inverse proportion – the inverse square law and light intensity</li> <li>-explain the important of limiting factors in enhancing the conditions in greenhouses to gain the maximum rate of photosynthesis while still maintaining profit.</li> </ul>	50-53	<a href="https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1</a>	<a href="https://www.youtube.com/watch?v=rAJGnS_ktk4">https://www.youtube.com/watch?v=rAJGnS_ktk4</a>  <a href="#">GCSE Science Revision Biology "Limiting Factors" - YouTube</a>  <a href="#">The Rate of Photosynthesis &amp; The Inverse Square Law - YouTube</a>
<b>Required Practical 5:</b> effect of light intensity on rate of photosynthesis	<ul style="list-style-type: none"> <li>-independent, dependent, control variables</li> <li>-How to measure the dependent variable</li> <li>-method</li> <li>-analysing results</li> </ul>	52	<a href="https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/5">https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/5</a>	<a href="https://www.youtube.com/watch?v=cBCKedXdFeE">https://www.youtube.com/watch?v=cBCKedXdFeE</a>

## Biology Paper 1 - H

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**Exam date: 17<sup>th</sup> May**

Spec point	CGP Revision Guide Pages
<b>4.1.1.5</b> Microscopy	12-13
<b>4.1.3</b> Transport in cells	17-19
<b>4.2.3</b> Plant tissues, organs and systems	39-41
<b>4.3.1.2</b> Viral Diseases	44
<b>4.3.1.4</b> Fungal Diseases	44
<b>4.3.1.5</b> Protist Diseases	44
<b>4.3.1.6</b> Human Defence Systems	46-47
<b>4.4.1.3</b> Uses of Glucose from Photosynthesis	Middle section pg 50
<b>4.4.2.2</b> Response to exercise	56

## Chemistry Paper 1 - H

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**Exam date: 27<sup>th</sup> May**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.2.2 How bonding and structure are related to the properties of a substance	<ul style="list-style-type: none"> <li>-interpreting melting and boiling point data to determine state at a certain temp</li> <li>-link energy needed to change state to strength of forces between particles</li> <li>-state symbols</li> <li>-describe &amp; explain properties of ionic compounds</li> <li>-describe &amp; explain properties of simple covalent molecules</li> <li>-describe &amp; explain properties of polymers</li> <li>-describe &amp; explain properties of metals and alloys</li> </ul>	114, 116-117, 119-121	<a href="https://www.bbc.co.uk/bitesize/topics/z33rrwx">https://www.bbc.co.uk/bitesize/topics/z33rrwx</a>	<a href="https://www.youtube.com/watch?v=leVxy7cjZMU">https://www.youtube.com/watch?v=leVxy7cjZMU</a>  <a href="https://www.youtube.com/watch?v=DECGNyC-x_s">https://www.youtube.com/watch?v=DECGNyC-x_s</a>  <a href="https://www.youtube.com/watch?v=EPQzfm_FVqc">https://www.youtube.com/watch?v=EPQzfm_FVqc</a>  <a href="https://www.youtube.com/watch?v=A-wTlPICd0">https://www.youtube.com/watch?v=A-wTlPICd0</a>
5.3.2 Use of amount of substance in relation to masses of pure substances	<ul style="list-style-type: none"> <li>-calculating relative formula mass</li> <li>-calculating the number of moles in a given mass of a substance, calculating the mass of a certain no. of moles of a substance</li> <li>-Avogadro's constant – the number of particles in 1 mole of every substance</li> <li>-calculate the masses of reactants and products from the balanced symbol equation and the mass of a given reactant or product.</li> <li>-using molar ratios to balance equations</li> <li>-identifying limiting reactants and explaining the effect on yield of products</li> <li>-define concentration of a solution</li> <li>-calculate the concentration of a solution, or the mass of a solute dissolved in a given volume to create a solution of given concentration</li> </ul>	123-124, 126-128	<a href="https://www.bbc.co.uk/bitesize/topics/zsnyy4j">https://www.bbc.co.uk/bitesize/topics/zsnyy4j</a>	<a href="https://www.youtube.com/watch?v=q49NwlrjaFw">https://www.youtube.com/watch?v=q49NwlrjaFw</a>  <a href="https://www.youtube.com/watch?v=wPGVQz3UXpw">https://www.youtube.com/watch?v=wPGVQz3UXpw</a>  <a href="https://www.youtube.com/watch?v=TV6n5MFH6IU">https://www.youtube.com/watch?v=TV6n5MFH6IU</a>  <a href="https://www.youtube.com/watch?v=YKUQ2cPmJg">https://www.youtube.com/watch?v=YKUQ2cPmJg</a>  <a href="https://www.youtube.com/watch?v=MuzOmFhiE8c">https://www.youtube.com/watch?v=MuzOmFhiE8c</a>  <a href="https://www.youtube.com/watch?v=3G3KQIyoZDI">https://www.youtube.com/watch?v=3G3KQIyoZDI</a>

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## Chemistry Paper 1 - H

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**Exam date: 27<sup>th</sup> May**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.4.1 The Reactivity of Metals	<ul style="list-style-type: none"> <li>-Metals + oxygen</li> <li>-Reduction and oxidation in terms of oxygen</li> <li>-reduction and oxidation in terms of electrons</li> <li>-identify in a given reaction, symbol equation or half equation which species are oxidised and which are reduced</li> <li>-The Reactivity Series</li> <li>- Displacement reactions</li> <li>- Extraction of metals by reduction</li> </ul>	132-134	<a href="https://www.bbc.co.uk/bitesize/guides/zy7dgd/revision/1">https://www.bbc.co.uk/bitesize/guides/zy7dgd/revision/1</a>	<a href="https://www.youtube.com/watch?v=Lk1V0buHEFs">https://www.youtube.com/watch?v=Lk1V0buHEFs</a>  <a href="https://www.youtube.com/watch?v=gnbuTl2aril">https://www.youtube.com/watch?v=gnbuTl2aril</a>  <a href="https://www.youtube.com/watch?v=2i5Lm7BMTpo">https://www.youtube.com/watch?v=2i5Lm7BMTpo</a>  <a href="https://www.youtube.com/watch?v=MXTSels6e2Y">https://www.youtube.com/watch?v=MXTSels6e2Y</a>
5.4.2 Reactions of Acids	<ul style="list-style-type: none"> <li>-Naming Salts</li> <li>-products of the reactions of acids and metals</li> <li>-explain the reactions of metals and acids in terms of loss and gain of electrons</li> <li>-products of the reactions of acids and alkalis and insoluble bases</li> <li>-products of the reactions of acids and metal carbonates</li> <li>-pH scale and neutralisation</li> <li>-difference between strong and weak acids</li> </ul>	131, 134 129-130	<a href="https://www.bbc.co.uk/bitesize/guides/ztv2dxs/revision/1">https://www.bbc.co.uk/bitesize/guides/ztv2dxs/revision/1</a>	<a href="https://www.youtube.com/watch?v=of6oHSYGF">https://www.youtube.com/watch?v=of6oHSYGF</a>  GCSE Science Revision Chemistry "Acids Reacting with Metals 2" - YouTube  <a href="https://www.youtube.com/watch?v=QISle_iSQ8">https://www.youtube.com/watch?v=QISle_iSQ8</a>
5.4.2.3 and Required Practical 8: preparation of a pure, dry sample of soluble salts	<ul style="list-style-type: none"> <li>-method of producing solid salt crystals from insoluble oxide or carbonate and acids</li> <li>-identifying errors in methods and reagents</li> </ul>	131	<a href="https://www.bbc.co.uk/bitesize/guides/ztv2dxs/revision/5">https://www.bbc.co.uk/bitesize/guides/ztv2dxs/revision/5</a>	<a href="https://www.youtube.com/watch?v=9GH95172js8&amp;t=16s">https://www.youtube.com/watch?v=9GH95172js8&amp;t=16s</a>  GCSE Science Revision Chemistry "Strong and Weak Acids" - YouTube

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## Chemistry Paper 1 - H

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**Exam date: 27<sup>th</sup> May**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.4.3 Electrolysis	<ul style="list-style-type: none"> <li>-The process of electrolysis</li> <li>-identifying oxidation and reduction in terms of electrons</li> <li>-writing half equations for oxidation/reduction reactions occurring at each electrode</li> <li>-Electrolysis of molten ionic compounds</li> <li>-Electrolysis of aluminium oxide</li> <li>-Electrolysis of aqueous solutions, predicting products formed</li> </ul>	135-6	<a href="https://www.bbc.co.uk/bitesize/guides/z9h9v9q/revision/1">https://www.bbc.co.uk/bitesize/guides/z9h9v9q/revision/1</a>	<a href="https://www.youtube.com/watch?v=AhTRiL6xjBA&amp;t=2s">https://www.youtube.com/watch?v=AhTRiL6xjBA&amp;t=2s</a> <a href="https://www.youtube.com/watch?v=iINOpROacf0">https://www.youtube.com/watch?v=iINOpROacf0</a> <a href="https://www.youtube.com/watch?v=YcyMEIBEzAY">https://www.youtube.com/watch?v=YcyMEIBEzAY</a> <a href="https://www.youtube.com/watch?v=6WjC_Vi4roA">https://www.youtube.com/watch?v=6WjC_Vi4roA</a> <a href="https://www.youtube.com/watch?v=W9ngXNxSvoo">https://www.youtube.com/watch?v=W9ngXNxSvoo</a>
<b>Required Practical 9:</b> : investigate what happens when aqueous solutions are electrolysed using inert electrodes.	<ul style="list-style-type: none"> <li>-Developing a hypothesis</li> <li>-Planning an investigation</li> </ul>	136	<a href="https://www.bbc.co.uk/bitesize/guides/z9h9v9q/revision/3">https://www.bbc.co.uk/bitesize/guides/z9h9v9q/revision/3</a>	<a href="https://www.youtube.com/watch?v=ukbtTTG1Kew">https://www.youtube.com/watch?v=ukbtTTG1Kew</a>

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## Chemistry Paper 1 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.5.1 Exothermic and endothermic reactions	<ul style="list-style-type: none"> <li>-describe the law of the conservation of energy</li> <li>-define exo and endothermic reactions and describe their features</li> <li>-give examples of exo and endothermic reactions</li> <li>-define activation energy</li> <li>-represent exo and endothermic reactions with reaction profiles</li> <li>-describe bond breaking in the reactants as an endothermic process</li> <li>-describe bond formation in the products as an exothermic process</li> <li>-calculate the energy transferred in chemical reactions using bond energies supplied</li> <li>-Use energy change values to identify if a reaction is exo/endothermic</li> </ul>	138-140	<a href="https://www.bbc.co.uk/bitesize/guides/z2b2k2p/revision/1">https://www.bbc.co.uk/bitesize/guides/z2b2k2p/revision/1</a>	<a href="https://www.youtube.com/watch?v=4HS6D0hTzdg">https://www.youtube.com/watch?v=4HS6D0hTzdg</a> <a href="https://www.youtube.com/watch?v=dstRL5x80Sk">https://www.youtube.com/watch?v=dstRL5x80Sk</a> <a href="https://www.youtube.com/watch?v=it0HGxhxD-s">https://www.youtube.com/watch?v=it0HGxhxD-s</a> <a href="https://www.youtube.com/watch?v=eExCBkp4jB4">https://www.youtube.com/watch?v=eExCBkp4jB4</a> <a href="https://www.youtube.com/watch?v=PdValXAVUOc">https://www.youtube.com/watch?v=PdValXAVUOc</a>
<b>Required Practical 10:</b> investigate the variables that affect temperature changes in reacting solutions such as, eg acid plus metals, carbonates, neutralisations, displacement of metals	<ul style="list-style-type: none"> <li>-Identifying independent, dependent, control variables</li> <li>-Analysing results</li> <li>-identifying exo and endothermic reactions from experimental results</li> </ul>	139	<a href="https://www.bbc.co.uk/bitesize/guides/z2b2k2p/revision/2">https://www.bbc.co.uk/bitesize/guides/z2b2k2p/revision/2</a>	<a href="https://www.youtube.com/watch?v=Bz0C9mmF2tw">https://www.youtube.com/watch?v=Bz0C9mmF2tw</a>

## Physics Paper 1 - H

These specification points will be the **major focus** of this paper.

**Exam date: 9<sup>th</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.1.1 Energy Changes in a system, and the ways energy is stored before and after such changes	<ul style="list-style-type: none"> <li>-identifying the energy changes in systems</li> <li>-Calculate, using equations, the amount of energy associated with a moving object, a stretched spring and an object raised above ground level.</li> <li>-Calculate, using an equation, the amount of energy stored in or released from a system as its temperature changes</li> <li>-Define power</li> <li>-Calculate Power and state its units</li> </ul>	167-169	<a href="https://www.bbc.co.uk/bitesize/guides/zskp7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/zskp7p3/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/1</a>	<a href="https://www.youtube.com/watch?v=JGwcDCeYRYo">https://www.youtube.com/watch?v=JGwcDCeYRYo</a> <a href="https://www.youtube.com/watch?v=zy9eWzmGe4">https://www.youtube.com/watch?v=zy9eWzmGe4</a> <a href="https://www.youtube.com/watch?v=Qw_9kX9PARc">https://www.youtube.com/watch?v=Qw_9kX9PARc</a> <a href="https://www.youtube.com/watch?v=63OTldNb-TE">https://www.youtube.com/watch?v=63OTldNb-TE</a> <a href="https://www.youtube.com/watch?v=EDTODPhaaMY">https://www.youtube.com/watch?v=EDTODPhaaMY</a>
<b>Required Practical 14:</b> an investigation to determine the specific heat capacity of one or more materials.	linking the decrease of one energy store (or work done) to the increase in temperature and subsequent increase in thermal energy stored	169	<a href="https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/4">https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/4</a>	<a href="https://www.youtube.com/watch?v=H5x0-U2F4">https://www.youtube.com/watch?v=H5x0-U2F4</a> <a href="https://www.youtube.com/watch?v=loeRLKNeUsc">https://www.youtube.com/watch?v=loeRLKNeUsc</a>
6.2.4 Energy Transfers	<ul style="list-style-type: none"> <li>-Use the equation that links energy transferred, charge flow and potential difference</li> <li>-Use the equation that links power, current and potential difference</li> </ul>	187-188	<a href="https://www.bbc.co.uk/bitesize/guides/zgva4qt/revision/3">https://www.bbc.co.uk/bitesize/guides/zgva4qt/revision/3</a> <a href="https://www.bbc.co.uk/bitesize/guides/zgva4qt/revision/9">https://www.bbc.co.uk/bitesize/guides/zgva4qt/revision/9</a>	<a href="https://www.youtube.com/watch?v=WkVQLrXOqik">https://www.youtube.com/watch?v=WkVQLrXOqik</a>

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## Physics Paper 1 - H

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**Exam date: 9<sup>th</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>Required Practical 16:</b> construct appropriate circuits to investigate the I–V characteristics of circuit elements, inc. a filament lamp, diode and a resistor at constant temp.	<ul style="list-style-type: none"> <li>-placing ammeter and voltmeter in the correct place in a circuit to measure the current through and potential difference across a component</li> <li>-Plotting graphs</li> <li>-Describing and explaining patterns shown in graphed data</li> </ul>	180-181	<a href="https://www.bbc.co.uk/bitesize/guides/zgva4qt/revision/5">https://www.bbc.co.uk/bitesize/guides/zgva4qt/revision/5</a>	<a href="https://www.youtube.com/watch?v=A15yKvdHoqY&amp;t=29s">https://www.youtube.com/watch?v=A15yKvdHoqY&amp;t=29s</a>
6.3.1 Changes of state and the particle model	<ul style="list-style-type: none"> <li>-Define and calculate the density of a substance or object</li> <li>-recognise/draw simple diagrams to model the difference between solids, liquids and gases</li> <li>-explain the differences in density between the different states of matter in terms of the arrangement of atoms or molecules.</li> <li>-describe how, when substances change state mass is conserved.</li> <li>-Describe changes of state as physical changes</li> </ul>	191-192	<a href="https://www.bbc.co.uk/bitesize/guides/zqjy6yc/revision/1">https://www.bbc.co.uk/bitesize/guides/zqjy6yc/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zwwfxfr/revision/1">https://www.bbc.co.uk/bitesize/guides/zwwfxfr/revision/1</a>	<a href="https://www.youtube.com/watch?v=hkBrw2fG75U">https://www.youtube.com/watch?v=hkBrw2fG75U</a> <a href="https://www.youtube.com/watch?v=E2mXV0Sa20">https://www.youtube.com/watch?v=E2mXV0Sa20</a>

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## Physics Paper 1 - H

These specification points will be the **major focus** of this paper.

**Exam date: 9<sup>th</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.3.3 Particle Model and pressure	-Describe the motion of gases -explain how the motion and the average kinetic energy of the molecules in a gas is related to both its temperature and its pressure	191	<a href="https://www.bbc.co.uk/bitesize/guides/z2xcfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/z2xcfcw/revision/1</a>	<a href="https://www.youtube.com/watch?v=hKO3DpgiISk">https://www.youtube.com/watch?v=hKO3DpgiISk</a> <a href="https://www.youtube.com/watch?v=9PwzPDJ7GYc">https://www.youtube.com/watch?v=9PwzPDJ7GYc</a>
6.4.1 Atoms and isotopes	-Describe the structure of an atom. -Compare the radius of the nucleus to the radius of the atom -Describe how electrons are arranged on energy levels -Describe how electrons can move energy levels further from or towards the nucleus -define the atomic number and mass number of elements -calculate the number of protons, neutrons and electrons in atoms -state the features of protons, neutrons and electrons -describe the similarities and differences between atoms of isotopes of the same element -development of the model of the atom	96-97, 195-196	<a href="https://www.bbc.co.uk/bitesize/guides/zpctty/revision/1">https://www.bbc.co.uk/bitesize/guides/zpctty/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z964y4j/revision/1">https://www.bbc.co.uk/bitesize/guides/z964y4j/revision/1</a>	<a href="https://www.youtube.com/watch?v=KwOHjB4Tro">https://www.youtube.com/watch?v=KwOHjB4Tro</a> <a href="https://www.youtube.com/watch?v=sG6QoLxwIw4">https://www.youtube.com/watch?v=sG6QoLxwIw4</a> <a href="https://www.youtube.com/watch?v=0ASldDQmIOQ">https://www.youtube.com/watch?v=0ASldDQmIOQ</a>

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## Physics Paper 1 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.4.2 Atoms and nuclear radiation	-radioactive decay, types of nuclear radiation and their properties -definition and units of activity and count rate -nuclear equations -half lives -calculate the net decline, expressed as a ratio, in a radioactive emission after a given number of half-lives -contamination and irradiation	196-199	<a href="https://www.bbc.co.uk/bitesize/guides/zxbnh39/revision/1">https://www.bbc.co.uk/bitesize/guides/zxbnh39/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zp4vfw/revision/1">https://www.bbc.co.uk/bitesize/guides/zp4vfw/revision/1</a>	<a href="https://www.youtube.com/watch?v=F_Y1-JieCrg">https://www.youtube.com/watch?v=F_Y1-JieCrg</a> <a href="https://www.youtube.com/watch?v=nWOS1C6wVrg">https://www.youtube.com/watch?v=nWOS1C6wVrg</a> <a href="https://www.youtube.com/watch?v=w9BzGFao8k">https://www.youtube.com/watch?v=w9BzGFao8k</a> <a href="https://www.youtube.com/watch?v=teGuOVAPIOo">https://www.youtube.com/watch?v=teGuOVAPIOo</a>

## Physics Paper 1 - H

Exam date: 9<sup>th</sup> JuneThese specification points will **not be assessed** on this paper.

Spec point	CGP Revision Guide Pages
6.2.2 Series and Parallel Circuits	183-184
6.2.3 Domestic uses and safety	186
6.3.2 Internal Energy and Energy Transfers	193-194

## Biology Paper 2 - H

Exam date: 15<sup>th</sup> JuneThese specification points will be the **major focus** of this paper.All other specification points from B2, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.5.3 Hormonal Control in Humans	<ul style="list-style-type: none"> <li>-definition of 'hormone'</li> <li>function of the tissues and organs of the endocrine system</li> <li>-identifying position of glands, and the hormones secreted from them</li> <li>-hormones involved in control of blood glucose concentration</li> <li>-Type 1 and Type 2 diabetes</li> <li>-explain how glucagon interacts with insulin in a negative feedback cycle to control blood glucose (sugar) levels in the body.</li> <li>-describe the roles of hormones in human reproduction, including the menstrual cycle</li> <li>-explain the interactions of FSH, oestrogen, LH and progesterone, in the control of the menstrual cycle</li> <li>-explain the use of hormones in modern reproductive technologies to treat infertility.</li> <li>-explain the roles of thyroxine and adrenaline in the body. Thyroxine levels are controlled by negative feedback</li> </ul>	62-67	<a href="https://www.bbc.co.uk/bitesize/guides/zq4mk2p/revision/1">https://www.bbc.co.uk/bitesize/guides/zq4mk2p/revision/1</a>	<a href="https://www.youtube.com/watch?v=c6olhi88KZs">https://www.youtube.com/watch?v=c6olhi88KZs</a>  <a href="https://www.youtube.com/watch?v=77oyUdN2054">https://www.youtube.com/watch?v=77oyUdN2054</a>  <a href="#">GCSE Biology Hormones in human reproduction (AQA 9-1) – YouTube</a>  <a href="#">GCSE Science Revision Biology "The Menstrual Cycle" – YouTube</a>  <a href="#">GCSE Science Revision Biology "Hormones to Treat Infertility" – YouTube</a>  <a href="#">GCSE Science Revision Biology "Negative Feedback" – YouTube</a>

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## Biology Paper 2 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.7.2 Organisation of an ecosystem	-interpret food chains and webs -identify producers, consumers, predators and prey from food chains and webs -describe the carbon and water cycles	86, 89-90	<a href="https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/1">https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/1</a>	<a href="https://www.youtube.com/watch?v=dRFQ8rZCK6Q">https://www.youtube.com/watch?v=dRFQ8rZCK6Q</a> <a href="https://www.youtube.com/watch?v=urzpnjwazV0">https://www.youtube.com/watch?v=urzpnjwazV0</a>
4.7.3 Biodiversity and the effect of human interaction on an ecosystem	-Define biodiversity -Describe ways in which pollution can occur, and the impacts of this pollution on biodiversity -Describe ways to manage this pollution -describe some of the biological consequences of global warming. -Describe the things that scientists have introduced to reduce the negative effects of humans on ecosystems and biodiversity.	91-92, 94	<a href="#">Biodiversity and interdependence - Biodiversity and the effect of human interaction on ecosystems - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	GCSE Science Revision Biology "Biodiversity" - YouTube GCSE Science Revision Biology "Maintaining Biodiversity" - YouTube GCSE Biology - How Human Waste Reduces Biodiversity - Explained #63 - YouTube GCSE Science Revision Biology "Global Warming" - YouTube
<b>Required Practical 7:</b> measure the population size of a common species in a habitat. Use sampling techniques to investigate the effect of a factor on the distribution of this species	-Using transects and quadrats are used by ecologists to determine the distribution and abundance of species in an ecosystem. -Understand the terms mean, mode and median -Calculate arithmetic means	87-88	<a href="https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/3">https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/3</a>	<a href="https://www.youtube.com/watch?v=2MW6nwf8XM">https://www.youtube.com/watch?v=2MW6nwf8XM</a> <a href="https://www.youtube.com/watch?v=RhMOCxCdRQ">https://www.youtube.com/watch?v=RhMOCxCdRQ</a> <a href="https://www.youtube.com/watch?v=yLHz2Ea10Mg&amp;t=2s">https://www.youtube.com/watch?v=yLHz2Ea10Mg&amp;t=2s</a>

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## Biology Paper 2 - H

These specification points will **not be assessed** on this paper.

**Exam date: 15<sup>th</sup> June**

Spec point	CGP Revision Guide Pages
4.5.2 The human nervous system	59-61
4.5.3.4 Contraception	Bottom half of pg 65
4.6.1.1 Sexual and asexual reproduction	69
4.6.1.3 DNA and the genome	68
4.6.1.4 Genetic Inheritance	72-73
4.6.1.5 Inherited Disorders	74
4.6.1.6 Sex Determination	71
4.6.2 Variation and Evolution	75-77
4.6.3. The development of understanding of genetics and evolution	78-80
4.7.1.4 Adaptations	85
4.7.3.3 Land Use	93
4.7.3.4 Deforestation	93

## Chemistry Paper 2 - H

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**Exam date: 20<sup>th</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.6.1 Rate of Reaction	<ul style="list-style-type: none"> <li>-Calculating the rate of a reaction</li> <li>-Calculate the gradient of a tangent to the curve on these graphs as a measure of rate of reaction at a specific time.</li> <li>-Describe collision theory</li> <li>-Define activation energy</li> <li>-Describe and explain the factors that increase the rate of reaction</li> <li>-Describe and explain the effect of catalysts on rate of reaction</li> </ul>	142-146	<a href="https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/1</a>	<a href="https://www.youtube.com/watch?v=UkrBJ6-uGFA">https://www.youtube.com/watch?v=UkrBJ6-uGFA</a> <a href="https://www.youtube.com/watch?v=GCR5xeduq2o">https://www.youtube.com/watch?v=GCR5xeduq2o</a> <a href="https://www.youtube.com/watch?v=4HXaUBbv04">https://www.youtube.com/watch?v=4HXaUBbv04</a> <a href="https://www.youtube.com/watch?v=heI8fQxcO8">https://www.youtube.com/watch?v=heI8fQxcO8</a>
<b>Required Practical 11:</b> Investigate how concentration affects the rates of reaction by a method involving measuring the volume of a gas produced/change in colour	<ul style="list-style-type: none"> <li>-Identify independent, dependent and control variables</li> <li>-describe how to measure the dependent variable</li> <li>-analyse results and draw conclusions from graphed data</li> <li>-calculate rate of reaction from data</li> </ul>	145	<a href="https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/6">https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/6</a>	<a href="https://www.youtube.com/watch?v=N5p06i9ilmo">https://www.youtube.com/watch?v=N5p06i9ilmo</a> <a href="https://www.youtube.com/watch?v=G16LV17oA1U">https://www.youtube.com/watch?v=G16LV17oA1U</a>

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## Chemistry Paper 2 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.6.2 Reversible reactions and dynamic equilibrium	<ul style="list-style-type: none"> <li>-Identify and give examples of reversible reactions</li> <li>-Apply the conservation of energy to reversible reactions</li> <li>-Define dynamic equilibrium</li> <li>-Describe Le Chatelier's principle</li> <li>-Describe and explain the effect of changing the following conditions on equilibrium; concentration, temperature, pressure</li> </ul>	147-148	<a href="https://www.bbc.co.uk/bitesize/guides/z32bbpk/revision/1">https://www.bbc.co.uk/bitesize/guides/z32bbpk/revision/1</a>	<a href="https://www.youtube.com/watch?v=66qcNNJFy6E">https://www.youtube.com/watch?v=66qcNNJFy6E</a> <a href="#">GCSE Science Revision Chemistry "Concentration and Reversible Reactions" – YouTube</a> <a href="#">GCSE Science Revision Chemistry "Pressure and Reversible Reactions" – YouTube</a> <a href="#">GCSE Science Revision Chemistry "Temperature and reversible reactions" – YouTube</a> <a href="#">GCSE Chemistry - Le Chatelier's Principle #42 (Higher Tier) – YouTube</a>

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## Chemistry Paper 2 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.7.1 Carbon compounds as fuels and feedstock	<ul style="list-style-type: none"> <li>-describe crude oil as a mixture of different length hydrocarbons</li> <li>-define the term hydrocarbon</li> <li>-identify the first 4 alkanes from their chemical formula and name them</li> <li>-Describe the trend in properties as hydrocarbon chain length increases</li> <li>-Describe and explain the process of fractional distillation</li> <li>-describe the process of cracking</li> <li>-describe the use of alkenes</li> </ul>	150-152	<a href="https://www.bbc.co.uk/bitesize/guides/zxd4y4j/revision/1">https://www.bbc.co.uk/bitesize/guides/zxd4y4j/revision/1</a>	<a href="https://www.youtube.com/watch?v=CX2lYWggEBc">https://www.youtube.com/watch?v=CX2lYWggEBc</a> <a href="https://www.youtube.com/watch?v=3l7yCkSXPos">https://www.youtube.com/watch?v=3l7yCkSXPos</a> <a href="https://www.youtube.com/watch?v=7AWWjkbRa_o">https://www.youtube.com/watch?v=7AWWjkbRa_o</a>
5.8.1 Purity, formulations and chromatography	<ul style="list-style-type: none"> <li>-Define the term pure substance in chemistry</li> <li>-Use melting and boiling point data to identify pure and impure substances</li> <li>-Define the term formulation and give examples</li> </ul>	153-154	<a href="https://www.bbc.co.uk/bitesize/guides/zp2wrwx/revision/1">https://www.bbc.co.uk/bitesize/guides/zp2wrwx/revision/1</a>	<a href="https://www.youtube.com/watch?v=3oXWwcnfJY">https://www.youtube.com/watch?v=3oXWwcnfJY</a>
<b>Required Practical 12:</b> investigate how paper chromatography can be used to separate and tell the difference between coloured substances.	<ul style="list-style-type: none"> <li>-Describe the properties of the mixtures that chromatography can be used to separate</li> <li>-Describe and explain the experimental process of chromatography</li> <li>-Explain how substances are separated using chromatography</li> <li>-Interpret chromatograms +</li> <li>-Calculate Rf values</li> </ul>	154	<a href="https://www.bbc.co.uk/bitesize/guides/zp2wrwx/revision/3">https://www.bbc.co.uk/bitesize/guides/zp2wrwx/revision/3</a>	<a href="https://www.youtube.com/watch?v=TdI57SQ6GAQ">https://www.youtube.com/watch?v=TdI57SQ6GAQ</a> <a href="https://www.youtube.com/watch?v=pnTGNAfu6GE">https://www.youtube.com/watch?v=pnTGNAfu6GE</a>

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## Chemistry Paper 2 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
5.9.1 The composition and evolution of the Earth's Atmosphere	<ul style="list-style-type: none"> <li>-describe the composition of the current atmosphere</li> <li>-describe the composition of the early atmosphere and explain theories of how the early atmosphere formed</li> <li>-explain how the early atmosphere changed to that of the present atmosphere</li> </ul>	157	<a href="https://www.bbc.co.uk/bitesize/guides/z9pk3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/z9pk3k7/revision/1</a>	<a href="https://www.youtube.com/watch?v=t123GInIdLA">https://www.youtube.com/watch?v=t123GInIdLA</a> <a href="https://www.youtube.com/watch?v=l0h_-3M0Pso">https://www.youtube.com/watch?v=l0h_-3M0Pso</a>
5.10.1 Using the Earth's resources and obtaining potable water	<ul style="list-style-type: none"> <li>-Describe the renewable and non-renewable resources that we get from the Earth and its atmosphere</li> <li>-Define the term potable water</li> <li>-Describe how potable water can be produced.</li> <li>-Describe the differences in the treatment of waste water, salt water and ground water</li> <li>-Describe and evaluate alternative methods of extracting metals e.g. phytomining and bioleaching</li> </ul>	161-162, 164-165	<a href="https://www.bbc.co.uk/bitesize/guides/zswfxfr/revision/1">https://www.bbc.co.uk/bitesize/guides/zswfxfr/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zg6cfcw/revision/1">https://www.bbc.co.uk/bitesize/guides/zg6cfcw/revision/1</a> Biological methods of metal extraction - Higher - Ways of reducing the use of resources - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize	<a href="https://www.youtube.com/watch?v=-XczTGavTZU">https://www.youtube.com/watch?v=-XczTGavTZU</a> <a href="https://www.youtube.com/watch?v=n7pYRQs20bl">https://www.youtube.com/watch?v=n7pYRQs20bl</a> <a href="https://www.youtube.com/watch?v=b5RVPauf4oM">https://www.youtube.com/watch?v=b5RVPauf4oM</a>

## Chemistry Paper 2 - H

Exam date: 20<sup>th</sup> JuneThese specification points will **not be assessed** on this paper.

Spec point	CGP Revision Guide Pages
5.8.2 Identification of common gases	155

## Physics Paper 2 - H

Exam date: 23<sup>rd</sup> JuneThese specification points will be the **major focus** of this paper.

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.5.1 Forces and their interactions	<ul style="list-style-type: none"> <li>-Describe the difference between scalar and vector quantities and give examples</li> <li>-give examples of contact and non-contact forces</li> <li>-Describe the relationship between mass, weight and gravitational field strength</li> <li>-Use an equation to calculate weight</li> <li>-Calculate the resultant of two forces that act in a straight line.</li> <li>-Use vector diagrams to illustrate the resolving of forces e.g. two components acting at right angles to each other</li> <li>-Use free body diagrams to describe qualitatively examples where several forces lead to a resultant force on an object, including balanced forces when the resultant force is zero</li> </ul>	201-204	<a href="https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1">https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zcxcfw/revision/1">https://www.bbc.co.uk/bitesize/guides/zcxcfw/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/1">https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/1</a>	<a href="https://www.youtube.com/watch?v=P1S1SWWUkMdQ">https://www.youtube.com/watch?v=P1S1SWWUkMdQ</a> <a href="https://www.youtube.com/watch?v=xxK8N23nx9M">https://www.youtube.com/watch?v=xxK8N23nx9M</a> <a href="https://www.youtube.com/watch?v=W2aBVbChR_k">https://www.youtube.com/watch?v=W2aBVbChR_k</a> <a href="https://www.youtube.com/watch?v=PL8ATKip0B4">https://www.youtube.com/watch?v=PL8ATKip0B4</a> GCSE Physics - Vector Diagrams and Resultant Forces #43 – YouTube Resolving Forces using Scale Drawings – YouTube

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## Physics Paper 2 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.5.4.1: Describing motion along a line	<ul style="list-style-type: none"> <li>-Describe the difference between distance and displacement</li> <li>-Use an equation to calculate speed</li> <li>-describe the difference between speed and velocity</li> <li>-explain that motion in a circle involves constant speed but changing velocity.</li> <li>-Interpret distance-time graphs and velocity-time graphs</li> <li>-Calculate speed of an accelerating object at any particular time by drawing a tangent and measuring the gradient of the distance-time graph at that time</li> <li>-Calculate the distance travelled /displacement of an object by calculating the area under a velocity-time graph.</li> <li>-Use an equation to calculate acceleration</li> <li>-Describe how an object reaches terminal velocity</li> </ul>	207 - 210	<a href="https://www.bbc.co.uk/bitesize/guides/z2wy6vc/revision/1">https://www.bbc.co.uk/bitesize/guides/z2wy6vc/revision/1</a>	<a href="https://www.youtube.com/watch?v=QaU9jMHh7gE">https://www.youtube.com/watch?v=QaU9jMHh7gE</a> <a href="https://www.youtube.com/watch?v=M_0FRiX8wIM">https://www.youtube.com/watch?v=M_0FRiX8wIM</a> <a href="https://www.youtube.com/watch?v=DkCw2C-DkT0">https://www.youtube.com/watch?v=DkCw2C-DkT0</a> <a href="https://www.youtube.com/watch?v=b0VKIpetP9A">https://www.youtube.com/watch?v=b0VKIpetP9A</a> <a href="https://www.youtube.com/watch?v=Kzx8GBT15VM">https://www.youtube.com/watch?v=Kzx8GBT15VM</a> <a href="https://www.youtube.com/watch?v=YCVSOp428Gj">https://www.youtube.com/watch?v=YCVSOp428Gj</a> <a href="https://www.youtube.com/watch?v=VRvjQBjI0oY">https://www.youtube.com/watch?v=VRvjQBjI0oY</a> <a href="https://www.youtube.com/watch?v=EkrAPvSin-M">https://www.youtube.com/watch?v=EkrAPvSin-M</a>

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## Physics Paper 2 - H

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**Exam date: 23<sup>rd</sup> June**

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.5.4.2 Force, accelerations and Newton's Laws of motion	<ul style="list-style-type: none"> <li>-Describe Newton's first law of motion</li> <li>-Describe Newton's second law of motion and use an equation to calculate the force required to make an object with a certain mass accelerate at a certain speed</li> <li>-Explain that inertial mass is a measure of how difficult it is to change the velocity of an object</li> <li>-Describe Newton's third law of motion</li> </ul>	211 - 213	<a href="https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/1">https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/1</a>	<a href="https://www.youtube.com/watch?v=15PtaCJFjw">https://www.youtube.com/watch?v=15PtaCJFjw</a> <a href="https://www.youtube.com/watch?v=DpQ_ikFKru0">https://www.youtube.com/watch?v=DpQ_ikFKru0</a>
6.6.5 Momentum	<ul style="list-style-type: none"> <li>-Use an equation to calculate the momentum of an object from its mass and velocity</li> <li>-Describe the law of the conservation of momentum</li> <li>-Explain examples of momentum in an event, such as a collision</li> </ul>	216	<a href="#">What is momentum? - Higher - Momentum - Higher - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">GCSE Science Revision Physics "Momentum" - YouTube</a> <a href="#">GCSE Physics - Momentum Part 1 of 2 - Conservation of Momentum Principle #59 - YouTube</a> <a href="#">GCSE Physics - Momentum Part 2 of 2 - Changes in Momentum #60 - YouTube</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
6.6.2 Electro-magnetic Waves	<ul style="list-style-type: none"> <li>-Describe the order of the electromagnetic spectrum</li> <li>-Describe the properties of the different parts of the EM spectrum</li> <li>-Describe the uses and hazards of the different parts of the EM spectrum</li> <li>- Describe how changes in atoms and the nuclei of atoms can result in EM waves being generated</li> <li>-Describe how waves are refracted at the boundary of two materials with different densities</li> <li>-Construct ray diagrams to illustrate the refraction of a wave at the boundary between two different media.</li> <li>-Use wave front diagrams to explain refraction in terms of the change of speed that happens when a wave travels from one medium to a different medium</li> <li>-Describe how radio waves can be produced by oscillations in electrical circuits.</li> </ul>	220-224, 226	<a href="https://www.bbc.co.uk/bitesize/guides/z3yq4qt/revision/3">https://www.bbc.co.uk/bitesize/guides/z3yq4qt/revision/3</a>  Reflection of waves - Reflection and refraction - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize	<a href="https://www.youtube.com/watch?v=u5vkYjV1V1A&amp;t=35">https://www.youtube.com/watch?v=u5vkYjV1V1A&amp;t=35</a>  <a href="https://www.youtube.com/watch?v=10iivb-acqU&amp;list=RDLVu5vkYjV1V1A&amp;index=2">https://www.youtube.com/watch?v=10iivb-acqU&amp;list=RDLVu5vkYjV1V1A&amp;index=2</a>  GCSE Science Revision Physics "Refraction of Waves" - YouTube  GCSE Physics - Radio Waves #65 - YouTube

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>Required Practical 21</b> investigate how the amount of infrared radiation absorbed or radiated by a surface depends on the nature of the surface.	<ul style="list-style-type: none"> <li>-Identify dependent, independent and variables</li> <li>-Plan a method to ensure valid results are collected</li> <li>-Draw conclusions from data</li> </ul>	225	<a href="https://www.bbc.co.uk/bitesize/guides/ztpm7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/ztpm7p3/revision/1</a>	<a href="https://www.youtube.com/watch?v=LFwio38EK9s">https://www.youtube.com/watch?v=LFwio38EK9s</a>
6.7.2 The motor effect	<ul style="list-style-type: none"> <li>-Describe how an electromagnet is made</li> <li>-Describe how to change the strength of the electromagnet</li> <li>-Show that Fleming's left-hand rule represents the relative orientation of the force, the current in the conductor and the magnetic field.</li> <li>-Describe the factors that affect the size of the force on the conductor.</li> <li>-Use an equation to calculate the force acting on the conductor from the magnetic flux density, current and length of the wire</li> <li>-Explain how the force on a conductor in a magnetic field causes the rotation of the coil in an electric motor</li> </ul>	228-230	<a href="https://www.bbc.co.uk/bitesize/guides/zg43y4j/revision/1">https://www.bbc.co.uk/bitesize/guides/zg43y4j/revision/1</a>	<a href="https://www.youtube.com/watch?v=79_SF5AZtzo">https://www.youtube.com/watch?v=79_SF5AZtzo</a>  GCSE Science Revision Physics "The Motor Effect" - YouTube  GCSE Physics - Motor Effect #79 - YouTube  GCSE Physics - How the Electric Motor Works #80 - YouTube  GCSE Science Revision Physics "The Electric Motor" - YouTube

## Physics Paper 2 - H

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**Exam date: 23<sup>rd</sup> June**

Spec point	CGP Revision Guide Pages
6.5.3 Forces and elasticity	205-206
6.5.4.3 Forces and braking	214-215
6.7.1 Permanent and induced magnetism, magnetic forces and fields	227

GCSE Geography Summer 2022 Exam Changes

PAPER 1 PHYSICAL GEOGRAPHY UNITS

1 Hour 30 minutes 88 marks 35% of grade

**NO CHANGES**

Section A Question 1 – Hazards

Answer all the questions

Section B Question 2- Living World

Answer all the questions

We do **HOT DESERTS** not Cold environments

Section C- UK Landscapes

**Answer:**

Question 3 Coasts

Question 4 Rivers

**DO NOT ANSWER QUESTION 5**

**GLACIATION**

PAPER 2 HUMAN GEOGRAPHY UNITS

1 Hour 15 minutes 63 marks 35% of grade

**CHANGES**

Section A Question 1 – Urban Issues

Answer all Questions

**SECTION B QUESTION 2**

**DO NOT ANSWER**

Section C- Resource Management

**Answer:**

Question 3 Resource Management

Question 4 Food

**DO NOT ANSWER QUESTION 5**

**& 6**

PAPER 3 GEOGRAPHICAL APPLICATIONS

1 Hour 56 marks 30% of grade

**CHANGES**

**Questions already removed**

NO QUESTIONS LINKED TO OUR FIELDWORK WILL BE ASKED BUT GENERAL FIELDWORK QUESTIONS WILL BE ASKED.

**ANSWER ALL QUESTIONS ON THE PAPER**

SECTION A AND B IS LINKED TO THE PRE RELEASE WE GET ON 22<sup>ND</sup> MARCH 2022

# AQA GCSE Physics: Higher

## Advance Information of Assessed Content 2022

Link to specification: <https://filestore.aqa.org.uk/resources/physics/specifications/AQA-8463-SP-2016.PDF>

Link to advance information document: <https://filestore.aqa.org.uk/content/summer-2022/AQA-8463-AI-22.PDF>

Link to revised Physics equation sheet: <https://filestore.aqa.org.uk/resources/physics/AQA-8463-ES-INS.PDF>

### Physics Paper 1 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.1.1 Energy changes in a system, and the ways energy is stored before and after such changes	<ul style="list-style-type: none"> <li>-identifying the energy changes in systems</li> <li>-Calculate, using equations, the amount of energy associated with a moving object, a stretched spring and an object raised above ground level.</li> <li>-Calculate, using an equation, the amount of energy stored in or released from a system as its temperature changes</li> <li>-Calculate Power</li> </ul>	11-14	<a href="https://www.bbc.co.uk/bitesize/guides/zskp7p3/revision/1">https://www.bbc.co.uk/bitesize/guides/zskp7p3/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/1">https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/1</a>	<a href="https://www.youtube.com/watch?v=JGwDCeYRYo">https://www.youtube.com/watch?v=JGwDCeYRYo</a> <a href="https://www.youtube.com/watch?v=zy9eWzmGe4">https://www.youtube.com/watch?v=zy9eWzmGe4</a> <a href="https://www.youtube.com/watch?v=Qw_9kX9PARc">https://www.youtube.com/watch?v=Qw_9kX9PARc</a> <a href="https://www.youtube.com/watch?v=63OTldNb-TE">https://www.youtube.com/watch?v=63OTldNb-TE</a> <a href="https://www.youtube.com/watch?v=EDTODPhaaMY">https://www.youtube.com/watch?v=EDTODPhaaMY</a>
4.1.2 Conservation and dissipation of energy	<ul style="list-style-type: none"> <li>-Describe the law of the conservation of energy</li> <li>-Describe, and give examples of how energy is dissipated, or 'wasted'</li> <li>-Explain ways of reducing unwanted energy transfers</li> <li>-Describe thermal conductivity in relation to the rate of energy transfer by conduction, through a material</li> <li>-Calculate the efficiency of a device, process or system</li> </ul>	15-17	<a href="https://www.bbc.co.uk/bitesize/guides/z8hsrwx/revision/1">https://www.bbc.co.uk/bitesize/guides/z8hsrwx/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zp8jtv4/revision/1">https://www.bbc.co.uk/bitesize/guides/zp8jtv4/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/z2gitv4/revision/1">https://www.bbc.co.uk/bitesize/guides/z2gitv4/revision/1</a>	<a href="https://www.youtube.com/watch?v=H6D_ViW0Ch4">https://www.youtube.com/watch?v=H6D_ViW0Ch4</a> <a href="https://www.youtube.com/watch?v=Ni5jaeBrigQ">https://www.youtube.com/watch?v=Ni5jaeBrigQ</a> <a href="https://www.youtube.com/watch?v=43XCqAN53Sg">https://www.youtube.com/watch?v=43XCqAN53Sg</a> <a href="https://www.youtube.com/watch?v=GTdgt-OKckA">https://www.youtube.com/watch?v=GTdgt-OKckA</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>Required Practical 2:</b> investigate the effectiveness of different materials as thermal insulators and the factors that may affect the thermal insulation properties of a material	<ul style="list-style-type: none"> <li>-Identify dependent, independent and control variables</li> <li>-How to measure the dependent variable</li> <li>-Analysing results</li> <li>-Plotting graphs</li> <li>-Drawing conclusions from data</li> </ul>	16	<a href="https://www.bbc.co.uk/bitesize/guides/z2g1v4/revision/3">https://www.bbc.co.uk/bitesize/guides/z2g1v4/revision/3</a>	<a href="https://www.youtube.com/watch?v=LH45loyPUA&amp;t=2s">https://www.youtube.com/watch?v=LH45loyPUA&amp;t=2s</a> <a href="https://www.youtube.com/watch?v=MUY1o4ogCvw">https://www.youtube.com/watch?v=MUY1o4ogCvw</a>
<b>4.2.4 Energy Transfers</b>	<ul style="list-style-type: none"> <li>Use the equation that links energy transferred, charge flow and potential difference</li> <li>-Use the equation that links power, current and potential difference</li> <li>-Describe how electricity is transmitted across the National Grid</li> <li>-Explain the role of step-up and step-down transformers</li> <li>-Explain how the efficiency of energy transfer is increased in the National Grid</li> </ul>	P32-34	<a href="https://www.bbc.co.uk/bitesize/guides/z3xv97h/revision/3">https://www.bbc.co.uk/bitesize/guides/z3xv97h/revision/3</a> <a href="https://www.bbc.co.uk/bitesize/guides/z3xv97h/revision/4">https://www.bbc.co.uk/bitesize/guides/z3xv97h/revision/4</a>	<a href="https://www.youtube.com/watch?v=WkvQLrXOqik">https://www.youtube.com/watch?v=WkvQLrXOqik</a> <a href="https://www.youtube.com/watch?v=VTAfjhO1HNo">https://www.youtube.com/watch?v=VTAfjhO1HNo</a> <a href="https://www.youtube.com/watch?v=InvGIt64fQ">https://www.youtube.com/watch?v=InvGIt64fQ</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
<b>Required Practical 5:</b> determine the densities of regular and irregular solid objects and liquids.	<ul style="list-style-type: none"> <li>-Method to determine density of regular shaped objects</li> <li>-Method to determine density of irregular shaped objects</li> <li>-Measurements needed to determine mass and volume of objects</li> <li>-Equipment and apparatus</li> </ul>	P38	<a href="https://www.bbc.co.uk/bitesize/guides/zsngdm/revision/1">https://www.bbc.co.uk/bitesize/guides/zsngdm/revision/1</a>	<a href="https://www.youtube.com/watch?v=ScXOp8Zph28">https://www.youtube.com/watch?v=ScXOp8Zph28</a> <a href="https://www.youtube.com/watch?v=lvq6jAbakC">https://www.youtube.com/watch?v=lvq6jAbakC</a>
<b>4.3.1 Changes of state and particle model</b>	<ul style="list-style-type: none"> <li>-Define and calculate the density of a substance or object</li> <li>-recognise/draw simple diagrams to model the difference between solids, liquids and gases</li> <li>-explain the differences in density between the different states of matter in terms of the arrangement of atoms/molecules.</li> <li>-describe how, when substances change state mass is conserved.</li> <li>-Describe changes of state as physical changes</li> </ul>	P38-39	<a href="https://www.bbc.co.uk/bitesize/guides/zqiy6yc/revision/1">https://www.bbc.co.uk/bitesize/guides/zqiy6yc/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zwwxfkr/revision/1">https://www.bbc.co.uk/bitesize/guides/zwwxfkr/revision/1</a>	<a href="https://www.youtube.com/watch?v=hkBrw2fG75U">https://www.youtube.com/watch?v=hkBrw2fG75U</a> <a href="https://www.youtube.com/watch?v=-EZmXVQ5a20">https://www.youtube.com/watch?v=-EZmXVQ5a20</a>
<b>4.3.2 Internal energy and energy transfers</b>	<ul style="list-style-type: none"> <li>-Define internal energy, specific heat capacity &amp; specific latent heat</li> <li>-Calculate, using an equation, the amount of energy stored in or released from a system as its temperature changes</li> <li>-interpret heating &amp; cooling graphs</li> <li>-Use an equation that links energy transferred, mass and specific latent heat</li> </ul>	P39-40	<a href="https://www.bbc.co.uk/bitesize/guides/zcncjty/revision/1">https://www.bbc.co.uk/bitesize/guides/zcncjty/revision/1</a>	<a href="https://www.youtube.com/watch?v=4rT7-5yE4pQ">https://www.youtube.com/watch?v=4rT7-5yE4pQ</a> <a href="https://www.youtube.com/watch?v=5WVTSNR0iLA">https://www.youtube.com/watch?v=5WVTSNR0iLA</a> <a href="https://www.youtube.com/watch?v=x7G2DXef8A">https://www.youtube.com/watch?v=x7G2DXef8A</a>

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## Physics Paper 1 - H

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Spec point	CGP Revision Guide Pages
4.2.1 Current, potential difference and resistance	P24-27
4.2.2 Series & parallel circuits	P28-30
4.2.3 Domestic uses and safety	P31
4.3.3 Particle model and pressure	P41
4.4.1 Atoms and isotopes	P43, P44 (top half on isotopes)
4.4.3 Hazards and uses of radioactive emissions and of background radiation	P47 (top half on background radiation), P48
4.4.4 Nuclear fission and fusion	P49

## Physics Paper 2 - H

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.5.1 Forces and their interactions	Describe the difference between scalar and vector quantities and give examples -give examples of contact and non-contact forces -Describe the relationship between mass, weight and gravitational field strength -Use an equation to calculate weight -Calculate the resultant of two forces that act in a straight line. -Use vector diagrams to illustrate the resolving of forces e.g. two components acting at right angles to each other -Use free body diagrams to describe qualitatively examples where several forces lead to a resultant force on an object, including balanced forces when the resultant force is zero	P51-54	<a href="https://www.bbc.co.uk/bitesize/guides/zpqngdm/revision/1">https://www.bbc.co.uk/bitesize/guides/zpqngdm/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zyxv97h/revision/1">https://www.bbc.co.uk/bitesize/guides/zyxv97h/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zgncjty/revision/1">https://www.bbc.co.uk/bitesize/guides/zgncjty/revision/1</a>	<a href="https://www.youtube.com/watch?v=P1S1SWWUkMdQ">https://www.youtube.com/watch?v=P1S1SWWUkMdQ</a> <a href="https://www.youtube.com/watch?v=xxK8N23nx9M">https://www.youtube.com/watch?v=xxK8N23nx9M</a> <a href="https://www.youtube.com/watch?v=W2aBVbChR_k">https://www.youtube.com/watch?v=W2aBVbChR_k</a> <a href="https://www.youtube.com/watch?v=PL8ATKip0B4">https://www.youtube.com/watch?v=PL8ATKip0B4</a> GCSE Physics - Vector Diagrams and Resultant Forces #43 – YouTube Resolving Forces using Scale Drawings – YouTube
4.5.2 Work done and energy transfer	-Use an equation to calculate the work done to an object -Convert between newton-metres and joules. -Work done against the frictional forces acting on an object causes a rise in the temperature of the object.	P53	<a href="https://www.bbc.co.uk/bitesize/guides/zgncjty/revision/3">https://www.bbc.co.uk/bitesize/guides/zgncjty/revision/3</a>	<a href="https://www.youtube.com/watch?v=JHEmP2-YnrU">https://www.youtube.com/watch?v=JHEmP2-YnrU</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.5.3 Forces and elasticity	<ul style="list-style-type: none"> <li>-Give examples of the forces involved in stretching, bending or compressing an object</li> <li>-Describe the difference between elastic deformation and inelastic deformation caused by stretching forces.</li> <li>-Describe the relationship between the extension of an elastic object and the force applied, provided that the limit of proportionality is not exceeded.</li> <li>-Use an equation that links force applied, the spring constant and extension of a spring</li> <li>-Calculate work done/energy stored in stretching a spring (up to the limit of proportionality)</li> </ul>	P55	<a href="https://www.bbc.co.uk/bitesize/guides/z9v8msg/revision/1">https://www.bbc.co.uk/bitesize/guides/z9v8msg/revision/1</a>	<a href="https://www.youtube.com/watch?v=FAHOI32oAns">https://www.youtube.com/watch?v=FAHOI32oAns</a> <a href="https://www.youtube.com/watch?v=ACDbJ8rsQDo&amp;t=5s">https://www.youtube.com/watch?v=ACDbJ8rsQDo&amp;t=5s</a> <a href="https://www.youtube.com/watch?v=Qw_9kx9PARc&amp;t=44s">https://www.youtube.com/watch?v=Qw_9kx9PARc&amp;t=44s</a>
4.5.5 Pressure and pressure differences in fluids	<ul style="list-style-type: none"> <li>-Use an equation to calculate the pressure at the surface of a fluid</li> <li>-Use an equation to calculate the pressure due to a column of liquid</li> <li>-calculate the differences in pressure at different depths in a liquid.</li> <li>-Describe the factors which influence floating and sinking.</li> </ul>	P58-59	<a href="https://www.bbc.co.uk/bitesize/guides/z93dxfr/revision/1">https://www.bbc.co.uk/bitesize/guides/z93dxfr/revision/1</a>	<a href="https://www.youtube.com/watch?v=P08-1YPy1hI">https://www.youtube.com/watch?v=P08-1YPy1hI</a> <a href="https://www.youtube.com/watch?v=9Gw0r1Xn6ec">https://www.youtube.com/watch?v=9Gw0r1Xn6ec</a>

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Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.5.6.1: Describing motion along a line	<ul style="list-style-type: none"> <li>-Describe the difference between distance and displacement</li> <li>-Use an equation to calculate speed</li> <li>-describe the difference between speed and velocity</li> <li>-explain that motion in a circle involves constant speed but changing velocity.</li> <li>-Interpret distance-time graphs and velocity-time graphs</li> <li>-Calculate speed of an accelerating object at any particular time by drawing a tangent and measuring the gradient of the distance-time graph at that time</li> <li>-Calculate the distance travelled /displacement of an object by calculating the area under a velocity-time graph.</li> <li>-Use an equation to calculate acceleration</li> <li>-Describe how an object reaches terminal velocity</li> </ul>	P60-63	<a href="https://www.bbc.co.uk/bitesize/guides/zwc7pbk/revision/1">https://www.bbc.co.uk/bitesize/guides/zwc7pbk/revision/1</a> <a href="https://www.bbc.co.uk/bitesize/guides/zp2fj6/revision/1">https://www.bbc.co.uk/bitesize/guides/zp2fj6/revision/1</a>	<a href="https://www.youtube.com/watch?v=QaU9jMh7gE">https://www.youtube.com/watch?v=QaU9jMh7gE</a> <a href="https://www.youtube.com/watch?v=M_0FRiX8wIM">https://www.youtube.com/watch?v=M_0FRiX8wIM</a> <a href="https://www.youtube.com/watch?v=DkCw2C-DkTO">https://www.youtube.com/watch?v=DkCw2C-DkTO</a> <a href="https://www.youtube.com/watch?v=b0VKipetP9A">https://www.youtube.com/watch?v=b0VKipetP9A</a> <a href="https://www.youtube.com/watch?v=Kxx8GTISVM">https://www.youtube.com/watch?v=Kxx8GTISVM</a> <a href="https://www.youtube.com/watch?v=YCVSOp428Gj">https://www.youtube.com/watch?v=YCVSOp428Gj</a> <a href="https://www.youtube.com/watch?v=VRvjQBj0oY">https://www.youtube.com/watch?v=VRvjQBj0oY</a> <a href="https://www.youtube.com/watch?v=EKrAPvSin-M">https://www.youtube.com/watch?v=EKrAPvSin-M</a>
4.5.7 Momentum	<ul style="list-style-type: none"> <li>-Use an equation to calculate the momentum of an object from its mass and velocity</li> <li>-Describe the law of the conservation of momentum</li> <li>-Explain examples of momentum in an event, such as a collision</li> <li>-Calculate change in momentum</li> <li>-explain safety features with reference to the concept of rate of change of momentum.</li> </ul>	P70-71	<a href="https://www.bbc.co.uk/bitesize/guides/zytb8mn/revision/1">https://www.bbc.co.uk/bitesize/guides/zytb8mn/revision/1</a>	GCSE Science Revision Physics "Momentum" – YouTube GCSE Physics - Momentum Part 1 of 2 - Conservation of Momentum Principle #59 – YouTube GCSE Physics - Momentum Part 2 of 2 - Changes in Momentum #60 – YouTube

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## Physics Paper 2 - H

These specification points will be the **major focus** of this paper.

**Exam date: 23<sup>rd</sup> June**

All other specification points from P2, other than those on the [next slide](#) that are explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.6.1 Waves in air, fluids and solids	<ul style="list-style-type: none"> <li>-Describe the differences between transverse and longitudinal waves and give examples</li> <li>-Define the property terms of waves</li> <li>-Compare properties of waves</li> <li>-Use an equation to calculate a time period</li> <li>-Use an equation that links wave speed, frequency and wavelength</li> <li>-describe a method to measure the speed of sound waves in air</li> <li>-describe a method to measure the speed of ripples on a water surface.</li> <li>-construct ray diagrams to illustrate the reflection of a wave at a surface.</li> <li>-describe the effects of reflection, transmission and absorption of waves at material interfaces.</li> </ul>	P73-75; P88-90	<a href="https://www.bbc.co.uk/bitesize/guides/zg97p3/revision/1">https://www.bbc.co.uk/bitesize/guides/zg97p3/revision/1</a>  <a href="https://www.bbc.co.uk/bitesize/guides/z9bw6yc/revision/1">https://www.bbc.co.uk/bitesize/guides/z9bw6yc/revision/1</a>  <a href="https://www.bbc.co.uk/bitesize/guides/zw42ng8/revision/1">https://www.bbc.co.uk/bitesize/guides/zw42ng8/revision/1</a>	<a href="https://www.youtube.com/watch?v=aCu4VRKMstA">https://www.youtube.com/watch?v=aCu4VRKMstA</a>  <a href="https://www.youtube.com/watch?v=8K6gOST8pZk">https://www.youtube.com/watch?v=8K6gOST8pZk</a>  <a href="https://www.youtube.com/watch?v=wO49W5isP0s">https://www.youtube.com/watch?v=wO49W5isP0s</a>
<b>Required practical 9:</b> investigate the reflection of light by different types of surface and the refraction of light by different substances.	<ul style="list-style-type: none"> <li>-Identify dependent, independent and control variables</li> <li>-How to measure the dependent variable</li> <li>-Analysing results</li> <li>-Plotting graphs</li> <li>-Drawing conclusions from data</li> </ul>	P77	<a href="https://www.bbc.co.uk/bitesize/guides/zw42ng8/revision/3">https://www.bbc.co.uk/bitesize/guides/zw42ng8/revision/3</a>	<a href="https://www.youtube.com/watch?v=2fN_jvf4fw8">https://www.youtube.com/watch?v=2fN_jvf4fw8</a>  <a href="https://www.youtube.com/watch?v=tqiqN3y1ze4">https://www.youtube.com/watch?v=tqiqN3y1ze4</a>

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## Physics Paper 2 - H

These specification points will be the **major focus** of this paper.

**Exam date: 23<sup>rd</sup> June**

All other specification points from P2, other than those on the [next slide](#) that are explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	CGP revision guide pages	Bitesize	YouTube
4.8.1 Solar system, stability of orbital motions, satellites	<ul style="list-style-type: none"> <li>-Describe the structure of the universe and our solar system</li> <li>-Describe the life cycle of a star</li> <li>-explain how fusion processes lead to the formation of new elements.</li> <li>-describe the similarities and distinctions between the planets, their moons, and artificial satellites.</li> <li>-explain qualitatively how for circular orbits, the force of gravity can lead to changing velocity but unchanged speed, for a stable orbit, the radius must change if the speed changes.</li> </ul>	P100-101	<a href="https://www.bbc.co.uk/bitesize/guides/zt2fc6/revision/1">https://www.bbc.co.uk/bitesize/guides/zt2fc6/revision/1</a>  <a href="https://www.bbc.co.uk/bitesize/guides/zpxv97h/revision/1">https://www.bbc.co.uk/bitesize/guides/zpxv97h/revision/1</a>	<a href="https://www.youtube.com/watch?v=mndRVJMovQk">https://www.youtube.com/watch?v=mndRVJMovQk</a>  <a href="https://www.youtube.com/watch?v=V0Y1JlUin4">https://www.youtube.com/watch?v=V0Y1JlUin4</a>  <a href="https://www.youtube.com/watch?v=okMA18ppu98">https://www.youtube.com/watch?v=okMA18ppu98</a>
4.8.2 Red shift	<ul style="list-style-type: none"> <li>-Explain how red-shift provides evidence for the expansion of the universe and the Big Bang model</li> <li>-Describe the Big Bang theory</li> <li>-Explain that the change of each galaxy's speed with distance is evidence of an expanding universe</li> <li>- Explain how scientists are able to use observations to arrive at theories such as the Big Bang theory</li> </ul>	P102	<a href="https://www.bbc.co.uk/bitesize/guides/zstb8mn/revision/1">https://www.bbc.co.uk/bitesize/guides/zstb8mn/revision/1</a>	<a href="https://www.youtube.com/watch?v=C9D0E87TYc">https://www.youtube.com/watch?v=C9D0E87TYc</a>  <a href="https://www.youtube.com/watch?v=bWEtm-7CvzM">https://www.youtube.com/watch?v=bWEtm-7CvzM</a>

## Physics Paper 2 - H

These specification points will **not be assessed** on this paper.

**Exam date: 23<sup>rd</sup> June**

Spec point	CGP Revision Guide Pages
4.5.4 Moments, levers and gears	P57
4.6.2 Electromagnetic waves	P76, P78-85
4.6.3 Black body radiation	P86-87
4.7.1 Permanent and induced magnetism, magnetic forces and fields	P92

## Spanish GCSE Summer 2022

### Paper 4: Writing (only) 25%

#### 1. Question options

For both foundation and higher writing papers, there has been an additional option for questions where you choose the question you will answer, previously 2 options, **now 3 options**. You must write about **one only**.

#### 2. Time

Both foundation and higher writing papers have been increased in time:

Foundation tier to 1 hour 5 minutes

Higher tier to 1 hour 20 minutes

#### 3. Advance information

The below information has been provided for the content of writing paper (**excluding** the translation section of the writing paper):

#### **Foundation tier:**

##### **Theme 1 – Identity and culture**

Topic 1: Me, my family and friends

Topic 2: Technology in everyday life

Topic 3: Free-time activities

Topic 4: Customs and festivals in Spanish speaking countries/communities

##### **Theme 2 – Local, national, international and global areas of interest**

Topic 1: Home, town, neighbourhood and region

Topic 2: Social issues

Topic 3: Global issues

Topic 4: Travel and tourism

### **Theme 3 – Current and future study and employment**

Topic 1: My studies

Topic 2: Life at school/college

Topic 4: Jobs, career choices and ambitions

### **Higher tier:**

#### **Theme 1 – Identity and culture**

Topic 1: Me, my family and friends

Topic 2: Technology in everyday life

Topic 4: Customs and festivals in Spanish speaking countries/communities

#### **Theme 2 – Local, national, international and global areas of interest**

Topic 1: Home, town, neighbourhood and region

Topic 2: Social issues

Topic 3: Global issues

Topic 4: Travel and tourism

#### **Theme 3 – Current and future study and employment**

Topic 1: My studies

Topic 2: Life at school/college

Topic 3: Education post-16

Topic 4: Jobs, career choices and ambitions

## 1RB0/1B PAPER 1: Area of Study 1 – Religion and Ethics Option 1B

### Christianity Section 1: Christian Beliefs Content

1.1 The Trinity: the nature and significance of the Trinity as expressed in the Nicene Creed; the nature and significance of the oneness of God; the nature and significance of each of the Persons individually: including reference to Matthew 3:13–17; how this is reflected in Christian worship and belief today.

1.2 The creation of the universe and of humanity: the biblical account of creation and divergent ways in which it may be understood by Christians, including as literal and metaphorical; the role of the Word and Spirit in creation, including John 1:1–18 and Genesis 1–3; the importance of creation for Christians today.

1.3 The Incarnation: the nature and importance of the person of Jesus Christ as the incarnate Son of God; the biblical basis of this teaching, including John 1:1–18 and 1 Timothy 3:16 and its significance for Christians today.

1.7 The problem of evil/suffering and a loving and righteous God: the problems it raises for Christians about the nature of God, including reference to omnipotence and benevolence, including Psalm 103; how the problem may cause believers to question their faith or the existence of God; the nature and examples of natural suffering, moral suffering. W73059A Continue 7 ""

### Section 3: Living the Christian Life Content

3.2 The role of the sacraments in Christian life and their practice in two denominations: the role of the sacraments/ordinance as a whole; the nature and importance of the meaning and celebration of baptism and the Eucharist in at least two denominations, including reference to the 39 Articles XXV–XXXVI; divergent Christian attitudes towards the use and number of sacraments in Orthodox, Catholic and Protestant traditions.

3.3 The nature and purpose of prayer: the nature of and examples of the different types of prayer; set prayers; informal prayer and the Lord's Prayer, including Matthew 6:5–14; when each type might be used and why; divergent Christian attitudes towards the importance of each type of prayer for Christians today.

3.5 Christian religious celebrations: the nature and history of Christian festivals in the church year, including Christmas and Easter; the significance of celebrating Advent and Christmas; the significance of celebrating Holy Week and Easter, with reference to interpretations of 1 Corinthians 15:12–34.

3.8 The role and importance of the Church in the worldwide community: how and why it works for reconciliation and the problems faced by the persecuted Church; divergent Christian responses to teachings about charity, including 1 Corinthians 13 and Matthew 25:31–46; the work of Christian Aid, what it does and why.

## Option 2C – Islam Section 1: Muslim Beliefs Content

1.2 The five roots of Usul ad-Din in Shi'a Islam (Tawhid (oneness of Allah); 'Adl (Divine Justice); Nubuwwah (Prophethood); Imamah (Successors to Muhammad) and Mi'ad (The Day of Judgment and the Resurrection): the nature, history and purpose of the five roots with reference to their Qur'anic basis, including Surah 112 (the oneness of Allah); the importance of these principles for different Shi'a communities today, including Sevenser and Twelver.

1.3 The nature of Allah: how the characteristics of Allah are shown in the Qur'an and why they are important: Tawhid (oneness), including Surah 16: 35–36, immanence, transcendence, omnipotence, beneficence, mercy, fairness and justice, Adalat in Shi'a Islam.

1.4 Risalah: the nature and importance of prophethood for Muslims, including Surah 2: 136; what the roles of prophets teach Muslims, exemplified in the lives of Adam, Ibrahim, Isma'il, Musa, Dawud, Isa, Muhammad.

1.7 al-Qadr: the nature and importance of Predestination for Muslims; how al-Qadr and human freedom relates to the Day of Judgement, including reference to Sahih Al-Bukhari 78: 685; divergent understandings of predestination in Sunni and Shi'a Islam; the implications of belief in al-Qadr for Muslims today. W73059A Continue 23 ""

## Section 3: Living the Muslim Life Content

3.2 Shahadah as one of the Five Pillars: the nature, role and significance of Shahadah for Sunni and Shi'a Muslims, including reference to Surah 3: 17–21; why reciting Shahadah is important for Muslims, and its place in Muslim practice today.

3.3\* Salah as one of the Five Pillars, including reference to Surah 15: 98–99 and 29: 45: the nature, history, significance and purpose of Salah for Sunni and Shi'a Muslims, including different ways of understanding them; how Salah is performed, including ablution, times, directions, movements and recitations, in the home and mosque and Jummah prayer.

3.4 Sawm as one of the Five Pillars: the nature, role, significance and purpose of fasting during Ramadan, including Surah 2: 183–185; those who are excused from fasting and why; the significance of the Night of Power: the nature, history and purpose of the Night of Power; why Laylat al-Qadr is important for Muslims today.

3.8 The nature, origins, activities, meaning and significance of the celebration/ commemoration of Id-ul-Adha, with reference to Surah 37: 77–111, and Id-ulFitr in Sunni Islam, with reference to their place within Shi'a Islam; and Id-ulGhadeer, with reference to Hadith and the interpretation of Surah 5: 3, and Ashura in Shi'a Islam, with reference to their place within Sunni Islam.



## Paper 1 Breadth study with interpretations

### Option 1H: Britain transformed, 1918–97

Sections A and B will draw from the following specification sub-themes:

Themes	Content
<b>1 A changing political and economic environment, 1918–79</b>	<ul style="list-style-type: none"><li>• A changing political landscape: changing party fortunes, 1918–31; the National government, 1931–45; Labour government, the rise of consensus politics and political challenge, 1945–79.</li><li>• Economic challenges in 1918 and post-war boom, crisis and recovery, 1918–39; creating a managed economy, 1939–51; the response to economic challenges, 1951–79.</li></ul>
<b>2 Creating a welfare state, 1918–79</b>	<ul style="list-style-type: none"><li>• Education and widening opportunities: education policy, 1918–43; the significance of the 'Butler Act' 1944, and the development of comprehensive education to 1979; the growth and social impact of university education, 1918–79.</li></ul>
<b>3 Society in transition, 1918–79</b>	<ul style="list-style-type: none"><li>• Race and immigration: immigration policies and attitudes towards ethnic minorities, 1918–39; the impact of the Second World War and new Commonwealth immigration; racial controversy and the impact of government policies on race relations and immigration, 1958–79.</li></ul>
<b>4 The changing quality of life, 1918–79</b>	<ul style="list-style-type: none"><li>• Changing living standards: the impact of boom, crisis and recovery, and the significance of regional differences, 1918–39; the effects of 'total war' and austerity, 1939–51; the growth of a consumer society, 1951–79.</li><li>• Popular culture and entertainment: the impact of mass popular culture, including cinema, radio and music, 1918–79; the influence of television from the 1950s and youth culture, 1955–79.</li><li>• Leisure and travel: the growth of spectator sports from the 1920s; increased leisure time and the development of mass tourism from the 1930s; the impact of car ownership and travel developments, 1918–79.</li></ul>

#### Section C

*The historical interpretation question is a discrete topic, and questions may draw on one or more of the content bullet points, therefore no advance information is supplied for Paper 1 Section C historical interpretations.*

**Paper 2 Depth study**

**Option 2H.2: The USA, 1955–92: conformity and challenge**

This paper will draw from the following specification sub-topics:

Key topics	Content
<b>1 Affluence and conformity, 1955–63</b>	<ul style="list-style-type: none"><li>• Urbanisation and affluence: the changing nature of cities; expansion of the suburbs; highway development; growing ownership and use of cars; white collar jobs and service industries; consumerism and domestic technology.</li><li>• Kennedy's New Frontier: social welfare and unemployment programmes; environmentalism and expansion of the National Park system; the Peace Corps; the space programme; extent of Kennedy's domestic achievements.</li></ul>
<b>2 Protest and reaction, 1963–72</b>	<ul style="list-style-type: none"><li>• Civil rights: the significance of Malcolm X, Black Power and the Black Panthers; King's changing priorities, including the campaigns in Selma and Chicago; King's achievements and the impact of his assassination; the work of Cesar Chavez.</li><li>• Protest and personal freedom: student protest; counter-culture and its key features; the growth of the women's movement; the impact of sexual liberalisation; the origins of gay rights.</li><li>• Johnson's Great Society, 1964–68: tackling poverty and unemployment; improving housing and education; Medicare and Medicaid; civil rights laws; Johnson's achievements.</li></ul>
<b>4 Republican dominance and its opponents, 1981–92</b>	<ul style="list-style-type: none"><li>• The Religious Right and its critics: the promotion of traditional values; campaigns against abortion and homosexuality; Nancy Reagan's 'Just Say No' campaign; the growth of bitter political divisions and their significance.</li><li>• Cultural challenge: trends in youth culture; the impact of technology on popular culture; the growth of cable television and the influence of MTV; the impact of the AIDS crisis; controversial social issues in film and television.</li><li>• Social change: the changing status of ethnic minorities; the impact of black American success in politics, business, sport and popular culture; the extent of racial tolerance and integration by 1992; the impact of women in politics and the workplace; the changing status of women by 1992.</li></ul>





**Paper 3 Themes in breadth with aspects in depth**

**Option 33: The witch craze in Britain, Europe and North America, c1580–c1750**

Section A will draw from the following specification key topic:

Key topic	Content
<b>1 The North Berwick witches in Scotland, 1590–91 and the aftermath to 1597</b>	<ul style="list-style-type: none"><li>• The origins of the persecution: Gilly Duncan’s confession; the impact of James VI’s voyage from Denmark; the extent to which Danish witch hunting influenced events in Scotland.</li><li>• The widening net: the case of Agnes Sampson and John Fian; the role of the king and torture; the involvement of the Earl of Bothwell; impact of the confessions, trials and executions.</li><li>• Reasons for the extent of persecutions in Scotland to 1597, including judicial procedures, lack of strong central control, the role of King James and significance of his <i>Daemonologie</i>.</li></ul>

Section B will draw from the following specification key topics:

Key topics	Content
<b>2 The Lancashire witches of 1604–13</b>	<ul style="list-style-type: none"><li>• The influence of social, economic and religious context of the area around Pendle in the early seventeenth century and the significance of the new witchcraft statute of 1604.</li><li>• The origins of the case: Alizon Device and John Law; the investigations of Roger Nowell; Old Demdike and Old Chattox and their witchcraft families; the meeting at Malkin Tower.</li><li>• The trial 1612: the Judges Bromley and Altham; the conduct and outcomes of the trial; impact of Thomas Potts’s account.</li></ul>
<b>5 Cotton Mather and the Salem witch hunt, 1692–93</b>	<ul style="list-style-type: none"><li>• The social, economic and political context of Salem: weakened authority following the 1688 Revolution; Indian threats and economic crisis; social tensions.</li><li>• The influence of Cotton Mather, including <i>Memorable Providences relating to Witchcraft and Possessions</i>; instigators, including the roles of Samuel Parris, children and Tituba; the nature of the victims; the trials and executions.</li><li>• Reasons for the ending of the witch hunt: the roles of Cotton Mather’s father and Governor Phips; the general pardon.</li></ul>

**Section C**

*The aspects in breadth focuses on long-term changes across the period studied, and the question may draw on one or both of the themes, therefore no advance notice is supplied for Paper 3 Section C aspects in breadth.*



As instructed in HODs meeting this week, I'm sending the advance information for the component 3 appraising exam for music on Wednesday 22<sup>nd</sup> June 2022.

#### GCSE Music

For the appraising (listening) exam, Eduqas have given the following specific genres/styles of music, that the unprepared extract questions will focus on:

- Romantic music
- vocal ensembles
- film music
- pop

The extended response will be in Area of Study 3, Music for Film, and the dictation question will require candidates to notate pitch only.

For the set works questions, focus will be on section B of the Badinerie and on the second verse and chorus of Africa.

## Design & Technology GCSE (9–1)

Exam board: OCR

Examination Paper: Principles of Design and Technology J310

This list below shows the topics that will be mainly, although **not** exclusively, tested through the higher mark questions:

2. Learning from existing products and practice	2.1 The factors designers consider when exploring existing products: <ul style="list-style-type: none"><li>• Materials &amp; processes used</li><li>• Aesthetics – the influence of fashion and trends</li><li>• The influence of marketing &amp; branding</li><li>• The impact on society</li><li>• The impact on usability</li><li>• The impact on the environment – life cycle assessment</li><li>• The influence of past and present designers</li></ul>
	2.2 How new and emerging technologies influence design decisions, considering: <ul style="list-style-type: none"><li>• Ethics</li><li>• The environment</li><li>• Product enhancement</li></ul>
3. Implications of wider issues	3.1. The impacts of new and emerging technologies when developing designs, on: <ul style="list-style-type: none"><li>• Industry, enterprise e.g. the circular economy</li><li>• Society, lifestyle</li><li>• The environment</li><li>• Sustainability</li></ul>
	3.3 The wider influences on the processes of designing and making: <ul style="list-style-type: none"><li>• Environmental initiatives</li><li>• Fair trade</li><li>• Social and ethical awareness</li><li>• Global sustainable development</li></ul>
5. Material considerations	5.3 The sources or origins of materials: <ul style="list-style-type: none"><li>• Timbers</li><li>• Polymers</li></ul>
7. Manufacturing processes and techniques	7.3 How designers and manufacturers ensure accuracy when making prototypes: <ul style="list-style-type: none"><li>• Measuring</li><li>• Templates/ jigs</li><li>• Working with tolerances</li><li>• Efficient cutting to minimise waste</li></ul>
	7.4 How industry professionals use digital design tools when exploring and developing design ideas: <ul style="list-style-type: none"><li>• Rapid prototyping</li><li>• Digital manufacture</li><li>• Interpretation of plans, 3D Models</li><li>• CAD, CAM, CAE</li></ul>
	7.5b. Awareness of manufacturing processes used for larger scales of production: <ul style="list-style-type: none"><li>• Timbers – CNC routers, sawing, steam bending, lathes</li><li>• Polymers – moulding &amp; forming processes</li></ul>

**General advice:** As well as the above, students and teachers should also consider how to focus their revision of other parts of the specification which may be tested in other lower mark questions.