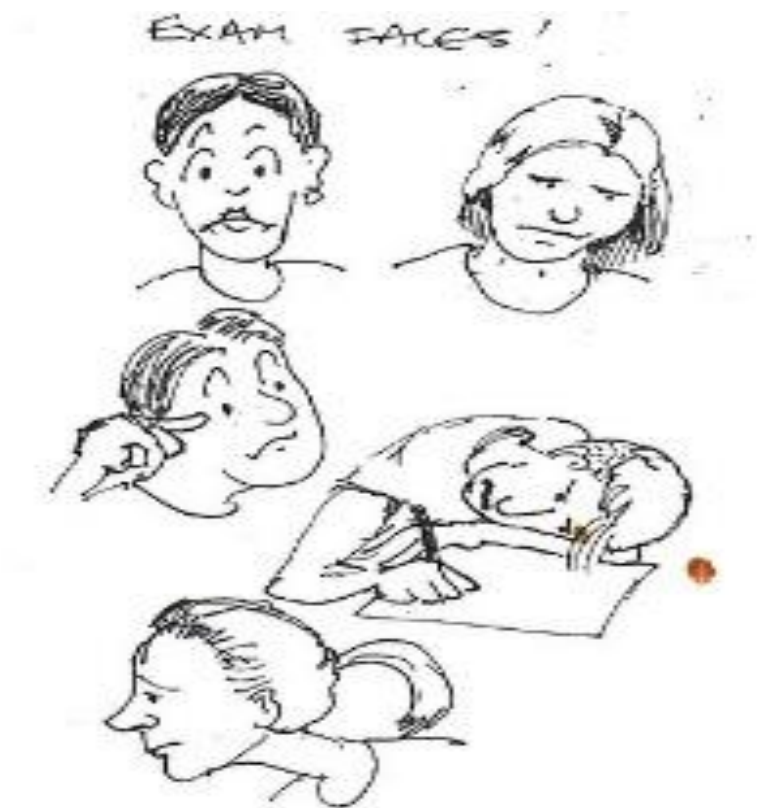




HEYFORD PARK  
FREE SCHOOL  
BONUM COMMUNE COMMUNITATIS

## REVISION BOOKLETS

Year 10



# MATHEMATICS



Tier	Topic	Strand	Grade	MathsWatch Clip
Higher	Algebraic Proof	Algebra	7	193
Higher	'And' 'Or' Probability Questions	Probability	7	204
Foundation/Higher	Angle Sum of Polygons	Geometry	3	123
Foundation/Higher	Angles and Parallel Lines	Geometry	3	120
Foundation/Higher	Angles in a Triangle	Geometry	3	121
Foundation/Higher	Angles on a Line and at a Point	Geometry	2	45
Foundation/Higher	Area of a Circle	Geometry	3	117
Foundation/Higher	Area of a Parallelogram	Geometry	2	55
Foundation/Higher	Area of a Rectangle	Geometry	2	53
Foundation/Higher	Area of a Trapezium	Geometry	2	56
Foundation/Higher	Area of a Triangle	Geometry	2	54
Foundation/Higher	Averages and the Range	Probability	2	62
Foundation/Higher	Averages from a table - Basics	Probability	3	130a
Foundation/Higher	Averages from a table - Estimate for the Mean	Probability	3	130b
Foundation/Higher	Bearings	Geometry	3	124
Higher	Boxplots	Probability	6	187
Foundation/Higher	Calculating Probabilities	Probability	2	59
Higher	Combinations of Transformations	Geometry	6	182
Foundation/Higher	Comparing Fractions	Number	3	70
Higher	Completing the Square - Basics	Algebra	8 - 9	209a
Foundation/Higher	Compound Interest and Depreciation	Ratio	5	164
Foundation/Higher	Compound Units	Ratio	4	142
Foundation/Higher	Congruent triangles	Geometry	5	166
Foundation/Higher	Coordinates	Algebra	1	8
Higher	Cumulative Frequency	Probability	6	186
Foundation/Higher	Decimals and Fractions	Number	3	84
Higher	Direct and Inverse Proportion	Ratio	7	199
Foundation/Higher	Distance-Time Graphs	Ratio	4	143
Foundation/Higher	Error Intervals	Number	5	155
Foundation/Higher	Estimating Answers	Number	3	91
Foundation/Higher	Exact Trigonometric Values	Geometry	5	173
Foundation/Higher	Expanding and Simplifying Brackets - Double Set of Brackets	Algebra	4	134b
Foundation/Higher	Expanding and Simplifying Brackets - Single Set of Brackets	Algebra	4	134a
Foundation/Higher	Expanding Brackets	Algebra	3	93
Higher	Exponential Functions	Algebra	7	194
Foundation/Higher	Factorising and Solving Quadratics	Algebra	5	157
Foundation/Higher	Factors, Multiples and Primes	Number	2	28
Higher	Finding the nth Term of a Quadratic	Algebra	8 - 9	213

<b>Higher</b>	Fractional Indices	Number	<b>7</b>	188
<b>Foundation/Higher</b>	Fractions, Percentages, Decimals	Number	<b>3</b>	85
<b>Foundation/Higher</b>	Frequency Tables and Diagrams	Probability	<b>2</b>	65
<b>Foundation/Higher</b>	Function Machines	Algebra	<b>2</b>	36
<b>Foundation/Higher</b>	Geometric Progressions	Algebra	<b>5</b>	163
<b>Foundation/Higher</b>	Harder Tree Diagrams	Probability	<b>5</b>	175
<b>Higher</b>	Histograms	Probability	<b>7</b>	205
<b>Foundation/Higher</b>	Increase/Decrease by a Percentage	Ratio	<b>3</b>	108
<b>Foundation/Higher</b>	Index Notation	Number	<b>4</b>	131
<b>Foundation/Higher</b>	Introduction to Bounds	Number	<b>4</b>	132
<b>Foundation/Higher</b>	Introduction to Fractions	Number	<b>2</b>	24
<b>Foundation/Higher</b>	Introduction to Percentages	Ratio	<b>2</b>	40
<b>Foundation/Higher</b>	Introduction to Powers/Indices	Number	<b>2</b>	29
<b>Foundation/Higher</b>	Introduction to Ratio	Ratio	<b>2</b>	38
<b>Foundation/Higher</b>	Introduction to Vectors	Geometry	<b>5</b>	174
<b>Foundation/Higher</b>	Listing Outcomes	Probability	<b>2</b>	58
<b>Foundation/Higher</b>	Listing Strategies	Number	<b>3</b>	69
<b>Foundation/Higher</b>	Metric conversions	Geometry	<b>3</b>	112
<b>Foundation/Higher</b>	Multiplying Decimals	Number	<b>3</b>	66
<b>Foundation/Higher</b>	Percentage Change	Ratio	<b>3</b>	109
<b>Foundation/Higher</b>	Percentage of an Amount (Calc.)	Number	<b>3</b>	86
<b>Foundation/Higher</b>	Percentage of an Amount (Non-Calc.)	Number	<b>3</b>	87
<b>Foundation/Higher</b>	Perimeters	Geometry	<b>2</b>	52
<b>Foundation/Higher</b>	Pictograms	Probability	<b>1</b>	16
<b>Foundation/Higher</b>	Pie Charts	Probability	<b>3</b>	128
<b>Foundation/Higher</b>	Place Value	Number	<b>1</b>	1
<b>Foundation/Higher</b>	Polygons	Geometry	<b>1</b>	10
<b>Foundation/Higher</b>	Possibility Spaces	Probability	<b>3</b>	126
<b>Higher</b>	Probability using Venn Diagrams	Probability	<b>6</b>	185
<b>Foundation/Higher</b>	Properties of Solids	Geometry	<b>2</b>	43
<b>Foundation/Higher</b>	Rearranging Simple Formulae	Algebra	<b>4</b>	136
<b>Foundation/Higher</b>	Rounding to Decimal places	Number	<b>2</b>	32
<b>Foundation/Higher</b>	Rounding to Significant Figures	Number	<b>3</b>	90
<b>Foundation/Higher</b>	Scatter Diagrams	Probability	<b>3</b>	129
<b>Foundation/Higher</b>	Sharing using Ratio	Ratio	<b>3</b>	106
<b>Foundation/Higher</b>	Similar Shapes	Ratio	<b>4</b>	144
<b>Higher</b>	Similarity - Area and Volume	Geometry	<b>7</b>	200
<b>Foundation/Higher</b>	Simple Factorisation	Algebra	<b>3</b>	94
<b>Foundation/Higher</b>	Simple Interest	Ratio	<b>3</b>	111
<b>Foundation/Higher</b>	Simple Proportion	Ratio	<b>2</b>	42
<b>Foundation/Higher</b>	Simple Tree Diagrams	Probability	<b>4</b>	151
<b>Foundation/Higher</b>	Simultaneous Equations Algebraically	Algebra	<b>5</b>	162
<b>Foundation/Higher</b>	Solving Equations - Balancing	Algebra	<b>4</b>	135a
<b>Foundation/Higher</b>	Solving Equations using Flowcharts	Algebra	<b>3</b>	100
<b>Higher</b>	Solving Quadratics with the Formula	Algebra	<b>7</b>	191
<b>Foundation/Higher</b>	Squares, Cubes and Roots	Number	<b>3</b>	81
<b>Foundation/Higher</b>	Standard Form	Number	<b>3</b>	83

<b>Foundation/Higher</b>	Straight Line Graphs	Algebra	<b>3</b>	96
<b>Foundation/Higher</b>	Subject of a Formula using Flowcharts	Algebra	<b>3</b>	101
<b>Higher</b>	Surds - Introduction to Surds	Number	<b>8 - 9</b>	207a
<b>Higher</b>	Surds - Rationalising the Denominator	Number	<b>8 - 9</b>	207c
<b>Foundation/Higher</b>	Tally Charts and Bar Charts	Probability	<b>1</b>	15
<b>Foundation/Higher</b>	Time Series	Probability	<b>4</b>	153
<b>Foundation/Higher</b>	Trigonometry	Geometry	<b>5</b>	168
<b>Foundation/Higher</b>	Two-Way Tables	Probability	<b>2</b>	61
<b>Higher</b>	Upper and Lower Bounds	Number	<b>8 - 9</b>	206
<b>Foundation/Higher</b>	Venn Diagrams - Introduction	Probability	<b>3</b>	127a
<b>Foundation/Higher</b>	Venn Diagrams - Notation	Probability	<b>3</b>	127b
<b>Higher</b>	Velocity-Time Graphs	Algebra	<b>8 - 9</b>	216
<b>Foundation/Higher</b>	Vertical Line Charts	Probability	<b>2</b>	64
<b>Foundation/Higher</b>	Volume of a Cuboid	Geometry	<b>3</b>	115
<b>Foundation/Higher</b>	Volume of a Prism	Geometry	<b>3</b>	119



All the end of year assessments in English will follow the GCSE English Language curriculum. AQA, the exam board we follow, has designed specific differentiated papers for years 7-10 which we will mark to gain an understanding of both reading and writing skills needs linked specifically to GCSE assessment objectives across all year groups. This data will inform our curriculum planning and intervention for next academic year.

### **YEAR 10**

Year 10 students will complete a Paper 2 assessment of 1 hour and 45 minutes. This is separated in Section A (reading) and Section B (writing) and having 80 marks available.

*For Section A*, students get 2 texts, one 19<sup>th</sup> or 20<sup>th</sup> century extracts (approximately 1 side of A4) and they must answer 4 questions based on this extract.

Q1 (4 marks)- chose 4 statements that are true from a choice of 8 statements

Q2 (8 marks)- compare the 2 sources by summarising them

Q3 (12 marks)- analyse language from one source only

Q4 (16 marks)- compare different viewpoints and writers' methods

*For Section B*, students get a statement which they should use to argue, persuade, advise, give their opinion and this is marked out of 40 marks.

### **Revision ideas**

- BBC Bitesize GCSE English Language AQA <https://www.bbc.co.uk/education/examspecs/zcbchv4>

-see Miss Marin in FB01 for further revision materials you might require



The end of year science exams will consist of three papers - one each for biology, chemistry and physics. These will directly mirror the format of the exam board papers and will contain a mixture of multiple choice, short and long answer questions. Each paper will be 1 hour 15 minutes long.

#### **Biology paper 1**

- Cell biology
- Organisation
- Infection and response
- Bioenergetics

#### **Chemistry paper 1**

- Atomic structure and the periodic table
- Bonding, structure and the properties of matter
- Quantitative chemistry
- Chemical changes
- Energy changes

#### **Physics paper 1**

- Energy
- Electricity
- Particle model of matter
- Atomic structure

#### **Books to Support Learning**

- **OUP revision guides** are tailored to this course (optional):
  - **Biology** ISBN: 978-0-19-835930-2
  - **Chemistry** ISBN: 978-0-19-835931-9
  - **Physics** ISBN: 978-0-19-835932-6
- CGP revision guides and workbooks are another excellent (optional) resource to help support your child with home learning and revision. [cgpbooks.co.uk](http://cgpbooks.co.uk)

#### **Websites to Support Learning**

- **Freesciencelessons**: This website has a huge range of videos all clearly labelled and linked to the relevant exam papers. [www.freesciencelessons.co.uk](http://www.freesciencelessons.co.uk)
- **BBC Bitesize** (KS4 Science) is another good source of revision information and includes repeatable test activities. Although they do not use exam board topic headings it is quite straightforward to find the topics you are looking for. [bbc.co.uk/education](http://bbc.co.uk/education)



# History

All the end of year assessments in History will follow the GCSE History question stems format. This data will inform our curriculum planning and intervention for next academic year.

**For GCSE History we follow the Edexcel specification. Students will be required to sit 3 exams at the end of Year 11.**

**For their end of year exams Year 10 students will sit TWO full GCSE papers covering the content that we have studied in History lessons during this academic year.**

**Students will complete the following papers -**

**Paper 1 – 1.15hr - Medicine in Britain c1250-present, and the British sector of the Western Front, 1914-1918.**

- C1250-1500: Medieval medicine in Britain, ideas on causes, treatments and prevention.
- 1500-1700: Renaissance medicine in Britain, ideas on causes, treatment and prevention.
- 1700-1900: Industrial medicine in Britain, ideas on causes, treatment and prevention.
- 1900-present: Industrial medicine in Britain, ideas on causes, treatment and prevention
- The British sector of the Western Front, 1914-1918; injuries, treatment and the trenches.

**Paper 3 – 1.20hr - Weimar and Nazi Germany, 1918-1939**

- Germany post-WWI – defeat and post-war government, Treaty of Versailles, social and political unrest, and the 'Golden era' under Stresemann.
- The Early Nazi Party 1919-1928 – Early policies, Munich Putsch, Hitler's trial and imprisonment. The 'lean years' and reason why had failed to gain power by 1928.
- Hitler's rise to power 1930-1934 – The Wall Street Crash and its impact, elections from 1930-32 (including Presidential election), Hitler becoming Chancellor, Reichstag Fire – Army Oath.
- Life in Nazi Germany 1934-39 – the Police state, propaganda, resistance, employment and the economy, changes to the lives of women and German youth, and persecution of minorities.

### **Revision ideas**

CGP revision guides for GCSE Edexcel 9-1 History are available to purchase via parentpay at a cost of £3.25.

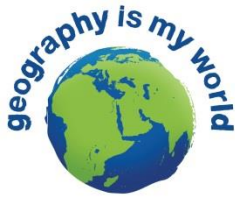
**All students have access to GCSEpod through their school email. This is an app that can be downloaded on to phones and other mobile devices or accessed via [www.gcsepod.com](http://www.gcsepod.com). This service is free to students and contains all the content required for all four History GCSE topics as well as most other subjects. I highly recommend using GCSEpod and have created playlists for students which have been linked via Show My Homework.**

Students may also find the following websites very useful:

- <https://www.bbc.com/education/topics/zymqwxw>
- <https://www.bbc.com/education/topics/znsnb9q/resources/1>

Finally, Pearson have also produced a series of unit specific revision workbooks for GCSE 9-1 History and Mrs Rhymes can give further details regarding which topics and books could be of use if required.

# Geography



In the final term of year 10, students will be required to sit an assessment in geography that will bring together all of their understanding from throughout the whole year.

This assessment will be an hour and a half in duration and will be a mock GCSE exam paper.

In geography, there are three exam papers that students must sit. Paper 1 (Physical geography), Paper 2 (human geography) and Paper 3 (Geographical Skills). Having completed all of the topics from Paper 1, this is the paper that students will complete during this exams season. The topics covered will be: The challenge of Natural Hazards, The Living World and Physical Landscapes in the UK.

## What do students need to know?

The key thing for students to know is the relevant case studies to demonstrate their own knowledge within exam questions.

- The River Tees: full river profile
- Cockermouth: river management
- The Jurassic Coast: coastal features
- Holderness: coastal management
- Epping Forest: small scale ecosystem
- The Amazon Rainforest: deforestation, sustainable management
- Svalbard: opportunities and challenges of cold environments
- Antarctica: management of cold environments
- Haiti (LIC earthquake)
- Christchurch (HIC earthquake)
- Typhoon Haiyan
- The Beast from the East

## Some helpful resources

[http://www.bbc.co.uk/schools/gcsebitesize/geography/water\\_rivers/](http://www.bbc.co.uk/schools/gcsebitesize/geography/water_rivers/) (basic river revision)

<https://getrevising.co.uk/> (really useful revision materials website, free to join!)

[http://www.coolgeography.co.uk/gcsen/living\\_world.php](http://www.coolgeography.co.uk/gcsen/living_world.php) (the living world revision)

[http://www.bbc.co.uk/schools/gcsebitesize/geography/ecosystems/human\\_uses\\_rainforest\\_rev5.shtml](http://www.bbc.co.uk/schools/gcsebitesize/geography/ecosystems/human_uses_rainforest_rev5.shtml) (sustainable management of the rainforest)

[http://www.coolgeography.co.uk/gcsen/challenge\\_natural\\_hazards.php](http://www.coolgeography.co.uk/gcsen/challenge_natural_hazards.php)

<https://www.bbc.com/education/topics/zcdrbk7>

<https://www.youtube.com/watch?v=7fd03fBRsuU>



# ESPAÑOL

Year 10 will be assessed on their reading skills. The exam will last an hour and it will have a variety of activities related to all the topics that they study in year 10 and 11. Some of the topics that will appear on this assessment are: vocabulary related to rooms in the house, describing a bedroom, prepositions to describe location, holidays, social media, jobs, healthy life, family relationships, festivals, future plans, weather phrases, free time and school. The activities will assess their reading comprehension in Spanish and they will have to answer questions about different texts. For instance, they might have to read an interview script, the results of a survey, and a passage from a literary text. They will have to answer in English, Spanish and there will be multiple choice, yes/no questions, an activity to reorder sentences in a text and a short translation into English. They will also be expected to understand different tenses on text, for example, simple past, future and present.

## GCSE PE

Student in Year 10 will be sitting both paper for GCSE PE. The assessment will cover the entire course. The assessment consists of multiple-choice, short-answer and extended writing questions.

<b>Paper 1 Component 1: Fitness and Body Systems</b>	<b>Paper 2 Component 2: Health and Performance</b>
Applied anatomy and physiology Movement analysis Physical training Use of data	Health, fitness and well-being Sport psychology Socio-cultural influences Use of data

<b>Paper 1</b>	<b>Paper 2</b>
The structure and functions of the musculoskeletal system	Physical, emotional and social health, fitness and well-being
The structure and functions of the cardiorespiratory system	The consequences of a sedentary lifestyle
Anaerobic and aerobic exercise	Energy use, diet, nutrition and hydration
The short- and long- term effects of exercise	Classification of skills (basic/ complex, open/closed)
Lever systems, examples of their use in activity and the mechanical advantage they provide in movement	The use of goal setting and SMART targets to improve and/or optimise performance
Planes and axes of movement	Guidance and feedback on performance
The relationship between health and fitness and the role that exercise plays in both	Mental preparation for performance
The components of fitness, benefits for sport and how fitness is measured and improved	Engagement patterns of different social groups in physical activity and sport
The principles of training and their application to personal exercise/ training programmes	Commercialisation of physical activity and sport
The long-term effects of exercise how to optimise training and prevent injury	Ethical and socio-cultural issues in physical activity and sport
Effective use of warm up and cool down	

Students should use class notes and revision guides (available on parent pay) to prepare themselves for the upcoming assessments.

Revision sessions will take place during Thursday lunchtimes at the SC.

On YouTube, students should search for SmartPE, the videos are prepared for AQA PE (not our exam board) however the content is the same and allows students another opportunity to revisit these topics.