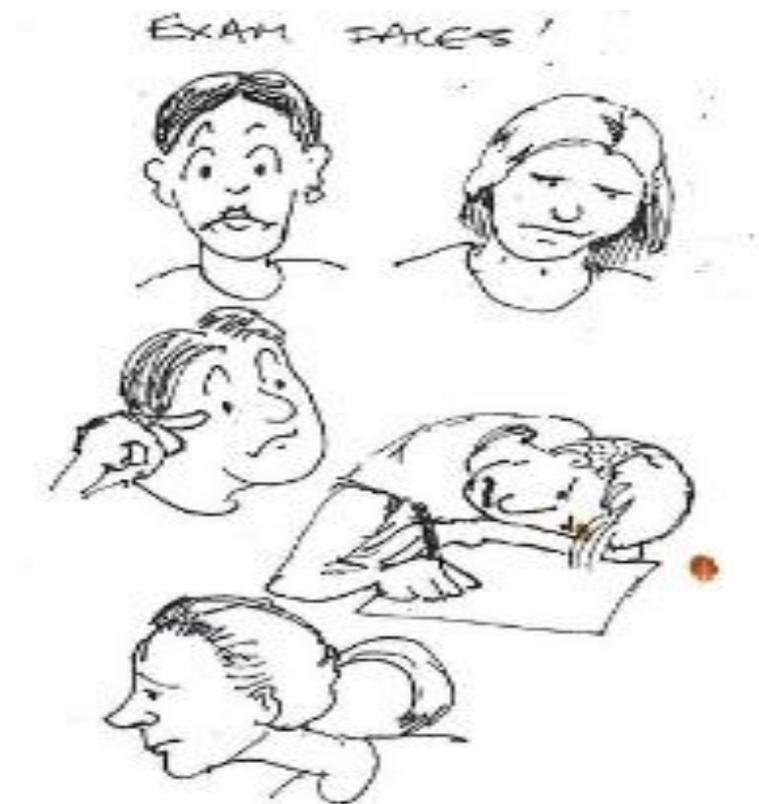




HEYFORD PARK
FREE SCHOOL
BONUM COMMUNE COMMUNITATIS

REVISION BOOKLETS

Year 9



MATHEMATICS



Year 9

Topic	Strand	Revision
Place Value	Number	www.mymaths.co.uk - Booster Pack 4 & 5
Factors, Multiples and Primes	Number	
Decimals and Fractions	Number	
Expanding and Simplifying Brackets - Single Set of Brackets	Algebra	
Simple Proportion	Ratio	
Percentage of an Amount (Calc.)	Number	
Fractions, Percentages, Decimals	Number	
Averages and the Range	Probability	
Stem And Leaf Diagrams	Probability	
Coordinates	Algebra	
Calculating Probabilities	Probability	
Solving Equations - Balancing	Algebra	
Solving Equations – Simplifying expressions	Algebra	
Solving Equations using Flowcharts	Algebra	
Angles in a Triangle	Geometry	
Simple Proportion	Ratio	
Subject of a Formula using Flowcharts	Algebra	
Introduction to Powers/Indices	Number	
Time Series	Probability	
Frequency Tables and Diagrams	Probability	
Distance-Time Graphs	Ratio	
Compound Interest and Depreciation	Ratio	
Area of a Circle	Geometry	
Perimeters	Geometry	
Rounding to Decimal places	Number	
Rounding to Significant Figures	Number	
Metric conversions	Geometry	
Venn Diagrams - Introduction	Probability	
Venn Diagrams - Notation	Probability	
Scatter Diagrams	Probability	
Sharing using Ratio	Ratio	
Introduction to Bounds	Number	
Straight Line Graphs	Algebra	
Averages from a table - Estimate for the Mean	Probability	
Factorising Quadratics	Algebra	
Compound Units	Ratio	



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

For Section A, students get either a 20th or 21st century extract (approximately 1 side of A4) and they must answer 4 questions based on this extract.

Q1 (4 marks)- list 4 ideas from the beginning of the extract

Q2 (8 marks)- analyse language in a part of the extract

Q3 (8 marks)- how the whole extract uses structure to interest the readers

Q4 (20 marks)- to what extent do you agree with a statement about a section of the text

For Section B, students get a choice of 2 descriptive writing tasks (1 has a picture as a stimulus, the other gives them a topic to write about) 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

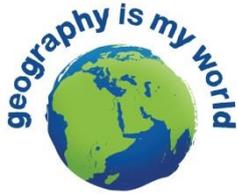
Books to Support Learning

- **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

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
- **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

Geography



In the final term of year 9, students will be required to sit an assessment in geography that will bring together all of their understanding from throughout the GCSE course content they have covered so far.

This assessment will be 1 hour in duration and will have a wide variety of questions, from multiple choice, to extended writing.

The first module that students have covered this term is: The challenge of natural hazards (Paper 1: topic A). This includes work about tectonic hazards, weather hazards and climate change.

What do students need to know?

- The structure of the Earth
- Tectonic processes (including different types of plate boundary and movement)
- Why people live in areas at risk of hazards
- Earthquake management
- Global atmospheric circulation
- Distribution and characteristics of tropical storms
- Natural and human causes of climate change
- Ways of mitigating climate change
- Key case studies
 - Haiti (LIC earthquake)
 - Christchurch (HIC earthquake)
 - Typhoon Haiyan
 - The Beast from the East

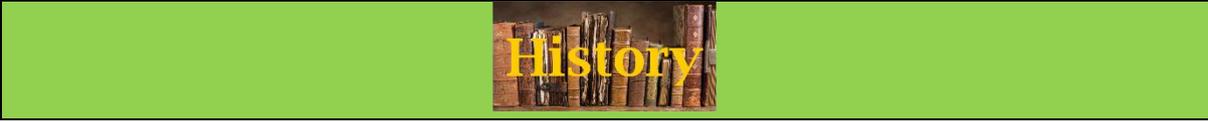
Some helpful resources

http://www.coolgeography.co.uk/gcsen/challenge_natural_hazards.php

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

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

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



History

All the end of year assessments in History will follow the GCSE History question stems format. Year 9 students have been completing units based around GCSE style questions. Since Easter students have been studying content that they will be tested on for their real GCSE exams in Year 11.

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 the June end of year exams students in Year 9 will sit part of a GCSE style paper.

Year 9 will complete a GCSE exam style paper on the 'International relations and the Cold War, 1941-91' topic. For this unit, which forms section A of Paper 2, students will be asked 4 questions in total. These questions could be on any content studied during this unit, but the 'type' of question will not change from year to year. The question types that students will complete for this paper are shown below –

- **Question 1** - Explain two consequences of..... [8]
- **Question 2** - Write a narrative account analysing [8]
- **Question 3** - Explain the importance of[8] x2

PLEASE NOTE THAT students will need to complete two separate answers for question 3 from a choice of three options. This will make 4 questions in total for the 1 hour paper.

The paper will be out of **32 marks** and will include the following topics –

- The origins of the Cold War, 1941-58; including – Early tensions between East and West, the Development of the Cold War and the intensification of the Cold War.
- Cold War crises, 1958-1970; including – Berlin 1958-63: increased tension and the impact of the Berlin Wall, and the Cuban Missile Crisis.

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. 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 website very useful:

- <https://www.bbc.com/education/topics/zwbysg8>

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.

GCSE PE

GCSE PE Students in year 9 will sit just one paper which will have a combination of 'paper 1' and 'paper 2' topics. The assessment consists of multiple-choice, short-answer, and extended writing questions.

Paper 1 - 1 hour

PHYSICAL TRAINING

- **COMPONENTS OF FITNESS**
- **FITNESS TESTING**
- **METHODS OF TRAINING**
- **PRINCIPLES OF TRAINING**
- **FUNCTIONS OF THE SKELETAL SYSTEM**
- **STRUCTURE OF THE SKELETAL SYSTEM**
- **CLASSIFICATION OF BONES**
- **CLASSIFICATION AND ROLES OF MUSCLES**
- **LOCATION AND ROLES OF KEY VOLUNTARY MUSCLES**
- **ANTAGONISTIC MUSCLES**
- **FAST AND SLOW TWITCH MUSCLE FIBRES**
- **EFFECTS OF EXERCISE ON THE MUSCULO-SKELETAL SYSTEM**
- **STRUCTURE AND FUNCTION OF THE CARDIOVASCULAR SYSTEM**
- **ARTERIES, VEINS AND CAPILLARIES**
- **VASCULAR SHUNTING**
- **COMPONENTS OF BLOOD AND THEIR SIGNIFICANCE FOR PHYSICAL ACTIVITY**
- **RESPIRATORY SYSTEM, COMPOSITION OF AIR & LUNG VOLUMES**
- **COMPONENTS OF RESPIRATORY SYSTEM AND ROLES IN BREATHING**
- **STRUCTURE AND FUNCTION OF ALVEOLI**
- **AEROBIC AND ANEROBIC EXERCISE**
- **EFFECTS OF EXERCISE ON THE CARDIO-RESPIRATORY SYSTEM**
- **FITNESS TESTING FOR PERFORMANCE**
- **ANALYSIS OF FITNESS TESTING**

Students should use classnotes 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.

ESPAÑOL

Year 9 will be assessed on their reading skills. The exam will last one hour and will assess students on different GCSE topics. For instance, the main topics are: family, school facilities, school subjects, teachers, school clubs, understanding description of rooms and houses, holidays, free time, films and TV programmes, future plans and places in town. Students will be required to complete a wide range of activities such as multiple choice, yes/no questions, answering questions in English or Spanish and a short translation into English.

