

HELSEBY

High School



**Achieving Success
Valuing Others**

2022

Year 10

Quick Guide

**Exam Preparation
for Assessment 2**

Computer Science

Students will be assessed on all the work covered this year:

- 3.3 Fundamentals of data representation
- 3.4 Computer systems
- 3.2 Programming

Students have a full set of class booklets and had the opportunity to purchase a revision guide. A set of revision cards will be provided.

Revision videos on YouTube videos at

- https://www.youtube.com/playlist?list=PL04uZ7242_M4BarR18V22PfEGkMzxR2yX and https://www.youtube.com/playlist?list=PL04uZ7242_M6K0uRmPXwAIb5w9kYOx86c (Please note that these cover the whole course so you will need to select the topics to revise)

Design & Technology

Year 10A/Dt1 LST

<https://www.bbc.co.uk/bitesize/guides/zn4bcj6/revision/1>

<https://www.bbc.co.uk/bitesize/guides/zkvny4j/revision/1>

<https://www.bbc.co.uk/bitesize/guides/zbstng8/revision/1>

https://www.technologystudent.com/despro_flsh/NEW_GCSE3.html

1. The industrial and digital revolution
2. Automation, design and organisation of the workplace
3. Barcode systems
4. Low oil supplies and electric vehicles (EV)
5. New materials and technology including the dangers of 3D printing
6. Small enterprises including crowd funding
7. Virtual marketing and augmented retail
8. Co-operatives and Fair Trade
9. Forestry management, thinning forests & felling
10. Product mileage
11. Timber conversion
12. Green timber and seasoning
13. Faults and how to reduce them
14. Sustainability and timber provenance
15. Consequences of illegal logging
16. Categories of timber (hardwood/softwood/manufactured)
17. Categories of metals (ferrous/non-ferrous/alloys)
18. Timber joining methods and adhesives
19. Tools and equipment, health & safety, risk assessments and regulations
20. Advantages and disadvantages of using CAD & CAM
21. Quality Control (QC)
22. Designers and Culture (target audiences)
23. Environment (Deforestation & finite/non-finite)
24. Fossil fuels (coal/gas/oil) and renewable energy (wind/solar/tidal/hydro-electrical/biomass)
25. Material properties (absorbency/density/strength/hardness/ toughness/malleability)
26. Production techniques (one off, batch, mass & just in time (JIT))

Year 10D/Dt1 GSR

<https://www.bbc.co.uk/bitesize/guides/zkvny4j/revision/1>

<https://www.bbc.co.uk/bitesize/guides/zbn6pbk/revision/1>

<https://www.bbc.co.uk/bitesize/guides/z6jkw6f/revision/1>

<https://www.bbc.co.uk/bitesize/guides/zbstnq8/revision/1>

https://www.technologystudent.com/despro_flsh/NEW_GCSE3.html

1. Timber joining methods
2. Finishes
3. Categories of timber (hardwood/softwood/manufactured)
4. Uses of timbers
5. Designers
6. Design Movements
7. Design principles
8. Market research
9. Product analysis
10. Focus groups
11. Data presentation
12. Design brief
13. Design specification
14. Manufacturing specifications
15. Testing designs
16. Modifying designs
17. Environmental challenges
18. Social and economic solutions
19. Electrical components and schematics
20. Ergonomics
21. anthropometrics
22. 6 R's
23. Packaging and the 5 reasons for
24. Categories of polymers (thermo and thermoset)
25. Polymer processes
26. CAD & CAM

English

English Language Friday 17th June am

Assessment Details

English Language Paper 1 Creative Reading and Writing 1 hour 45minutes

Section A: Reading 1 hour 40 marks

Students will be given an unseen fiction extract and will be asked to answer 4 questions based on the extract. The questions will test reading skills. Question 1 is a retrieval question (4 marks). Question 2 will ask the students to comment on the effect of the writer's language choices (8marks). Question 3 will ask the students to comment on the effect of the structural features employed by the writer(8 marks). Students are advised to spend 20 minutes on question 4 which is a critical evaluation question as it is worth 20 marks. They will be asked to evaluate a statement about the text and comment on the impact of the writer's methods.

Section B: Writing 45 minutes 40 marks

Students will be given the choice of two tasks. They will be asked to produce a piece of creative writing with a focus on narrative and descriptive writing skills.

They will be assessed on the content and organisation of their work in addition to an assessment of spelling, punctuation and grammar.

There are 24 marks available for content and organisation and 16 for spelling, punctuation and grammar.

Students will be prepared for the assessments in lessons. They should revise using their notes in exercise books and revision materials provided by their teachers. Revision materials will be linked via Show My Homework and Teams.

English Literature Paper 1 Shakespeare and 19th Century 1hour 45 minutes

Section A: 'Macbeth'

Students will answer 1 question based on either character or theme. This is a closed book examination which means the students will not have access to their copies of the text but will be given an extract from the text.

Section B: 'A Christmas Carol'

Students will answer 1 question based on either character or theme. This is a closed book examination which means the students will not have access to their copies of the text but will be given an extract from the text.

Each question is worth 30 marks and there are an additional 4 marks for Spelling, punctuation and grammar in Section A

Students will be prepared for the assessments in lessons. They should revise using their copies of the text, notes in exercise books and revision materials provided by their teachers. Revision materials will be linked via Show My Homework and Teams.

Business

The end of year exam will be on unit 1.5. Please use the following to revise for this:

- pages 33-43 in your revision guide
- pages 21-25 in your blue knowledge book
- Learning checklists, notes and mind maps given out in class

Expressive Arts

Art & Photography

Students will show their work to date to be assessed by their class teacher. They will undertake key tasks to assess the skills they have developed so far.

Use sketch books and assessment feedback to date to help you prepare for this assessment.

Drama

Students will be answering questions based on how to act, stage and design the play 1984.

Students should use their books to help them revise. They should also refer to the 1984 revision booklets given by your teacher

Music

Students will answer key questions and complete key tasks to uncover the knowledge retained from the units worked on this year. Questions will be listening and written questions.

Use your Music books and KS4 BBC Bitesize to help with revision. <https://www.bbc.co.uk/bitesize/subjects/zpf3cdm>

Food Technology

The different food commodities studied in detail over the course of the year so far:

1. fruits and vegetables
2. starchy carbohydrate foods
3. milk & dairy foods
4. Protein rich foods: meat, poultry, fish, eggs and alternative protein foods
5. Fats, oils and sugars

For each food commodity listed above students need to know the following:

· Classification of foods within the food commodity · The origins of the foods · How they are grown/reared · Primary and secondary processing · Labelling of certain foods · How to store the different foods · Safe preparation of the foods · Different uses in cooking · The changes taking place when the foods are cooked · Nutritional content of the different foods and functions of those nutrients · Health benefits of different foods · The effect of eating too much or not enough of the different foods

In addition students must be able to apply knowledge learnt through practical work including: · Food safety and hygiene · The different practical skills, processes, methods and terminology · The function of ingredients in different food products

They must be able to apply nutritional knowledge including:

· The different nutrients, their functions (jobs), sources, effect of lack or excess: Protein; fat; carbohydrate; vitamins A, B, C, D; minerals Iron and calcium; dietary fibre · Nutritional needs of different groups: young children; teenagers; vegetarians; religious groups.

Resources

Their food exercise book (class and homework tasks)

The digital text book available using our online account: <https://www.illuminate.digital/eduqasfood/> Username: SALT4 Password: STUDENT4 ·

Eduqas GCSE Food Preparation & Nutrition: Revision Guide (Illuminate publishing approx. £13:50)

BBC Bitesize: <https://www.bbc.co.uk/bitesize/subjects/zdn9jhv>

British Nutrition Foundation's 'Food a Fact of Life' website: <https://www.foodafactoflife.org.uk/14-16-years/>

Geography

With respect to **cartographic skills**, learners should be able to:

- use and understand coordinates, scale and distance
- extract, interpret, analyse and evaluate information
- use and understand gradient, contour and spot height (on OS and other isoline maps)
- describe, interpret and analyse geo-spatial data presented in a GIS framework.
- Use and understand a variety of maps including choropleth maps, isoline maps, desire line and flow lines.

With respect to **graphical skills**, learners should be able to:, learners should be able to:

- extract, interpret, analyse and evaluate information

With respect to numerical and statistical skills, learners should be able to:

- calculate and understand percentages (increase and decrease) and percentiles
- understand and correctly use cumulative frequency

History

1 x full Elizabethans paper (50 mins)

Students will be provided with their own copy of the CGP revision guide.

Students will be given supplementary revision resources in lessons.

All topics on the paper will need to be revised.

Maths

Higher	Foundation
1 Number	1 Number
2 Algebra	2 Algebra
3 Interpreting and representing data	3 Graphs, tables and charts
4 Fractions, ratio and proportion	4 Fractions and percentages
5 Angles and trigonometry	5 Equations, inequalities and sequences
6 Graphs	6 Angles
7 Area and volume	7 Averages and range
8 Transformations and constructions	8 Perimeter, area and volume 1
9 Equations and inequalities	9 Graphs
10 Probability	10 Transformations
11 Multiplicative reasoning	11 Ratio and proportion
12 Similarity and congruence	12 Right-angled triangles
13 More trigonometry	13 Probability
14 Further statistics	14 Multiplicative reasoning
15 Equations and graphs	15 Constructions, loci and bearings
	16 Quadratic equations and graphs
17 More algebra	

Media

- Magazines (GQ or Pride)
- Advertising (Quality Street or This Girl Can)
- An 'unseen' element which will be a magazine cover that students have not previously studied, to be compared and contrasted with one of the set text magazine covers.

Students will also need to revise key terminology and theory and can do so on the Eduqas website using the free digital resources available there, their Zig-Zag e-revision accounts, and the Mrs Fisher Youtube text and theory revision videos.

MFL

French

Reading exam – higher or foundation tier - You will have a GCSE-style paper with a series of short texts in French to read. Each text will be followed by some questions in English or multi-choice boxes to tick, to show what you have understood. These are the kind of tasks that we regularly do together in lessons. There will be a short translation into English as the final question.

Listening exam – higher or foundation tier - You will have a GCSE-style paper with a series of short spoken tracks in French to listen. Each track will be followed by some questions in English or multi-choice boxes to tick, to show what you have understood. These are the kind of tasks that we regularly do together in lessons.

Writing exam – you will have a few sentences to translate into French (so make sure you revise your tenses!) The foundation tier will have one 90 word question with 4 bullet points and the higher tier will have one 150 word question with 2 bullet points. The topic for both these extended writing will be EDUCATION (your experiences at school).

How to prepare –

- In your vocabulary booklet, look over the of the topics that we have covered this year - Local area, Holidays & Education and last year – family & friends, freetime (TV, film, technology), sport, festivals & celebrations.
- Practise reading and listening to these topics online – on Linguascope or Active Learn
- Practise writing some sentences about your educational experiences activities. Remember which grammatical tenses & structures that you need to include, and practise these
- Please ask your teacher if you can't find your vocabulary booklet or if you have forgotten your passwords.

German -

Reading exam – higher or foundation tier - You will have a GCSE-style paper with a series of short texts in German to read. Each text will be followed by some questions in English or multi-choice boxes to tick, to show what you have understood. These are the kind of tasks that we regularly do together in lessons. There will be a short translation into English as the final question.

Listening exam – higher or foundation tier - You will have a GCSE-style paper with a series of short spoken tracks in German to listen to. Each track will be followed by some questions in English or multi-choice boxes to tick, to show what you have understood. These are the kind of tasks that we regularly do together in lessons.

Writing exam – you will have a few sentences to translate into German (so make sure you revise your tenses!) The foundation tier will have one 90 word question with 4 bullet points and the higher tier will have one 150 word question with 2 bullet points. The topic for both of the extended pieces will be TOWN AND HOLIDAYS.

How to prepare –

- In your vocabulary booklet, look over the of the topics that we have covered this year - Lifestyle, town and holidays, and last year – education, free time (TV, film, technology), sport, festivals & celebrations, and friends and family.
- Practise reading and listening to these topics online – on Linguascope or Active Learn
- Practise writing some sentences about your educational experiences activities. Remember which grammatical tenses & structures that you need to include, and practise these
- Please ask your teacher if you can't find your vocabulary booklet or if you have forgotten your passwords.

GCSE PE

Fitness and Body Systems

The muscular system

The skeletal system

The cardiovascular system

The respiratory system Physical Training

Health, fitness and exercise

The components of fitness and fitness testing

The principles of training

Methods of training

<https://www.bbc.co.uk/bitesize/examspecs/zxbg39q>

Religious Education

Living the Christian Life

- Worship
- Role of the sacraments
- Nature and purpose of prayer
- Pilgrimage
- Religious celebrations
- Future of the Church
- Importance of the local church
- The worldwide Church

Matters of life and death

- Origins and value of the universe
- Sanctity of life
- Origins and value of human life
- Abortion
- Death and the afterlife
- Non-religious arguments against life after death
- Euthanasia
- The natural world

Science

Biology

- Cells
- Microscopes
- Stem cells
- Mitosis
- Diffusion
- Blood and blood vessels
- Heart
- Digestion (and food tests)
- Gas exchange (Lungs)
- Enzymes
- Respiration
- Effects of exercise
- Metabolism
- Osmosis
- Plant tissues
- Active transport
- Photosynthesis
- Communicable disease (bacteria, viruses etc)
- Non communicable disease (cancer, heart disease etc)
- Defence against disease.
- Medicines (new drugs, painkillers)
- General How Science Works skills. (graphs, tables, calculations etc)

Resources including links to Oaks Academy, BBC Bitesize and MyGCSEScience will be placed on SMHW.

Chemistry

Paper 1 GCSE Combined Science Trilogy Higher & Foundation.

- C1 Atomic Structure & The Periodic Table.
- C2 Structure & Bonding
- C3 Quantitative Chemistry
- C4 Chemical Changes - reactions of metals, reactions of acids, electrolysis.
- C5 Energy Changes.
- Includes Required Practicals: Preparing a soluble salt, Electrolysis of aqueous solutions, & Temperature changes.
- Topics taught across Year 9 and Year 10.

All revision resources will be on SMHW, including links to My GCSE Science, BBC Bitesize, Keoodle, Oak Academy.

Physics

Higher and Foundation Tiers

P12 Wave properties

1. P12.1 The nature of waves
2. P12.2 The properties of waves
3. P12.3 Reflection and refraction (HT)
4. P12.4 More about waves

P1 Conservation and dissipation of energy (12 lessons)

1. P1.1 Changes in energy stores
2. P1.2 Conservation of energy
3. P1.3 Energy and work
4. P1.4 Gravitational potential energy stores
5. P1.5 Kinetic energy and elastic energy stores
6. Energy transfer calcs (GPE to KE etc)
7. P1.6 Energy dissipation
8. P1.7 Energy and efficiency
9. P1.8 Electrical appliances
10. P1.9 Energy and power

P2 Energy transfer by heating (7 lessons)

1. P2.1 Energy transfer by conduction
2. P2.2 Infrared radiation (HT)
3. P2.3 More about infrared radiation (HT)
4. P2.4 Specific heat capacity
5. P2.4 SHC calculations
6. P2.5 Heating and insulating buildings

P3 Energy resources (7 lessons)

1. P3.1 Energy demands
2. P3.2 Energy from wind and water
3. P3.3 Power from the Sun and the Earth
4. P3.4 Energy and the environment
5. P3.5 Big energy issues

P6 Molecules and matter (9 lessons)

1. P6.1 Density
2. P6.2 States of matter
3. P6.3 Changes of state
4. P6.4 Internal energy
5. P6.5 Specific latent heat
6. P6.6 Gas pressure and temperature
7. P6.7 Gas pressure and volume (HT)

P8 Forces in balance (8 lessons)

1. P8.1 Vectors and scalars
2. P8.2 Forces between objects
3. P8.3 Resultant forces
4. P8.6 Centre of mass
5. P8.8 The parallelogram of forces (HT)
6. P8.9 Resolution of forces (HT)

P9 Motion (6 lessons)

1. P9.1 Speed and distance–time graphs
2. P9.2 Velocity and acceleration
3. P9.3 More about velocity–time graphs
4. P9.4 Analysing motion graphs

All revision resources to be provided on SMH.

Revision resources to include:

- List of equations to remember
- Knowledge Organisers
- Past Paper Questions and Answers
- Revision Websites

Sociology

Research Methods

- Intro and Experiments
- Types of Data
- Survey & Questionnaires
- Interviews
- Observations
- Case studies and longitudinal studies
- Ethnography
- Sampling
- Analysing Data
- Quantitative Data
- Qualitative Data

Remember to revise strengths and limitations plus practical and ethical considerations

Family

- What is a family?
- Family Diversity including Rapoport's
- Nuclear Family
- Alternatives to the family
- Families in a Global context
- Functionalism and the family (Murdock & Parsons)
- Alternative theories on the functions of the family (Marxist, Feminism, Delphy & Leonard)
- Relationships within families
- Marriage
- Divorce
- Theories about Divorce (Functionalist, Marxist and Feminist views)
- Conjugal Roles (Oakley)
- Functionalist, Feminist & Marxist theories about conjugal roles
- Symmetrical family (Young & Wilmott)
- Power relationships

Education

- Different types of schools
- State/Private/Selective

Students have been provided with revision booklets, banks of example exam questions and can also access Seneca selecting the Sociology: AQA GCSE option or the following link:

<https://app.senecalearning.com/classroom/course/31b5a110-bffe-4156-a620-495a430ceed1/section/808116a1-68a2-4e0a-a534-7f1f858b5255/session>