Welcome to our study skills and Post-16 evening
The year ahead

- Study skills
- Revision habits
- English, Maths and Science tips
- Post-16 timeline
- Meet the Post-16 providers
Memory matters

Learning is something that no one can do for you, but it is something you will have to do for the rest of your life – yes even after school! So it makes sense that you learn how to learn quickly, easily and effectively.
How to learn....

1. Understand it
2. Condense it
3. Memorise it
4. Review it
Revision techniques – understand and condense it

• **Rewrite and organise class notes:**
  Rewrite helps the memory process.
  Summarise notes (1 page per topic). Write topic headings and keywords with definitions on index cards. Use back of index cards for quotations etc.

• **Highlight:** use either various colours or symbols to indicate what is essential to learn.

• **Record:** Record essential points (on your phone or MP3 player). You can then listen to them as you rest, walk to school, eat..

• **Speak out:** Read your notes out loud, ask questions and answer questions.
Memory hooks:
• ‘Hooks' are things you can associate with the information to help you remember it.

• Give meaning to what you are trying to memorise.

• Use your own techniques to remember: make word associations, mnemonics (turning letters of a list into a word that is easy to recall), poems or stories to remind you of main points) or use the loci method.
Image Chains – memory technique

This is a simple and imaginative way to remember lists of words or facts. You simply take each item on a list and link them together using a story. The crazier the better!
Review

1\textsuperscript{st} time revising
2\textsuperscript{nd} time revising
3\textsuperscript{rd} time revising
4\textsuperscript{th} time revising
Science Revision Guidance
Exam technique and the use of key words is vital particularly on the longer 6 mark QWC questions

An example from Chemistry Unit 1

In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.

There are millions of plastic bags in use. After use most of these plastic bags are buried in landfill sites. The amount sent to landfill could be reduced if the plastic bags:
• could be reused
• could be recycled by melting and making them into new plastic products
• could be burned to release energy.

Use the information above and your knowledge and understanding to give the positive and negative environmental impacts of using these methods to reduce the amount of plastic bags sent to landfill.
Exam technique and the use of key words is vital particularly on the longer 6 mark QWC questions.

<table>
<thead>
<tr>
<th>0 marks</th>
<th>Level 1 (1-2 marks)</th>
<th>Level 2 (3-4 marks)</th>
<th>Level 3 (5-6 marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No relevant content.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exam technique and the use of key words is vital particularly on the longer 6 mark QWC questions

Example of a two mark answer

Marks awarded according to the following rationale

- There is very little in this answer, although an attempt has been made and an advantage and a disadvantage have been given.
- There is no structure to the answer.
- Spelling, punctuation and grammar are weak.
- There is practically no use of specialist terms.
- The candidate has referred to very few of the scientific points in the mark scheme.
- This response is clearly Level 1 and is worth only 2 marks.
Exam technique and the use of key words is vital particularly on the longer 6 mark QWC questions.

**Example of a three mark answer**

Marks awarded according to the following rationale:

- The candidate has some knowledge of the subject, and has referred to two of the processes, giving positive and negative points for both.
- There is some structure to the answer – positive effects and negative effects are given and separated out. However, the information is rather muddled, with the candidate going between reuse and recycling.
- There are a number of errors in spelling.
- Some technical terms are used (such as oil, global warming, carbon dioxide, pollution), and are referred to correctly.
- This is just sufficient for a Level 2 answer, and it is awarded 3 marks.

3/6
Exam technique and the use of key words is vital particularly on the longer 6 mark QWC questions.

Example of a six mark answer

Marks awarded according to the following rationale:

- It is clear from reading through this answer that the candidate has sound knowledge and understanding of the subject area, covering a wide range of the points in the mark scheme.
- The information is presented coherently and logically.
- The spelling, punctuation and grammar are exemplary.
- The answer contains a wide range of specialist terms correctly used, such as raw materials, fuel, carbon dioxide, atmosphere, combustion, greenhouse effect, toxic, generate.
- The candidate has referred clearly to all three methods, and to both positive and negative effects on the environment.
- This is a top Level 3 answer, satisfying all of the criteria for 6 marks.
Exam technique and the use of key words is vital particularly on the longer 6 mark QWC questions

<table>
<thead>
<tr>
<th>Examination hints and tips</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Candidates should:</em></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Use paragraphs and full sentences.</td>
</tr>
<tr>
<td>In this type of question, divide the answer space into three then write ‘Reusing’ on the top line, ‘Recycling’ one third of the way down the space and ‘Burning’ two thirds of the way down the space. This will ensure that they address all three parts of the question.</td>
</tr>
<tr>
<td>Remember to give advantages and disadvantages for each process.</td>
</tr>
<tr>
<td>Include as many relevant specialist terms as possible, such as renewable energy source, fuel, pollution, carbon dioxide.</td>
</tr>
</tbody>
</table>
Biology Key Topic: Photosynthesis and Respiration
Green plants can make glucose.

Plants need energy to make glucose.

How do plants get this energy?

<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
<th>Extra information</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>7(a)</td>
<td>light is trapped / absorbed / used&lt;br&gt;by chlorophyll / chloroplasts</td>
<td>extra answers cancel mark&lt;br&gt;ignore solar / sunshine</td>
<td>1&lt;br&gt;1</td>
</tr>
<tr>
<td>7(b)</td>
<td>(to make) starch (for storage)&lt;br&gt;(to make) fat / oil (for storage)&lt;br&gt;(to make) amino acids / proteins / enzymes&lt;br&gt;(to make) cellulose / cell walls</td>
<td>ignore ‘for growth’ unqualified&lt;br&gt;ignore respiration</td>
<td>1&lt;br&gt;1&lt;br&gt;1&lt;br&gt;1</td>
</tr>
</tbody>
</table>
Chemistry Key Topic: Atomic Structure
6 (d) The bonding in iodine is similar to the bonding in chlorine.

6 (d) (i) Complete **Figure 4** to show the bonding in iodine.

<table>
<thead>
<tr>
<th>6(d)(ii)</th>
<th>max 2 if incorrect structure or bonding or particles</th>
</tr>
</thead>
<tbody>
<tr>
<td>simple molecules</td>
<td>accept small molecules</td>
</tr>
<tr>
<td>with intermolecular forces</td>
<td>accept forces between molecules</td>
</tr>
<tr>
<td>which are weak or which require little energy to overcome – must be linked to second marking point</td>
<td>must be no contradictory particles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AO1/ AO2</th>
<th>1</th>
</tr>
</thead>
</table>

2.2.1ab

| reference to weak covalent bonds negates second and third marking points | 1 |
Physics Key Topic: Electricity

Series Circuit

Parallel Circuit
1 (c) The resistance of a wire can be calculated using the readings from an ammeter and a voltmeter.

1 (c) (i) Complete **Figure 2** by drawing a voltmeter in the correct position in the circuit. Use the correct circuit symbol for a voltmeter.

**[1 mark]**

<table>
<thead>
<tr>
<th>1(c)(i)</th>
<th>voltmeter symbol correct and drawn in parallel with the wire</th>
<th>accept voltmeter symbol correct and drawn in parallel with the battery</th>
<th>1</th>
<th>AO1 2.3.2c/f</th>
</tr>
</thead>
</table>

![Circuit Diagram](image-url)
Past papers and mark schemes are a vital resource.
Key subject content - Biology

<table>
<thead>
<tr>
<th>3.4 Biology 2</th>
<th>Expand all</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2.1 Cells and simple cell transport</td>
<td></td>
</tr>
<tr>
<td>B2.2 Tissues, organs and organ systems</td>
<td></td>
</tr>
<tr>
<td>B2.3 Photosynthesis</td>
<td></td>
</tr>
<tr>
<td>B2.4 Organisms and their environment</td>
<td></td>
</tr>
<tr>
<td>B2.5 Proteins – their functions and uses</td>
<td></td>
</tr>
<tr>
<td><strong>B2.6 Aerobic and anaerobic respiration</strong></td>
<td></td>
</tr>
<tr>
<td>B2.7 Cell division and inheritance</td>
<td></td>
</tr>
<tr>
<td>B2.8 Speciation</td>
<td></td>
</tr>
</tbody>
</table>
Key subject content - Biology

3.5 Biology 3

- B3.1 Movement of molecules in and out of cells
- B3.2 Transport systems in plants and animals
- B3.3 Homeostasis
- B3.4 Humans and their environment
Key subject content - Chemistry

3.3 Unit 1: Chemistry 1

- C1.1 The fundamental ideas in chemistry
- C1.2 Limestone and building materials
- C1.3 Metals and their uses
- C1.4 Crude oil and fuels
- C1.5 Other useful substances from crude oil
- C1.6 Plant oils and their uses
- C1.7 Changes in the Earth and its atmosphere
### 3.4 Unit 2: Chemistry 2

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2.1</td>
<td>Structure and bonding</td>
</tr>
<tr>
<td>C2.2</td>
<td>How structure influences the properties and uses of substances</td>
</tr>
<tr>
<td>C2.3</td>
<td>Atomic structure, analysis and quantitative chemistry</td>
</tr>
<tr>
<td><strong>C2.4</strong></td>
<td>Rates of reaction</td>
</tr>
<tr>
<td>C2.5</td>
<td>Exothermic and endothermic reactions</td>
</tr>
<tr>
<td>C2.6</td>
<td>Acids, bases and salts</td>
</tr>
<tr>
<td>C2.7</td>
<td>Electrolysis</td>
</tr>
</tbody>
</table>
# Key subject content - Chemistry

<table>
<thead>
<tr>
<th>3.5 Unit 3: Chemistry 3</th>
<th>Expand all</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3.1 The periodic table</td>
<td></td>
</tr>
<tr>
<td>C3.2 Water</td>
<td></td>
</tr>
<tr>
<td>C3.3 Calculating and explaining energy change</td>
<td></td>
</tr>
<tr>
<td>C3.4 Further analysis and quantitative chemistry</td>
<td></td>
</tr>
<tr>
<td>C3.5 The production of ammonia</td>
<td></td>
</tr>
<tr>
<td><strong>C3.6 Alcohols, carboxylic acids and esters</strong></td>
<td></td>
</tr>
</tbody>
</table>
Key subject content - Physics

<table>
<thead>
<tr>
<th>3.4 Unit 2: Physics 2</th>
<th>Expand all</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2.1 Forces and their effects</td>
<td></td>
</tr>
<tr>
<td>P2.2 The kinetic energy of objects speeding up or slowing down</td>
<td></td>
</tr>
<tr>
<td>P2.3 Currents in electrical circuits</td>
<td></td>
</tr>
<tr>
<td>P2.4 Using mains electricity safely and the power of electrical appliances</td>
<td></td>
</tr>
<tr>
<td>P2.5 What happens when radioactive substances decay, and the uses and dangers of their emissions</td>
<td></td>
</tr>
<tr>
<td>P2.6 Nuclear fission and nuclear fusion</td>
<td></td>
</tr>
</tbody>
</table>
Key subject content - Physics

3.5 Unit 3: Physics 3

P3.1 Medical applications of physics

P3.2 Using physics to make things work

P3.3 Keeping things moving
Key subject content – Physics

### 3.3 Unit 1: Physics 1

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1.1 The transfer of energy by heating processes</td>
<td>and the factors that affect the rate at which that energy is transferred</td>
</tr>
<tr>
<td>P1.2 Energy and efficiency</td>
<td></td>
</tr>
<tr>
<td>P1.3 The usefulness of electrical appliances</td>
<td></td>
</tr>
<tr>
<td>P1.4 Methods we use to generate electricity</td>
<td></td>
</tr>
<tr>
<td>P1.5 The use of waves for communication and to</td>
<td>provide evidence that the universe is expanding</td>
</tr>
</tbody>
</table>
MATHEMATICS

How to prepare for the new 9-1 Specification
Completion of Homework

Students in Year 11 are being set

1) A quiz every week as per whole school policy – set on Show My Homework

2) A specimen Exam paper once every fortnight.

This will be gone through in class in detail and students will be given the opportunity to attend extra support classes on a Tuesday and Wednesday each week.
Method Maths

Methodmaths is a unique interactive website where students can practise official Edexcel, OCR and KS2 exam papers.

Built on the principles of active revision and reflective learning, methodmaths will help foster independent learning skills and exam preparation away from the classroom.
Mathswatch is a very powerful revision guide that SPEAKS...

Use it to

1) Consolidate learning you are doing in class – your teacher will put the clip numbers you need to watch on the board

2) Help you learn some of the topics you cannot do from the exam papers you are doing every fortnight.
Week 4 Lesson 2

What is the total sum of the angles in a triangle?

What is the square root of 169?

Find the size of $y$. Give reasons for your answer.

The diagram shows the distances, in kilometres, between some towns, by road.

Work out the shortest distance between Ambel and Ford by road.

$ABCDE$ is a regular pentagon. $BCF$ and $EDF$ are straight lines.

Work out the size of angle $CFD$. You must show how you got your answer.
What is the total sum of the angles in a triangle?

\[ 180^\circ \]

What is the square root of 169?

\[ \sqrt{169} = 13 \]

Y = 56°. Angles on a straight line sum to 180°

---

The diagram shows the distances, in kilometres, between some towns, by road.

- Branning to Colton: 70 km
- Colton to Ford: 20 km
- Ford to Ditton: 50 km
- Ditton to Ambel: 30 km
- Ambel to Evely: 60 km
- Evely to Colton: 10 km

Work out the shortest distance between Ambel and Ford by road.

\[ 50 + 40 + 20 = 110 \]

Work out the size of angle CFD.

- External angle on a regular pentagon = 72°
- \( CDF \) isosceles triangle
- \( \therefore \) CFD = 180 - \( (72 \times 2) \) = 36°
Revision guides

These are for independent study. The student should not just work through the revision guide, rather:

1) Use the exam papers being completed for homework to choose topics that you are struggling on.

2) Look up topics that are being covered in class and go over by reading through the notes in the revision guide.
In summary

1) Use Method Maths at home. All year 11 have logins. See Mr Castano if you don’t have one or can’t remember. The first 6 papers are the new specification.

2) Use Mathswatch at home – logins are available from Your teacher

3) Buy a revision guide

4) COMPLETE ALL HOMEWORK SET
English Language and Literature
The English Team

Ms Pember
Mr Morrison
Ms Smith
Mr Casebourne
Mr Dunlop
Miss Skidmore
Explorations in creative reading and writing

**Language**

Paper 1

Reading – Section A

Reading an unseen text

Fiction

Q: 1, 2, 3 & 4 based on the text.

Writing – Section B

Q 5 is an **or** question

Narrative

Paper 2

Reading – Section A

Reading an unseen text

Non-Fiction x2

Q: 1, 2, 3 & 4 based on the text.

Writing – Section B

Q 5 is a non-fictional piece of writing.

viewpoint/perspective/opinion

Writers viewpoints and perspectives

1HR 45MINS

1HR 45MINS
Literature

Paper 1

Macbeth
- 1 extract based question
- Essay style answer
- Knowledge of whole text

Jekyll and Hyde
- 1 extract based question
- Essay style answer
- Knowledge of whole text

Paper 2

Lord of the Flies
- This is an or question – only answer one
- Essay style answer
- Knowledge of whole text

Poetry and Unseen Poetry
- Unseen Poems:
  - 2 questions
  - 2 unseen poems
Revision Guides

GCSE AQA English Language
For the Grade 9-1 Course
The Revision Guide

Literature P1

Macbeth

Literature P2

Lord of the Flies

Dr Jekyll & Mr Hyde

AQA Anthology of Poetry
Love and Relationships

ICITY! Wear Beauty in the Morning

Unseen Poetry Exam Board AQA
Useful Research Websites


There are many more that you can revise from – just ask your teachers or have a search yourself!
Homework

- Videos for revision
- Quizzes
- Unit designs – content

Homework set are for **ALL** year 11 students unless otherwise stated by their class teacher.

**Encourage** your child to read – talk about books, news, politics, new vocabulary, anything – for at least 30 mins a day – over dinner? Question them on the unit design…
Context questions:
• How did the industrial revolution impact society at the time of the novel?
• Why was the impact of science so important?
• Charles Darwin became an important figure of that time. Explain the reason for this?
• What did society begin to question at the end of the 1800s?
• What enhanced Stevenson’s fascination with duality?
• Why was religion a big factor on Stevenson?
• How does the novel represent the time period?
• Why does Stevenson write in the different first-person perspectives?
• What does it allow the reader to do? (Structure Question)

Symbol questions:
• How is the back door represented and why is this important?
• Why is the laboratory separate from the rest of the house?
• Explain your reasons.
• What is so important about Hyde’s physical appearance?
• And how does this connect with context?

Theme questions:
• How does Stevenson explore the duality of human nature?
• Why was reputation so important in Victorian times?
• There are many binary opposites apparent in Stevenson’s Dr Jekyll and Mr Hyde, why does he include these?
• Why has Stevenson presented the theme of man’s duality in Dr Jekyll and Mr Hyde? What is he trying to suggest?

Character questions
What does Dr Jekyll represent and why? Provide an example from the novel.
What does Mr Hyde represent and why? Provide an example from the novel.
What does Dr Lanyon represent and why? Provide an example from the novel.
What does Mr Enfield represent and why? Provide an example from the novel.
What does Poole represent and why? Provide an example from the novel.
What is the nature of the relationship between Mr Utterson and Mr Enfield?

Enfield is presented as a ‘Well known man about town’ what does this say about his personality?
Can you make any links between the character? What are your reasons for these?

Assessment questions:
extract based – deep marking.

How does Stevenson present Mr Hyde as a frightening outsider?
“There are some things that are best kept private.” To what extent does the opening chapter of The Strange Case of Dr Jekyll and Mr Hyde illustrate this view?
What view of Human Nature does Stevenson present in the novel The Strange Case of Dr Jekyll and Mr Hyde?
In what way is The Strange Case of Dr Jekyll and Mr Hyde a novel of secrets, where the truth is hard to see?
Post-16 Timeline

3/10/16: UCAS application process begins
4/10/16: Scholarship evening @ Causeway
October and November: students complete applications in tutor time (personal statement completed in English lesson)
15/11/16: English, Maths, Science mock
2/12/16: deadline for UCAS applications
January 2017: Mock interview day
9/1/17-13/1/17: GCSE mock exams
May/June: External exams
24/8/17: GCSE results day
Search and Apply

With over 90,000 courses from more than 5,000 providers, there are many options available for you if you're interested in post-16 education or training.

If the college, school or training provider which runs the course you're interested in is registered with UCAS Progress, you can apply to them directly through our service.