



**General Certificate of Secondary  
Education**

*General Studies*

**Specimen Mark Scheme**

**Unit 1 (Case Study)**

The specimen assessment materials are provided to give centres a reasonable idea of the general shape and character of the planned question papers and mark schemes in advance of the first operational exams.

Further copies of this Mark Scheme are available to download from the AQA Website: [www.aqa.org.uk](http://www.aqa.org.uk)

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**1 Identify and explain in your own words two ways of producing energy for the UK. (4 marks)**

*Examples of indicative content – any other valid points will be credited*

**Level 0 (0 marks)**

No valid response or relevant information

**Level 1 (1 – 2 marks)**

Simple undeveloped points (identification only) such as:

- gas
- coal
- nuclear
- wind
- wave

**Level 2 (3 – 4 marks)**

Some development of points such as:

- using the UK's natural wind resources to power wind turbines
- burning gas / coal in power stations
- harnessing the power of the tides with wave based power stations

N.B. Full marks (4) should be reserved for candidates who explain two ways with clear communication and development.

- 2 Using the sources and your own knowledge discuss some of the problems associated with one current method of producing energy for the UK. (6 marks)**

*Examples of indicative content – any other valid points will be credited*

**Level 0 (0 marks)**

No valid response or relevant information

**Level 1 (1 – 2 marks)**

Simple undeveloped points such as:

- nuclear produces radioactive waste
- wind turbines are not popular with everyone / are expensive to install
- coal is a dirty fuel – adds to CO<sub>2</sub> emissions
- gas supplies are running out

**Level 2 (3 – 4 marks)**

Some development of points such as:

- gas is available but might have to come from unstable countries
- wave power is constantly available but not easy to access
- home generation is unlikely to produce much power
- hydro-electric schemes are efficient but require specific geography

**Level 3 (5 – 6 marks)**

Cross-referencing, and developed points and conclusions such as:

- nuclear power produces no CO<sub>2</sub> emissions but there are problems re waste and nuclear plants are very expensive to run
- renewable sources can cut CO<sub>2</sub> but we are many years away from generating enough power from such sources as wind and wave
- the UK has huge coal reserves and could be self sufficient but burning coal causes emissions problems and most of the coal mines have been closed

N.B. Full marks (6) should be reserved for candidates who express clear conclusions and have shown awareness of different views (either from the sources or own knowledge).

**Level Mark Scheme for use with Question 3**

<b>Level</b>	<b>Marks</b>	
Level 4	7 - 10	<ul style="list-style-type: none"> <li>• Clear analysis of the facts and well informed personal opinion</li> <li>• Makes full use of relevant supporting material</li> <li>• Selects with precision from pre-released material and introduces and links material from elsewhere</li> <li>• Evidence of some additional research where appropriate</li> <li>• Information is clearly presented and simple for the general reader to understand</li> <li>• Contains clear conclusions drawn from a range of relevant material and based on clear analysis</li> <li>• Spelling, punctuation and grammar is largely accurate</li> </ul>
Level 3	5 - 6	<ul style="list-style-type: none"> <li>• Some cross-referencing of material - linking ideas in different documents. Answers in this band should draw clear comparisons and not simply give isolated facts</li> <li>• Clear evidence of reorganisation of material with personal opinion beginning to be expressed</li> <li>• Information is presented clearly and simply with some illustration of points</li> <li>• The answer should contain clear conclusions, though these may be in the simplest form</li> <li>• Spelling, punctuation and grammar is reasonably accurate</li> </ul>
Level 2	3 - 4	<ul style="list-style-type: none"> <li>• Selects some relevant material</li> <li>• Attempts to use stimulus material and/or own ideas</li> <li>• Examples are frequently undeveloped</li> <li>• Some evidence of reorganisation of the material provided and/or of additional material</li> <li>• Draws relevant simple conclusions</li> <li>• Communication is likely to be unclear and contain a number of errors</li> </ul>
Level 1	1 - 2	<ul style="list-style-type: none"> <li>• Simple interpretation / selection of source material</li> <li>• Basic level of organisation of material - probably in the order in which it was presented</li> <li>• No real development of points</li> <li>• Communication may well be weak with numerous errors in spelling, punctuation and grammar.</li> </ul>
Level 0	0	<ul style="list-style-type: none"> <li>• No valid response or relevant information</li> </ul>

- 3 Using the sources and your own knowledge explain, with examples, why it is difficult to make decisions about how to produce energy for the UK in the future. (10 marks)**

***Refer to Level Mark Scheme on page 5 when awarding marks***

*Examples of indicative content – any other valid points will be credited*

**Level 0 (0 marks)**

No valid response or relevant information

**Level 1 (1 – 2 marks)**

Simple undeveloped points such as:

- current reserves will not last
- need for a cut in emissions but the UK needs to generate more power every year
- hard to tell which countries will be “friendly” in years to come

**Level 2 (3 – 4 marks)**

Some development of points such as:

- not easy to predict future energy needs
- don't want to become reliant on unstable sources of energy
- new technologies are largely unproven on a big scale

**Level 3 (5 – 6 marks)**

Cross-referencing, developed points and conclusions such as:

- in order to reduce CO<sub>2</sub> emissions the UK could turn to nuclear power but this has problems re waste and nuclear plants are very expensive to set up
- getting the right mix of renewables and non-renewables is the key to solving the problem but there is resistance to building any more coal / gas fired power stations

**Level 4 (7 – 10 marks)**

Clear analysis based on sources and research with well developed conclusions such as:

- it is not easy to predict the kind of world that we will live in 20 years from now so energy sources are hard to plan for – gas might become unreliable but for now the UK still has gas reserves
- heating is a very large percentage of the UK's energy needs but this could be addressed by better insulation, more advanced boilers etc

N.B. 9 to 10 marks should be reserved only for candidates who make full use of sources and some evidence of additional research/knowledge.

**Level Mark Scheme for use with Question 4**

<b>Level</b>	<b>Marks</b>	
Level 5	17 - 20	<ul style="list-style-type: none"> <li>• Selects from source material with considerable precision</li> <li>• Discriminates well between important and less important material</li> <li>• Draws conclusions in a clear and logical way</li> <li>• Offers personal judgements supported by detailed evidence drawn from a wide range of areas</li> <li>• Demonstrates significant additional research where appropriate</li> <li>• Analyses and evaluates clearly and concisely</li> <li>• Extends and develops points – always with clear aims</li> <li>• Communication displays a high degree of accuracy</li> </ul>
Level 4	13 - 16	<ul style="list-style-type: none"> <li>• Clear analysis of the facts and well informed personal opinion</li> <li>• Makes full use of relevant supporting material</li> <li>• Selects with precision from pre-released material and introduces and links material from elsewhere</li> <li>• Evidence of some additional research where appropriate</li> <li>• Information is clearly presented and simple for the general reader to understand</li> <li>• Contains clear conclusions drawn from a range of relevant material and based on clear analysis</li> <li>• Spelling, punctuation and grammar is largely accurate</li> </ul>
Level 3	9 -12	<ul style="list-style-type: none"> <li>• Some cross-referencing of material - linking ideas in different documents. Answers in this band should draw clear comparisons and not simply give isolated facts.</li> <li>• Clear evidence of reorganisation of material with personal opinion beginning to be expressed</li> <li>• Information is presented clearly and simply with some illustration of points</li> <li>• The answer should contain clear conclusions, though these may be in the simplest form</li> <li>• Spelling, punctuation and grammar is reasonably accurate</li> </ul>
Level 2	5 - 8	<ul style="list-style-type: none"> <li>• Selects some relevant material</li> <li>• Attempts to use stimulus material and/or own ideas</li> <li>• Examples are frequently undeveloped</li> <li>• Some evidence of reorganisation of the material provided and/or of additional material</li> <li>• Draws relevant simple conclusions</li> <li>• Communication is likely to be unclear and contain a number of errors</li> </ul>
Level 1	1 - 4	<ul style="list-style-type: none"> <li>• Simple interpretation / selection of source material</li> <li>• Basic level of organisation of material - probably in the order in which it was presented</li> <li>• No real development of points.</li> <li>• Communication may well be weak with numerous errors in spelling, punctuation and grammar.</li> </ul>
Level 0	0	<ul style="list-style-type: none"> <li>• No valid response or relevant information</li> </ul>

- 4 In answer to this question you should refer to Sources 1 to 5 as well as using your own knowledge.**

**Say what you think the future energy needs of the UK might be and how these might be met.**

**You might consider**

- **the increasing need for energy**
- **the contribution that could be made by different energy sources**
- **the ways that people can alter their behaviour to use less energy.**

**(20 marks)**

***Refer to Levels Mark Scheme on page 7 when awarding marks***

*Examples of indicative content – any other valid points will be credited*

**Level 0 (0 marks)**

No valid response or relevant information

**Level 1 (1 – 4 marks)**

Simple undeveloped points such as:

- will need to generate more electricity
- could build more power stations – gas, coal, nuclear

**Level 2 (5 – 8 marks)**

Some development of points such as:

- likely to need more power generation in the future and a mixture of resources will be needed
- could meet needs through traditional fossil fuels but this is not in keeping with CO<sub>2</sub> reduction targets

**Level 3 (9 – 12 marks)**

Cross-referencing, developed points and conclusions such as:

- there could be an increasing need for more power generation but energy savings could help to prevent this
- renewables can play a part in future energy needs but are unlikely to meet all needs at any point

**Level 4 (13 – 16 marks)**

Clear analysis based on sources and research with well developed conclusions such as:

- a combination of energy savings and the use of clean technologies could address the energy needs of the UK in the medium to long term but in the short term there will still have to be “dirty” power stations and nuclear power stations



**Level 5 (17 – 20 marks)**

Clear and concise analysis and significant additional research such as:

- it is difficult to predict the energy needs of the UK far into the future – e.g. 20 years ago the UK was still a manufacturing nation with the energy needs of heavy industry. As the UK economy changes further there might be a lower energy requirement in some areas which could well balance out the growth in energy needs due to an expanding population. A mixture of energy source is the most likely solution with renewables and non-renewables running along side one another

N.B. 19 to 20 marks should be reserved only for candidates who analyse / evaluate the evidence and display significant additional research with some personal judgement.

**Distribution of Assessment Objective marks across Unit 1**

<b>Question</b>	<b>AO1</b>	<b>AO2</b>	<b>AO3</b>	<b>AO4</b>	<b>Total</b>
<b>1</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>4</b>
<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>6</b>
<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>10</b>
<b>4</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>20</b>
<b>Total</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>40</b>