

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)



Arctic offshore oil drilling, Russia

Introducing the question

Students can be introduced to this question using the Kerboodle assessment:

22 On your marks

This will help students to unpick the question and to decide what they should and shouldn't include in their answer.

Using the student resources

The student resources for this question are provided on the following pages. These resources provide flexible support for your students in answering the question. They can be printed and copied as required.

Student resources	Page
<p>Plan your answer</p> <p>This is a planning document to help students decide what to include and how to structure their answer.</p>	3–5
<p>Write your answer</p> <p>This provides an answer sheet for students to complete their answer on paper in class or at home.</p>	6–7
<p>Mark your answer</p> <p>This student-friendly checklist and mark scheme can be used for self- or peer-marking. It can also be used by students in assessing the sample answers.</p>	8–9
<p>Sample answers</p> <p>Three sample answers, at a range of levels, are given. These could be used in a number of ways to demonstrate to students how to maximise their marks for this question.</p>	10–14
<p>Marked sample answers</p> <p>These marked and annotated versions of the three sample answers can be used by students to compare with their own marked sample answers.</p>	15–19

Please note: Students do not automatically have access to the *On your marks* presentation or resources from Kerboodle. If you would like your students to access these resources, or to complete the *On your marks* question on-screen, you will need to assign these to your students in Kerboodle.

Using the Kerboodle Markbook

If you would like to use the Kerboodle Markbook to monitor progress and record student marks for this question, you must assign **22 On your marks** to the students. Students can type their answer onto the final screen of the presentation and then submit this to the Kerboodle Markbook. Students' marks can then be entered into the Kerboodle Markbook and they will be informed automatically of their mark when they next log in to Kerboodle.

Timing	Spelling, punctuation and grammar (SPaG)
Under exam-style conditions, it should take students around six minutes to complete your answer to this question.	No additional marks are awarded for SPaG for this question.

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)



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Before attempting to answer the question, remember to BUG it.

- ✓ **B**ox the command word.
- ✓ **U**nderline the following:
 - the **theme**
 - the **focus**
 - any **evidence** required
 - the **number of examples** needed.
- ✓ **G**lance back over the question – to make sure you include everything in your answer.



Evidence: You must use evidence from both the photograph and your own knowledge.

Command word: Give reasons **why** something happens. No credit is given for description.

Using the photograph and your own knowledge, **explain** how different factors affect the global supply of energy. (6 marks)

Number of examples: You must give more than one different factor.

Theme: This question is related to the theme of Energy, assessed in Paper 2, Section C of your exam. The question is optional.

Focus: You need to focus on the global, not local, supply of energy.

continued overleaf

Name _____ Class _____

PEEL your answer

Use **PEEL** notes to structure your answer. This will help you to communicate your ideas to the examiner in the clearest way.

- **Point** – Make two or three points in detail, rather than lots of points in less detail. Don't use bullet points.
- **Explain** – Give reasons by using sentence starters such as: *'This is because ...'*, *'One reason is ...'*
- **Evidence** – Include facts and other details from named examples to back up your point. Each point – with explanation and evidence – should represent a separate PEE paragraph.
- **Link** – To link different points to each other, use PEE sentence starters such as: *'Another important point is ...'* or *'Of more importance is ...'*. Make sure your conclusion also links back to the question.



Quality not quantity: You will not be marked simply on the number of points you make, but on the quality of your answer. That means the quality of the content and how well you structure your answer.



SPaG: You are not awarded extra marks for spelling, punctuation and grammar for this question. However, you could miss out on marks if your spelling, punctuation or grammar is poor, so always check your answer carefully.

Name _____ Class _____

Planning grid

Use this planning grid to help you write high-quality paragraphs. Remember to include links to show how your points relate to each other and to the question.

	PEE paragraph 1	PEE paragraph 2	PEE paragraph 3
Point			
Explain			
Evidence			

Name _____ Class _____

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Arctic offshore oil drilling, Russia

continued overleaf

PLAN YOUR ANSWER

WRITE YOUR ANSWER

MARK YOUR ANSWER

SAMPLE ANSWERS

MARKED SAMPLE ANSWERS

Name _____ Class _____

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)



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This question is assessing the following assessment objectives (AO).

AO1	Testing your knowledge of factors affecting the global supply of energy	2 marks
AO2	Testing your understanding of how various factors affect the global supply of energy	2 marks
AO3	Testing that you can apply your knowledge and understanding to explain how different factors affect the global supply of energy	2 marks

1. To help you to identify if the answer includes detailed points, first highlight or underline the:



Points in **red**



Explanations in **orange**



Evidence in **green**

2. Use the mark scheme on the next page to decide what mark to give. You will not be awarding marks for individual points, but will choose a level and a mark based upon the **quality** of the answer as a whole.

Name _____ Class _____

Level	Marks	Descriptor	Examples
3 (Detailed)	5–6	<p>AO1: Shows detailed knowledge of factors affecting the global supply of energy, include details from examples studied.</p> <p>AO2: Shows thorough understanding of how various factors affect the global supply of energy.</p> <p>AO3: Shows thorough use of knowledge and understanding in well-developed points to interpret geographical information based on the evidence.</p>	<p>There are large supplies of oil under the Arctic Ocean, but the physical conditions are extreme, with very low temperatures and remoteness of the area, as shown in the photograph. That means it is expensive to exploit the oil and that less is produced than the size of the reserves would suggest. There are also strict environmental laws following the oil spillage by the Exxon Valdez in Alaska because of the fragile nature of the ecosystem there. This also increases costs and so affects supply.</p>
2 (Clear)	3–4	<p>AO1: Shows clear and accurate knowledge of factors affecting the global supply of energy, including reference to examples studied.</p> <p>AO2: Shows some understanding of how various factors affect the global supply of energy.</p> <p>AO3: Shows reasonable use of knowledge and understanding in developed points to interpret geographical information based on the evidence.</p>	<p>In the photograph they are drilling through ice to get to the seabed, which means the oil is very difficult and expensive to get at. Fighting in the Middle East can mean that supplies of oil are cut off and less is exported. New technology means that it becomes more economic to exploit new areas and new sources of energy.</p>
1 (Basic)	1–2	<p>AO1: Shows limited knowledge of factors affecting the global supply of energy and may include only one factor. Any examples will be too generic.</p> <p>AO2: Shows little understanding of how factors affect the global supply of energy.</p> <p>AO3: Shows limited use of knowledge and understanding to interpret geographical information. Simple basic statements are not developed and may be purely descriptive.</p>	<p>It is very cold. They are drilling under the sea. It is difficult to drill. There are high costs of exploitation and production. New technology helps increase supplies.</p>

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 1

In the photograph they are drilling for oil in a very cold area, as shown by the ice. The search for energy is under the sea. These two factors make it difficult and expensive to find the oil and to transport it away from the area. New technology means that oil can be obtained from deeper wells as well as more remote areas than was possible in the past, increasing the supply. In other areas the oil may run out because it has become exhausted. Sometimes countries stop exporting oil because of political unrest.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 2

They are drilling for oil under the sea. It is a very cold area. They are now also getting energy using fracking. War can stop oil being exported. Some oil wells have run out of oil. It is very expensive to find and drill for oil. Sometimes there are oil spills. Oil is found in difficult areas. Oil is sometimes deep in the ground. There is oil and gas in the North Sea. These are fossil fuels.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 3

There are physical and human factors affecting the global supply of energy. Political considerations are important, as governments have energy policies. Germany is phasing out all her nuclear power stations whereas the UK is planning new ones. Russia has used her dominance in supplying natural gas to apply political pressure on countries she disagrees with, such as Ukraine.

New technology like fracking has meant that oil shale, which was previously uneconomic to exploit, can now be produced more cheaply. The USA has stopped importing oil from Nigeria because she can satisfy her needs by fracking.

The search for oil is dependant on the price of oil. If the price is high, it is practical to exploit oil in remote areas, for example, under Arctic Ocean as shown in the photograph.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 4

Drilling for oil under the sea, especially if it is in the type of cold polar area shown in the photograph, is very difficult and expensive. These areas will only be used to contribute to the global supply of energy if the price of oil makes it economic to do so.

Due to global warming, governments are also trying to cut down on the use of fossil fuels like coal and oil because of the greenhouse gases they produce. There are therefore attempts to make greater use of renewable energy like solar and wind turbines. Many of these are being built in the UK.

The technology involved in fracking to get energy from oil shale has been improved so a lot of oil is now being produced in this way in the USA. The UK's oilfields in the North Sea are becoming exhausted and so the country now has to import natural gas from abroad. Nuclear power is used in some countries but is banned in others.

All these factors affect the global supply of energy.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 5

The photograph shows an oil well drilling for oil. If they discover oil in the Arctic Ocean it will increase the supply of energy. There has been an increased supply of energy because of fracking. Fossil fuels are non-renewable and so eventually will run out so there will be less energy. Some countries are increasingly using nuclear power and renewable energy sources to cut down on CO₂ emissions because they cause global warming.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 1

In the photograph they are drilling for oil in a very cold area, as shown by the ice. The search for energy is under the sea. These two factors make it difficult and expensive to find the oil and to transport it away from the area. New technology means that oil can be obtained from deeper wells as well as more remote areas than was possible in the past, increasing the supply. In other areas the oil may run out because it has become exhausted. Sometimes countries stop exporting oil because of political unrest.

Evidence: Uses the photograph.

Points: Draws a logical conclusion but could be more fully developed to show the impact on the supply of energy.

Point: Uses own knowledge to give another factor.

Points: Needs to be show more clearly why these could also be factors.

Feedback: This answer makes clear, linked points on more than one factor, based on evidence from the photograph and own knowledge. However, it fails to develop the points enough and link the factors closely enough to their impact on the global supply of oil.

Level = 2 Marks = 3

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 2

They are drilling for oil under the sea. It is a very cold area. They are now also getting energy using fracking. War can stop oil being exported. Some oil wells have run out of oil. It is very expensive to find and drill for oil. Sometimes there are oil spills. Oil is found in difficult areas. Oil is sometimes deep in the ground. There is oil and gas in the North Sea. These are fossil fuels.

Points: Give simple statements but fails to focus on the question.

Explanation: Not required by the question.

Feedback: Although there is some knowledge of how energy is produced, this basic answer develops none of the statements to explain how different factors affect supply. There is no direct reference to the photograph.

Level = 1 Marks = 1

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 3

There are physical and human factors affecting the global supply of energy.

Political considerations are important, as governments have energy policies.

Germany is phasing out all her nuclear power stations whereas the UK is planning new ones. Russia has used her dominance in supplying natural gas to apply political pressure on countries she disagrees with, such as Ukraine.

New technology like fracking has meant that oil shale, which was previously uneconomic to exploit, can now be produced more cheaply. The USA has stopped importing oil from Nigeria because she can satisfy her needs by fracking.

The search for oil is dependant on the price of oil. If the price is high, it is practical to exploit oil in remote areas, for example, under Arctic Ocean as shown in the photograph.

Point: Immediately focuses on the question.

Point: Identifies a human factor.

Explanation: Explains the previous point.

Evidence: Uses named examples well to support the previous point.

Point: Identifies a second human factor.

Explanation: Explains the changing situation.

Evidence: Gives another appropriate named example.

Point: Identifies another economic (human) factor.

Evidence: Refer to the photograph.

Feedback: This answer makes clear rather than detailed use of the photograph, but otherwise is focused closely on the needs of the question. It uses a good blend of narrative and argument, and is well organised. It also uses examples throughout to illustrate and support the points effectively.

Level = 3 Marks = 6

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 4

Drilling for oil under the sea, especially if it is in the type of cold polar area shown in the photograph, is very difficult and expensive. These areas will only be used to contribute to the global supply of energy if the price of oil makes it economic to do so.

Due to global warming, governments are also trying to cut down on the use of fossil fuels like coal and oil because of the greenhouse gases they produce.

There are therefore attempts to make greater use of renewable energy like solar and wind turbines. Many of these are being built in the UK.

The technology involved in fracking to get energy from oil shale has been improved so a lot of oil is now being produced in this way in the USA.

The UK's oilfields in the North Sea are becoming exhausted and so the country now has to import natural gas from abroad. Nuclear power is used in some countries but is banned in others.

All these factors affect the global supply of energy.

Point: Draws a logical conclusion from the evidence to identify a factor.

Evidence: Uses the photograph.

Point: Develops the previous point, linking it to the question.

Explanation: Gives the reason.

Point: Identifies a second factor.

Explanation: Gives the reason for the policy.

Point: Develops the previous point but fails to make the effect on supply clear.

Evidence: Identifies an appropriate named location.

Point: Identifies another factor but fails to link it closely to the question.

Evidence: Identifies other appropriate named locations.

Point: Identifies another factor.

Point: Identifies another factor.

Point: Offers a conclusion.

Feedback: This detailed answer shows good knowledge and understanding of a range of factors. It also makes effective use of the photograph to make well-developed points that address the question. However, it does not relate the points to the question closely enough, and could be better organised, to merit full marks.

Level = 3 Marks = 5

Name _____ Class _____

Using the photograph and your own knowledge, explain how different factors affect the global supply of energy. (6 marks)

Sample answer 5

The photograph shows an oil well drilling for oil. If they discover oil in the Arctic Ocean it will increase the supply of energy. There has been an increased supply of energy because of fracking. Fossil fuels are non-renewable and so eventually will run out so there will be less energy. Some countries are increasingly using nuclear power and renewable energy sources to cut down on CO₂ emissions because they cause global warming.

Evidence: Uses the photograph.

Point: Shows logical development based on the evidence.

Points: Identifies other factors but fails to link them to the question and how they affect the global supply of energy.

Feedback: This answer clearly shows knowledge of various factors that affect the global supply of energy and makes use of the photograph. However, although the points show some development, they fail to make clear links between the factors and the supply of energy.

Level = 2 Marks = 3