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OCR
RECOGNISING ACHIEVEMENT

SPECIMEN

...day ... Month 2012 – Morning/Afternoon

GCSE GEOGRAPHY A

A732/01: Geographical Skills (Foundation Tier)

Candidates answer on the Question Paper

OCR Supplied Materials:
- An Insert (A732/01/02/I)

Other Materials Required:
- Calculator

Duration: 1 hour 15 minutes

Candidate Forename		Candidate Surname	

Centre Number						Candidate Number				

INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.
- Answer **all** the questions.

INFORMATION FOR CANDIDATES

- The number of marks for each question is given in brackets **[ ]** at the end of the question or part question.
- The total number of marks for this paper is **50**.
- This document consists of **16** pages. Any blank pages are indicated.
- These abbreviations are used throughout this paper:

UK – United Kingdom
EU – European Union
OS – Ordnance Survey

OCR is an exempt Charity

Answer **all** the questions.

1 **(a)** Read the passage below.

Energy crisis if renewables are not increased!

In 2010, 80% of the world's electricity was being produced from fossil fuels. These include coal, oil, natural gas and nuclear sources which are non-renewable. These may run out causing an energy crisis. To avoid this, many countries have been trying to increase their use of renewable energy. Using renewable resources will also reduce air pollution, conserve many environments and may reduce the rate of global warming.

(i) Circle **one** example of a fossil fuel from the list below:

Wind **Sun** **Biofuels** **Natural Gas**

[1]

(ii) Give **two** advantages of using renewable energy resources.

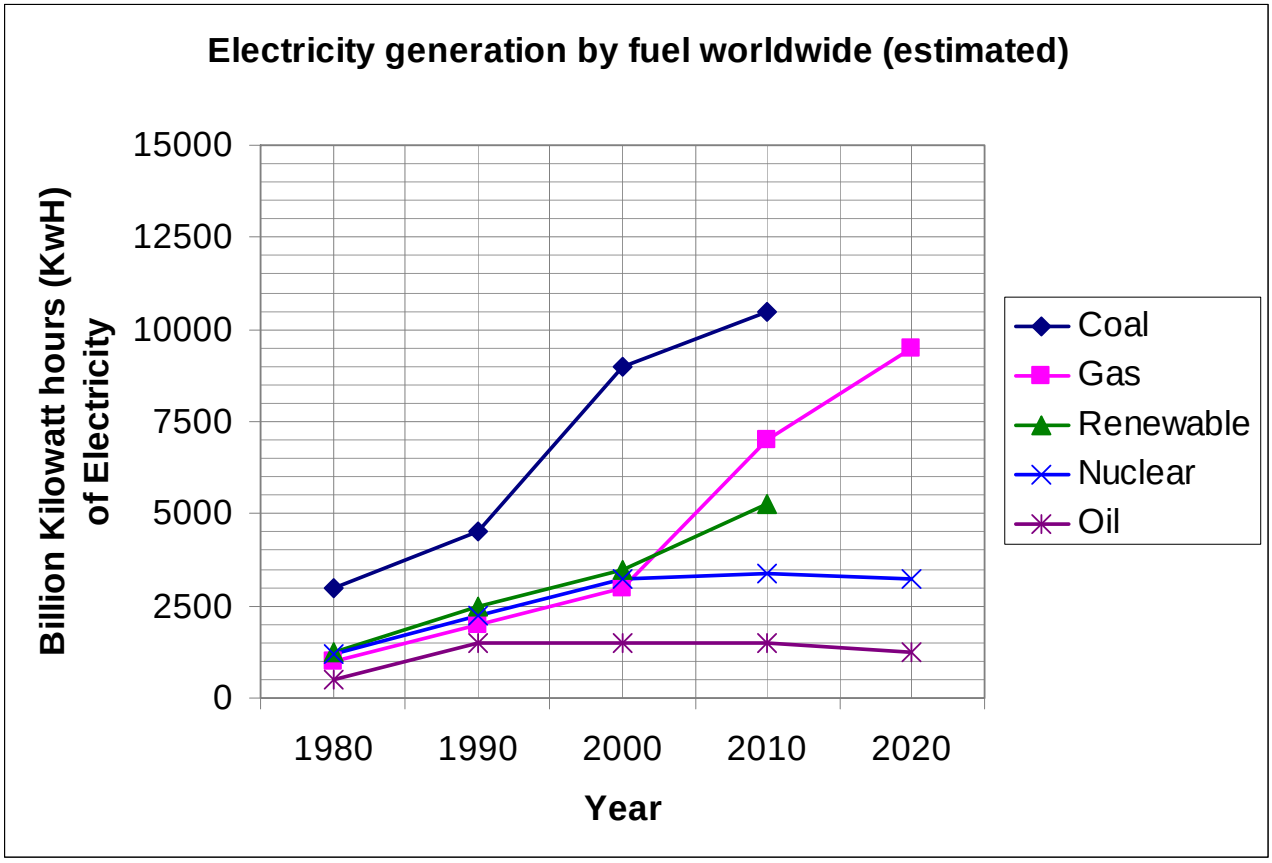
Advantage 1.....

.....

Advantage 2 .....

..... **[2]**

2 Study the graph below.



(a) Circle the correct answers in the sentences below.

In 2010 the fuel that generated the most electricity was ***oil / coal / gas.***

Between 1990 and 2010 electricity generated by gas ***increased quickly then levelled off / stayed constant / increased slowly then rose more steeply***.

Between 2010 and 2020 nuclear is predicted to ***decline slightly / increase quickly / keep rising steadily*.**

[3]

(b) Complete the graph above by plotting the following data:

- Estimated use of coal in 2020: 12 500 BkWh (Billion kilowatt hours)
- Estimated use of renewables in 2020: 7 250 BkWh (Billion kilowatt hours).

[2]

(c) Describe, using data, how the use of renewables is expected to change after 2010.

.....

.....

.....

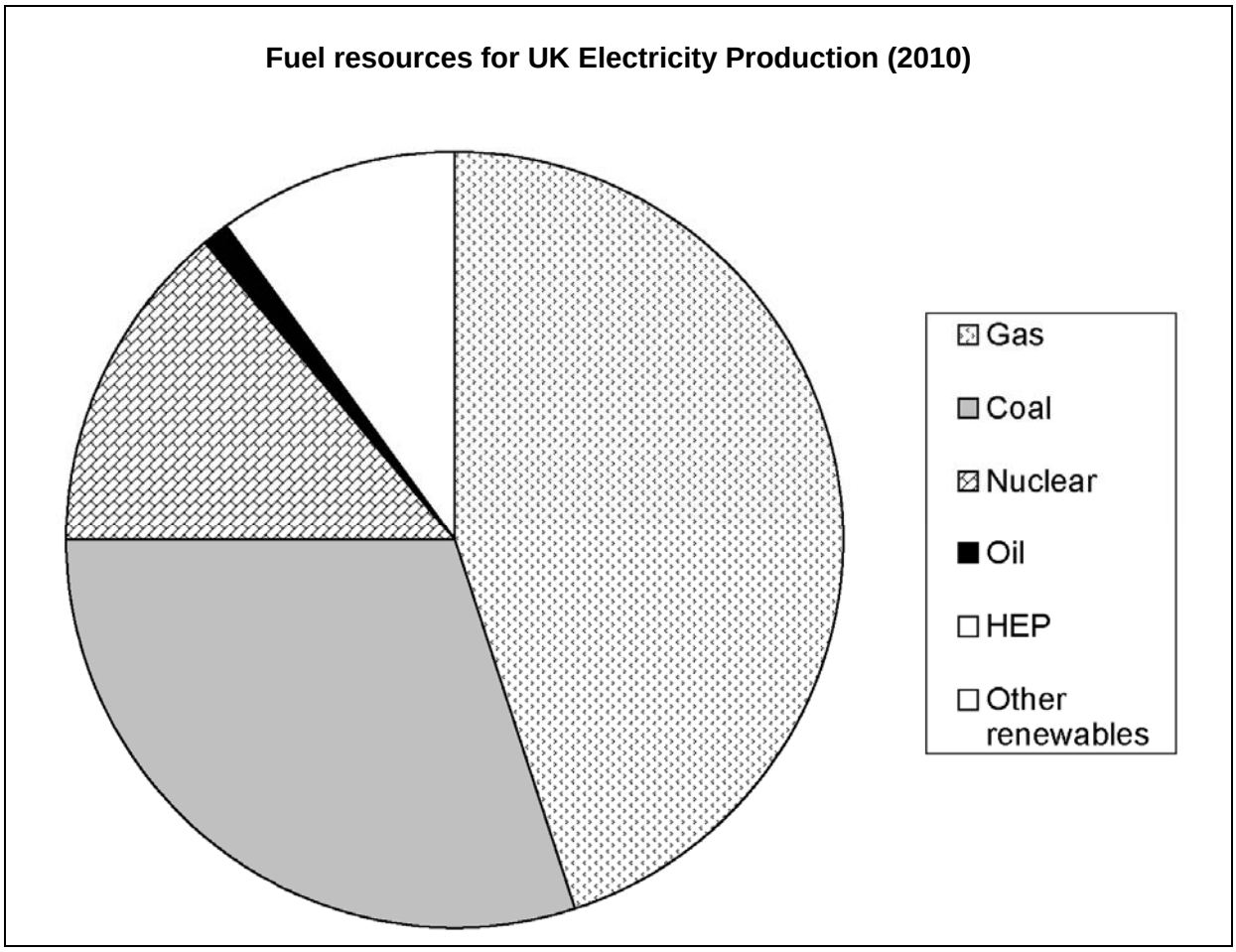
..... **[2]**

3 Study **Resource 1** in the separate **Insert.** Match any **two** types of environment shown in the photographs to the type of renewable energy that might be produced from them. One type (not shown in the photographs) has been done for you.

Type of environment	**Type of renewable energy**
Hot desert	Tidal energy
Mountain	Hydro-Electric power (HEP)
River valley	Geothermal energy
Sea waves	Solar energy
Hot rocks	Wind energy

[2]

4 (a) Study the pie chart and table below.



Type of fuel	World %	UK %
Coal	39	30
Natural Gas	25	45
Nuclear	11	14
Oil	6	1
HEP	15	8
Other renewables	4	2
TOTAL	**100**	**100**

(i) Complete the pie chart and the key above for the UK, using figures from the table for 'HEP' and 'Other renewables'.

[2]

(ii) Describe **one similarity** and **one difference** between fuel resources for electricity production in the world compared with the UK.

Similarity:

.....

.....

Difference:

.....

..... **[2]**

(b) In 2010, renewable resources produced 10% of the UK's electricity. The table below shows the different percentages of electricity produced from these renewable resources.

Energy type	**Percentage (%)**
HEP	83
Wind	8
Biomass	6
Geothermal	2
Other	1
TOTAL	**100**

How important was the use of wind energy in producing electricity in the UK in 2010 compared to other types of renewable energy?

.....

.....

.....

..... **[2]**

5 **(a)** Study the article in **Resource 2** in the separate Insert.

(i) Circle below the percentage of the UK's energy needs that will have to come from wind power by 2020.

3% **15%** **20%**

[1]

(ii) Give **one** reason why the UK is regarded as a good place to build wind farms.

..... **[1]**

(b) **(i)** Study the map in **Resource 3** in the separate Insert. Tick the columns on the right to say whether the statements below are **TRUE** or **FALSE**.

Statements	**TRUE**	**FALSE**
There are a large number of wind farms around London.		
The offshore wind farms are mostly to the east of the UK.		
Most of Scotland's wind farms are near Inverness.		

[3]

(ii) The location of Low Spinney wind farm is labelled on the map.

Describe its location.

.....

.....

.....

..... **[2]**

6 Study **Resource 4** in the separate Insert.

(a) (i) The scale of this OS map is 1: 25 000. Circle below another way of stating this scale.

2 cm = 1 km **4 cm = 1 km** **10 cm = 1 km**

[1]

(ii) Circle the answer below to show the area covered by this map extract.

12 sq. km **16 sq. km** **20 sq. km**

[1]

(b) (i) There are three villages on the map – Dunton Bassett, Ashby Magna and Gilmorton. In the table below write down the name of the **two** villages that match the descriptions given.

Description of village	**Village name**
This village has a church with a tower. It lies east of the M1 motorway.	
This village lies east of some springs and also has a school.	

[2]

(ii) Describe the location of Ashby Magna in relation to Dunton Bassett. Refer to distance and direction in your answer.

.....

.....

.....

..... **[2]**

(c) (i) Give a 6-figure grid reference for any **one** of the four wind turbines at Low Spinney farm.

Grid reference ..... **[1]**

(ii) Circle the correct answers in the passage below:

Low Spinney wind farm is located between the villages of Dunton Bassett, Ashby Magna and Gilmorton. It consists of four wind turbines.

Two turbines are on land ***145 / 150 / 155 metres*** above sea level and two are just above the 140 metre contour.

The site of the wind farm is in grid squares ***5589*** and ***5690 / 5689 / 5789***.

The land on which the wind farm is built slopes upwards and towards the

east / north / west. **[3]**

(d) (i) The presence of electricity pylons here was one reason the wind farm was built. Use the map key to help you find the electricity pylons towards the west of the map. Complete the sentence below by adding two 6-figure grid references.

The electricity pylons start in the south of the map at grid reference ……..

and leave the map on the western side at grid reference …….. .

[2]

(ii) From **map evidence only** suggest **two other** reasons why this area was chosen to build the wind farm.

Reason 1:

.....

.....

Reason 2:

.....

..... **[2]**

7 (a) (i) Producing electricity from wind turbines is one way that the land is being used by people.

Using **Resource 5**, describe one other way in which the land is being used by people.

.....**[1]**

(ii) Apart from wind farms, identify **one other** way in which the landscape or skyline has been changed by people.

.....

.....**[1]**

(iii) Study **Resource 5** in the separate Insert. Use **Resource 4** to decide the direction that the camera was pointing to take this photograph.

..... **[1]**

8 (a) A group of students carried out a survey of 50 people in the three villages. They put their results in a table and also recorded some of the different opinions given by people and organisations involved in the development. These are shown in **Resource 6** in the separate Insert.

Study the table and the different opinions. Read the statements below.

Statement A: "Building Low Spinney wind farm was a good decision."

Statement B: "Low Spinney wind farm should never have been built in this area."

(i) Give **one** piece of evidence that supports **Statement A.**

..... **[1]**

(ii) Give **one** piece of evidence that supports **Statement B**.

..... **[1]**

(iii) Which **statement** do you agree with the most? Circle your choice below and give reasons for your choice. You should use information from **Resource 6** in your answer.

Statement A / Statement B

Reasons for my choice:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... **[6]**

END OF QUESTION PAPER

ADDITIONAL PAGE

If additional space is required, you should use the lined pages below. The question number(s) must be clearly shown.

PLEASE DO NOT WRITE ON THIS PAGE

OCR
RECOGNISING ACHIEVEMENT

SPECIMEN F

Sample Assessment Material

GCSE GEOGRAPHY A

A732/01: Geographical Skills (Foundation Tier)

MARK SCHEME

Duration: 1 hour 15 minutes

MAXIMUM MARK 50

SPECIMEN

Question			Answer	Marks	Guidance
1	(a)	(i)	Natural Gas (✓)	1	
		(ii)	Reduce air pollution (✓) Conserve many environments (✓) Reduce the rate of global warming (✓)	2	2 x 1 Two advantages of using renewable energy resources. Any two from the list. Accept different wording.
2	(a)		Coal (✓) Increased slowly then rose more steeply (✓) Decline slightly (✓)	3	3 x 1
	(b)		One mark for each correct plot: 12 500 (✓) 7250 (✓)	2	2 x 1 Accurate line starting and ending in correct place = mark as correct plot.
	(c)		The use of renewables has continually increased between 1980/2020 (✓) Rising from under 2000 to 7250 BkWh by 2020 (✓) or rising by 5250 BkWh (✓)	2	2 x 1 One mark for recognition of upward trend and one for statistics.
3			Arrows/lines must link any two correctly: Hot desert → Solar energy Mountain → Wind energy River valley → Hydro-Electric power (HEP) Hot rocks → Geothermal energy	2	One correct = 1 marks Two correct = 2 marks

Question			Answer	Marks	Guidance
4	(a)	(i)	Correct line drawn at 98% (✓) Correct shading using the key (✓)	2	2 x 1 No tolerance on % Do not accept 92% (shading in reverse way).
		(ii)	Similarities: between fuel resources for electricity in the world compared with the UK Other renewables very low in both UK and the world (✓) Coal and natural gas dominate in both UK and world (✓) Differences: between fuel resources for electricity in the world compared with the UK More coal used in world than UK/39% to 25% (✓) Natural gas greater percentage in UK compared with world/45% to 25% (✓)	2	2 x 1 Credit any one valid comparison from each list.
	(b)		Indicative content: Wind has far less than HEP (✓) with 75% less (✓) Wind is ranked 2nd out of 5 (✓) Wind is higher than three other renewable (✓) with 8% compared to 6% Bio (✓) or 2% Geo (✓) or 1% other (✓)	2	2 x 1 Credit: One valid comparison with data or Two statements that are valid.

Question			Answer	Marks	Guidance
5	(a)	(i)	3 (%)	1	1 x 1
		(ii)	The UK is a good place to build wind farms because: Windiest place in Europe (✓) Has technology to generate electricity (✓) Has national electricity grid (✓) Wants to reduce use of fossil fuels (✓) Excellent motorway network (✓)	1	1 x 1 Credit one valid reason.
	(b)	(i)	There are a large number of wind farms around London. **FALSE** The offshore wind farms are mostly to the east of the UK. **TRUE** Most of Scotland's wind farms are near Inverness. **FALSE**	3	3 x 1
		(ii)	The location of Low Spinney wind farm is: In the centre/Midlands of England (✓) North west of London (✓) at 80 miles (dev) Close to Coventry (✓) South of Nottingham (✓) at 60 miles (dev)	2	2 x 1 or 1 x 2 Credit: Two valid points or One developed point. Need not include distance and direction.

Question			Answer	Marks	Guidance
6	(a)	(i)	4 cm = 1 km	1	1 x 1
		(ii)	20 sq km	1	1 x 1
	(b)	(i)	This village has a church with a tower. It lies east of the M1 motorway. **ASHBY MAGNA** This village lies east of some Springs and also has a school. **GILMORTON**	2	Point mark: 2 x 1
		(ii)	Ashby Magna lies east of Dunton Bassett (✓) Ashby Magna lies 1.2 - 2 km from Dunton Bassett (✓)	2	Point mark: 2 x 1 Credit: One mark max for a distance reference. One mark max for a direction reference. Accept reverse. Allow range on distance as it depends on where measured from. Do not credit measurement in centimetres.
	(c)	(i)	555891 (✓) 560890 (✓) 561895 (✓) 564891 (✓)	1	1 x 1 Grid reference for one of the four turbines.
		(ii)	145 (✓) 5689 (✓) east (✓)	3	3 x 1
	(d)	(i)	547870 (✓) or 548870 (✓) 540900 (✓)	2	2 x 1
		(ii)	Indicative content: Small villages so not many people to object (✓)	2	2 x 1 Reasons why this area was chosen for a wind farm. Two reasons from the list.

Question			Answer	Marks	Guidance
			Area looks remote/plenty of open space (✓) M1 motorway could bring in materials easily (✓) Relief has some hilltops/spot height at 153m (✓) Will already be used to noise from motorway (✓) Already has spoilt view due to pylons (✓) Plenty of farmers who may be happy to sell/rent land for money (✓)		Credit any acceptable reasons taken from the map.
7	**(a)**	**(i)**	Indicative content: Pastoral farming/keeping cows (✓) Arable farming/growing crops (✓) Transporting electricity (✓) A hut/hovel providing shelter (✓)	**1**	Ways that the land is used by the people. Credit any one way that the land is being used that can be seen in the photo. Not necessarily listed in the indicative content.
		(ii)	Indicative content: Electricity pylons (✓) Telephone cables (✓) Telegraph poles (✓)	**1**	1 x 1 How the skyline has been changed. Credit any one way that the skyline has been changed that can be seen in the photo. Not necessarily listed in the indicative content. To distinguish from (i) must be a factor that changes the landscape or skyline.
		(iii)	From the south west	**1**	1 x 1
8	**(a)**	**(i)**	Any appropriate piece of supportive evidence from either the table or opinions.	**1**	1 x 1
		(ii)	Any appropriate piece of supportive evidence from either the table or opinions.	**1**	1 x 1

Question			Answer	Marks	Guidance
		(iii)	**Level 3 [5 – 6 marks]** Choice is supported with detailed points including specific detail from both the table and the opinions. There is also reference to the opposite choice with supporting evidence there too. Reasoning is clear and logical with good expression of language **Level 2 [3 – 4 marks]** Choice is supported with some points from both the table and opinions. There is limited reference to the opposite choice. Good reasoning and logic in parts of the answer. **Level 1 [1 – 2 marks]** Choice is supported with simple points from either the table or the opinions and there is no reference to the opposite choice. Reasoning may be weak or unclear. **0 marks** No response or no response worthy of credit.	**6**	The response is to be marked holistically. Examiners to label overall level awarded at the end of the response. For Level 3, Statement A e.g. I support Statement A because 80% of the people surveyed disagree – some strongly – that wind turbines will damage crops and animals. The farmer has seen no evidence of this and he should know! Farmers are not making much money at present so it will be good to get rent or to sell some of his land to the wind farm company. I know that some people think that turbines spoil the view but so do pylons and telegraph poles as well as churches. People will have to get used to it! For Level 3, Statement B e.g. I support Statement B because 70% of the people in the survey agree strongly that the turbines will create a lot of noise; indeed only 2% disagree with this. You also need 24 000 turbines to produce the equivalent of one coal-fired power station which will take up a lot of land and upset a lot of people. While I agree that we need more electricity from renewable sources, I think there are better ways of producing it than wind turbines. If the quality of written communication criteria is not fully met then full marks must not be awarded. NB: 1. No marks for statement circled. Marks are for justifying choice. 2. Candidate can use evidence already covered in (i) and (ii).

Assessment Objectives Grid (includes QWC)

	AO1	AO2	AO3	Total
1(a)(i)			1	**1**
1(a)(ii)			2	**2**
2(a)		1	2	**3**
2(b)			2	**2**
2(c)		1	1	**2**
3		1	1	**2**
4(a)(i)			2	**2**
4(a)(ii)		1	1	**2**
4(b)		1	1	**2**
5(a)(i)		1		**1**
5(a)(ii)			1	**1**
5(b)(i)		2	1	**3**
5(b)(ii)		1	1	**2**
6(a)(i)		1		**1**
6(a)(ii)		1		**1**
6(b)(i)		2		**2**
6(b)(ii)		1	1	**2**
6(c)(i)			1	**1**
6(c)(ii)		1	2	**3**
6(d)(i)			2	**2**
6(d)(ii)			2	**2**
7(a)(i)		1		**1**
7(a)(ii)			1	**1**
7(a)(iii)		1		**1**
8(a)(i)			1	**1**
8(a)(ii)			1	**1**
8(a)(iii)		3	3	**6**
TOTAL	**0**	**20**	**30**	**50**