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Tick this box if there is no writing in this booklet

Level 3 Geography 2020

91429 Demonstrate understanding of a given environment(s) through selection and application of geographic concepts and skills

9.30 a.m. Wednesday 2 December 2020
Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of a given environment(s) through selection and application of geographic concepts and skills.	Demonstrate in-depth understanding of a given environment(s) through selection and application of geographic concepts and skills.	Demonstrate comprehensive understanding of a given environment(s) through selection and application of geographic concepts and skills.

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should attempt ALL the questions in this booklet.

Pull out Resource Booklet 91429R from the centre of this booklet.

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–8 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

Achievement

TOTAL 04

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INSTRUCTIONS

Refer to the resource booklet about air pollution in Mongolia. You should demonstrate your understanding of a range of geographic skills and concepts when answering the question.

QUESTION: Air pollution in Mongolia

(a) Using **Resources A to I** on pages 3–10 of the resource booklet, comprehensively analyse how the environment (natural and cultural) contributes to Ulaanbaatar's air pollution.

The enviroment in Mongolia of harsh Winter months along with lack of social development, has led to hundreds of thousands of people within Ulaanbaatar to resort to burning fossil fuels to survive the harsh weather events faced in the Winter months. As a result of this almost 600,000 tonnes of coal is burnt solely for heating, this accounts for approximatly 80% of Ulaanbaatars winter pollution. The choice of burning coal is due to the ~~abbundance~~ of the resource in the area which makes it cheaper to burn than any other material. In addation to this Ulaanbaatars geographical location, in a valley next to the ~~Tolo~~ tolgoxt mountain range, means that the city gets trapped in an inversion layer for many ~~years~~ months of the year, Thus trapping all Pollutants in the low atmosphere rather than letting them escape

As a reshlt of Ulcombaatars Cheap access to Fossil fuels and enviroment it results in pollution getting stuck in the valley ~~it~~ infecting hundreads of thousands of people per year

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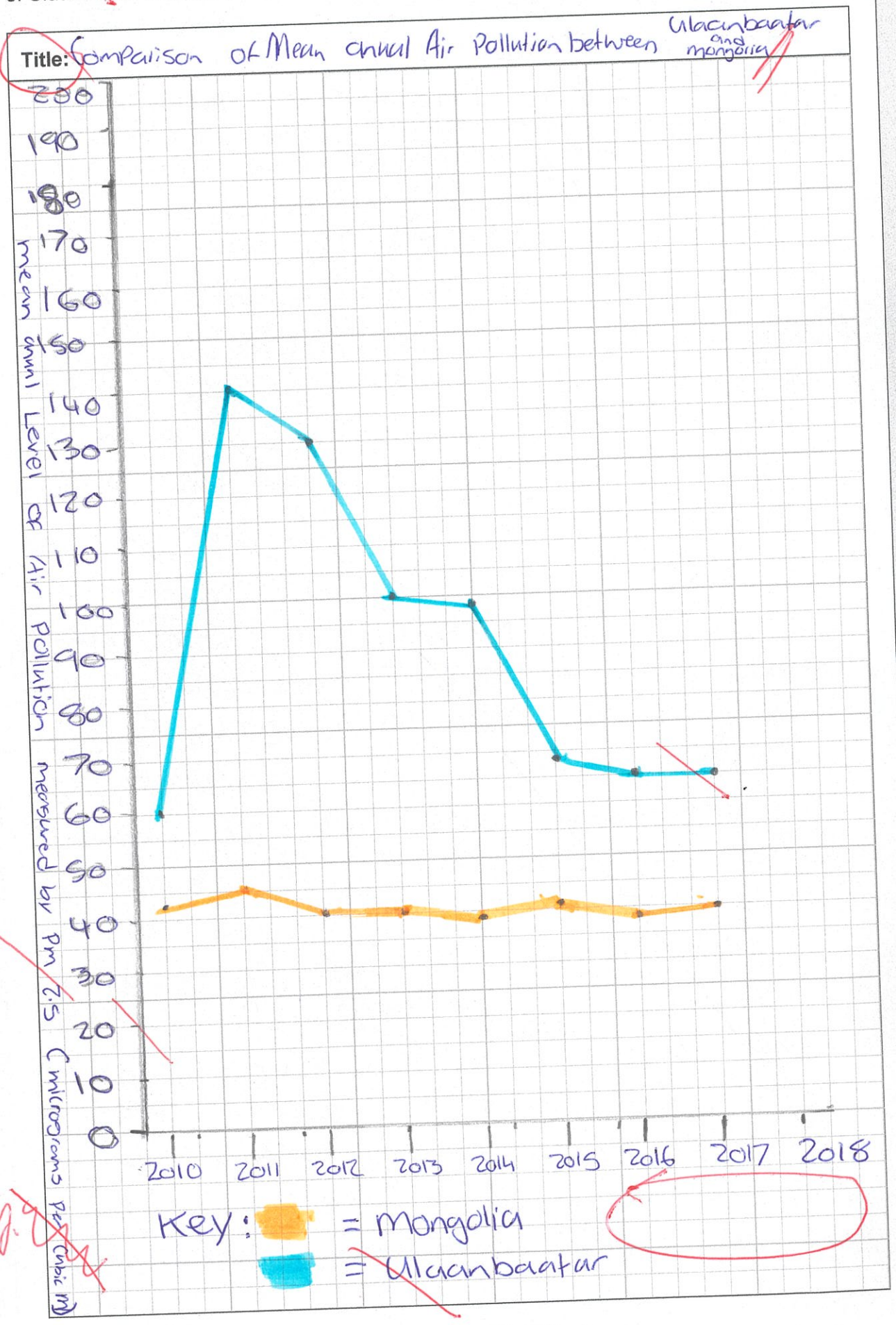
(b) Use the most appropriate graphing method and graphing conventions, and the data in **Resource I** on page 10 of the resource booklet, to show how air pollution for BOTH the city of Ulaanbaatar and Mongolia as a country changed between 2010 and 2017.



(c) Critically evaluate possible solutions to air pollution in Ulaanbaatar, and come to a justified conclusion as to which solution will best solve the problem.

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In your answer, you should:

- integrate specific information from **Resources J to M** on pages 11–13 of the resource booklet
- apply relevant geographic concepts (see page 2 of the resource booklet).

Possible Sollutions to Solving Ulaanbaatars pollution issue involve the banning of all raw coal sales to the public, subsidising more efficent electric heating and providing insulation to homes. I strongly agree that providing subsadies will pose a positive effect on the popnlation, but it will not stop the pollution crisis that is currently going on. However the ban on the selling of raw coal will, as this totally negates the issue of generating greenhouse gasses in the first place, meaning that there will be a significant loss in coal burnings over the winter resulting in less pollution to get stuck in the inversion layer. in conjunction with this moving the popnlation out of the city will disperse the consentration of pollution allowing it to escape. This would further allow the pollution levels to decrease in Ulaanbaatar.

Achievement Exemplar 2020

Subject	Geography	Standard	91429	Total score	04

Q	Grade score	Annotation
	A4	This candidate has demonstrated they understand the environment and the way it contributes to air pollution, but the response lacks depth and detail. There were no temperatures given, no reference to the gers or why people live in or move to the city for example. Greater use of detail using the resources provided or understanding of how the aspects interact would have enhanced this answer. The graph demonstrates some precision, but the horizontal (years) axis is not labelled, the dates are not included in the title and the estimated data is not identified. Part (c) of the question also lacks depth and detail. The candidate has identified some solutions but has not critically evaluated them. They have not considered a range of the possible solutions provided in the resources, so their justified conclusion is weak. The answer lacks specific integrated information, which prevents it from attaining an M grade.