



CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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0460/22

May/June 2021

1 hour 30 minutes

You must answer on the question paper.

You will need:

Insert (enclosed)	Plain paper
1:25 000 survey map (enclosed)	Protractor
Calculator	Ruler

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- If additional space is needed, you should use the lined pages at the end of this booklet; the question number or numbers must be clearly shown.

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [].
- The insert contains additional resources referred to in the questions.

This document has **20** pages. Any blank pages are indicated.

1 Study the map extract for Carnac, France. The scale is 1:25 000.

- (a) Fig. 1.1 shows some of the features near Cité du Runell in the north of the map extract. Study Fig. 1.1 and the map extract, and answer the questions below.

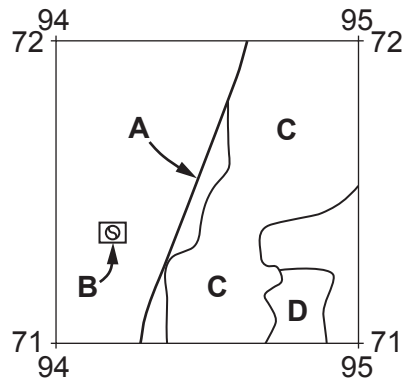


Fig. 1.1

Using the map extract, identify the following features shown in Fig. 1.1:

- (i) the type of road at **A**

..... [1]

- (ii) the leisure activity at **B**

..... [1]

- (iii) the land use at **C**

..... [1]

- (iv) the land use at **D**.

..... [1]

- (b) The central point of the main settlement at Carnac is at 940700. Identify **three** services provided for tourists within 1 km of the centre of Carnac.

1

2

3

[3]

- (c) Fig. 1.2 shows an area in the south west of the map at St-Colomban. Fig. 1.3 shows an area in the north east of the map near Kermario. Study the two areas and answer the questions below.

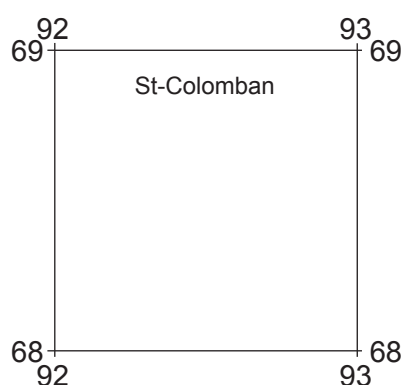


Fig. 1.2

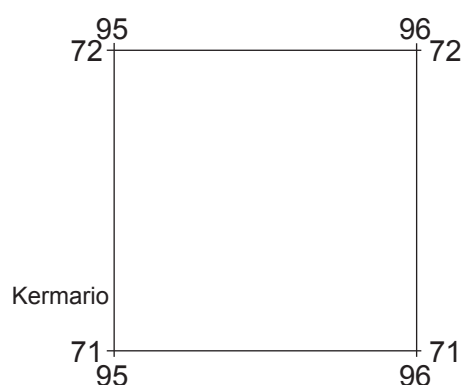


Fig. 1.3

The table below compares the features of the two areas. Complete the table by putting ticks (✓) in the correct **four** boxes. Use only **one** tick for each row.

feature	area in Fig. 1.2 at St-Colomban	area in Fig. 1.3 near Kermario	both these areas	neither of these areas
a dam				
land over 25m above sea level				
a bathing place				
a railway				

[4]

(d) Look at the part of the straight D781 road that runs between the settlements at Plouharnel and Carnac.

(i) What is the distance along the straight part of the road? Tick (✓) **one** box below.

	tick (✓)
287 metres	
387 metres	
2875 metres	
3875 metres	

[1]

(ii) What is the compass direction along the road **from** Plouharnel **to** Carnac?

.....

[1]

(iii) Measure the bearing along the road **from** Plouharnel **to** Carnac.

..... degrees

[1]

(iv) Find the roundabout (circle) part way along the road at Kergouillard. Give the six-figure grid reference of this roundabout (circle).

.....

[1]

(e) Describe the natural features of the coast shown on the map.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [5]

[Total: 20]

2 Fig. 2.1 shows the population distribution of South America.

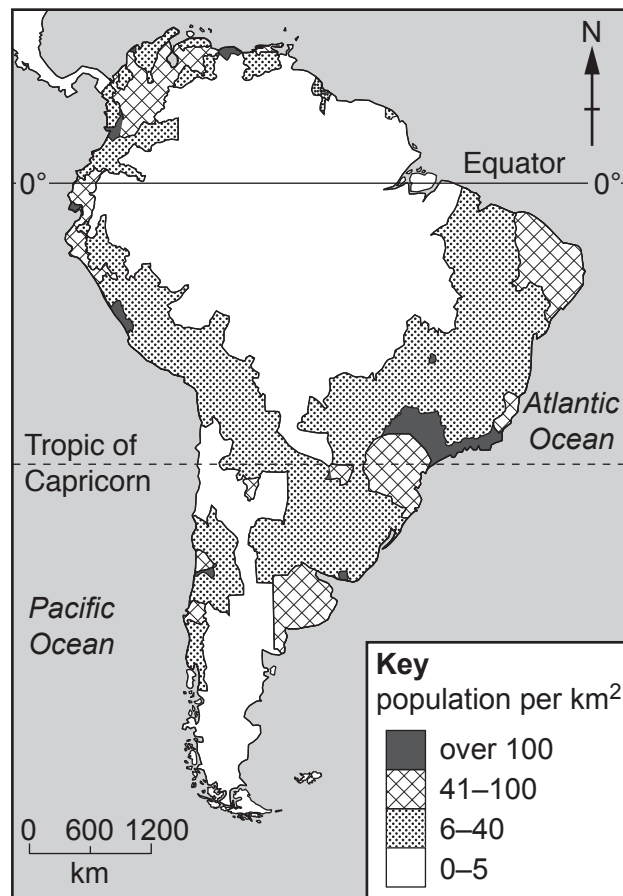


Fig. 2.1

(a) Using Fig. 2.1 **only**, describe the distribution of areas with:

(i) 0–5 people per km²

.....

.....

.....

..... [2]

(ii) more than 40 people per km².

.....

.....

.....

..... [2]

(b) Fig. 2.2 is a simplified relief map of South America.

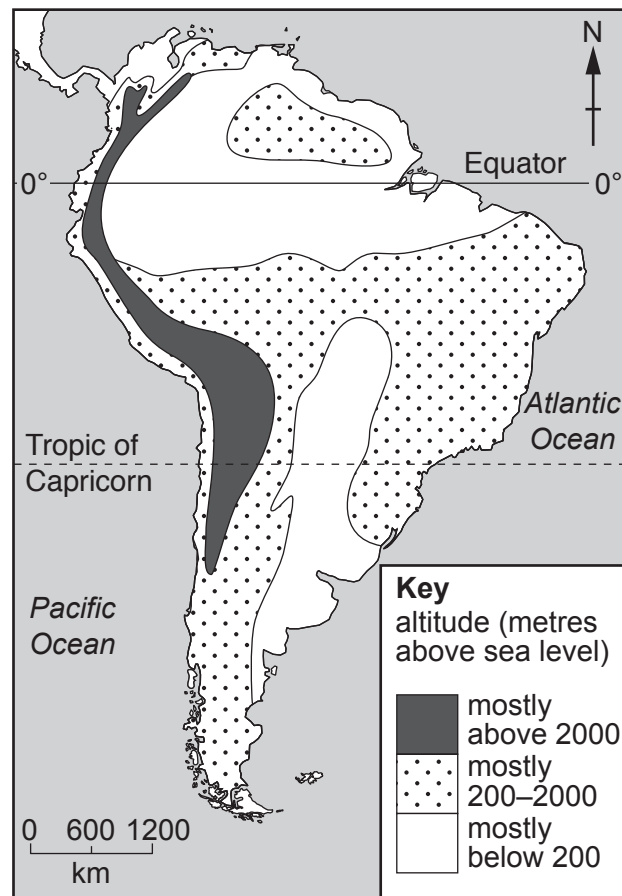


Fig. 2.2

(i) What is meant by a *relief* map?

..... [1]

(ii) Describe the relationship between population density shown in Fig. 2.1 and relief shown in Fig. 2.2.

..... [2]

(c) Using Figs. 2.1 and 2.2, suggest why there are areas of both high and low population density along the Equator.

..... [1]

[Total: 8]

[Turn over]

3 Table 3.1 shows the settlement hierarchy in County Tipperary, Ireland.

Table 3.1

type of settlement	number of settlements	position in hierarchy
regional town (RT)	1	high ↑ ↓ low
sub-regional town (SRT)	2	
district town (DT)	6	
service centre (SC)	35	
local service centre (LSC)	26	
small settlement (SS)	58	

(a) (i) Using information from Table 3.1, **plot the number of district towns** in Fig. 3.1 below.

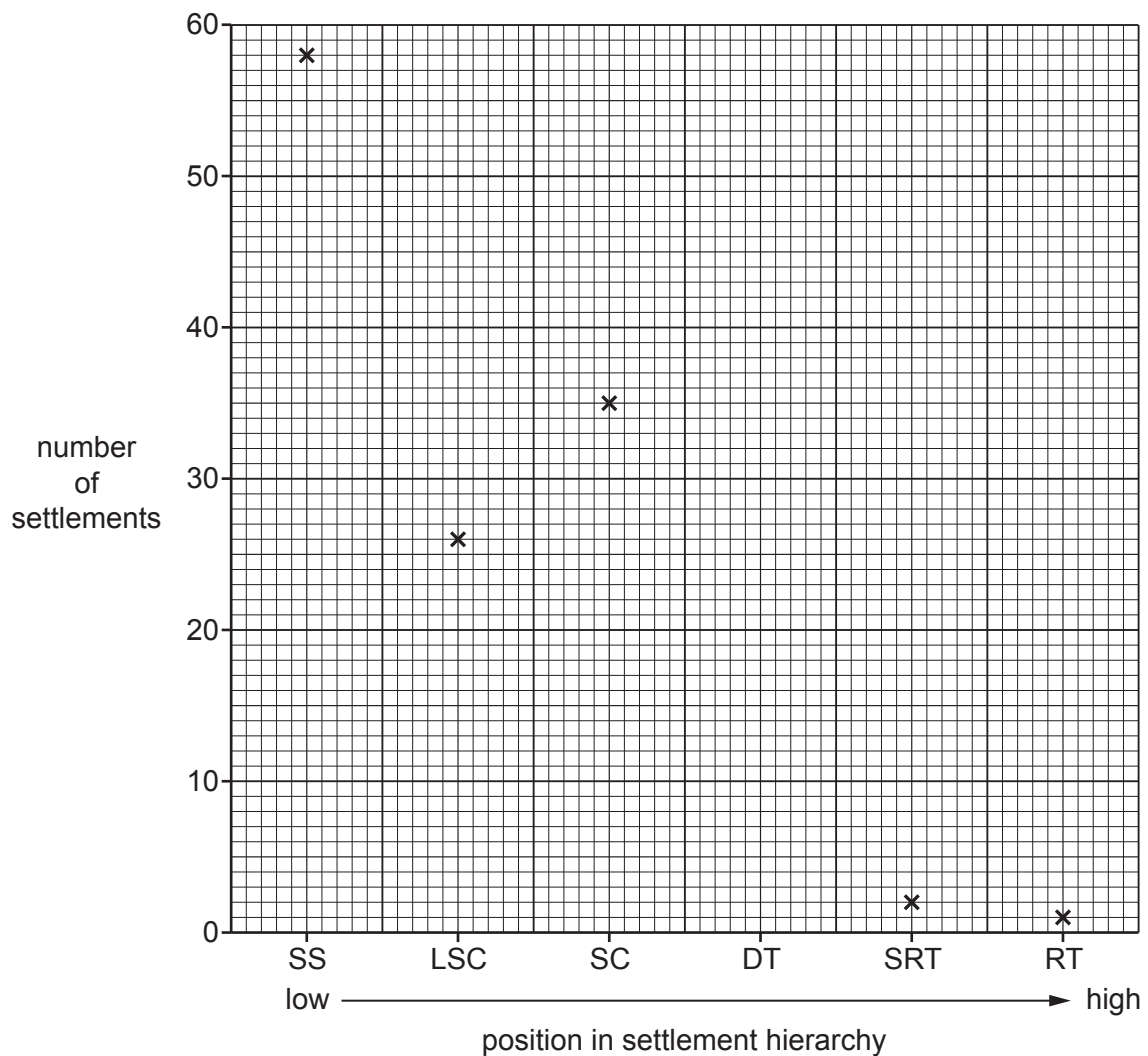


Fig. 3.1

[1]

- (ii) Describe the relationship between position in the settlement hierarchy and number of settlements as shown in Table 3.1 and Fig. 3.1.

.....
 [1]

- (iii) What is unusual about the number of local service centres (LSCs) in Fig. 3.1?

.....
 [1]

- (b) Fig. 3.2 shows the locations of settlements highest in the settlement hierarchy in County Tipperary.

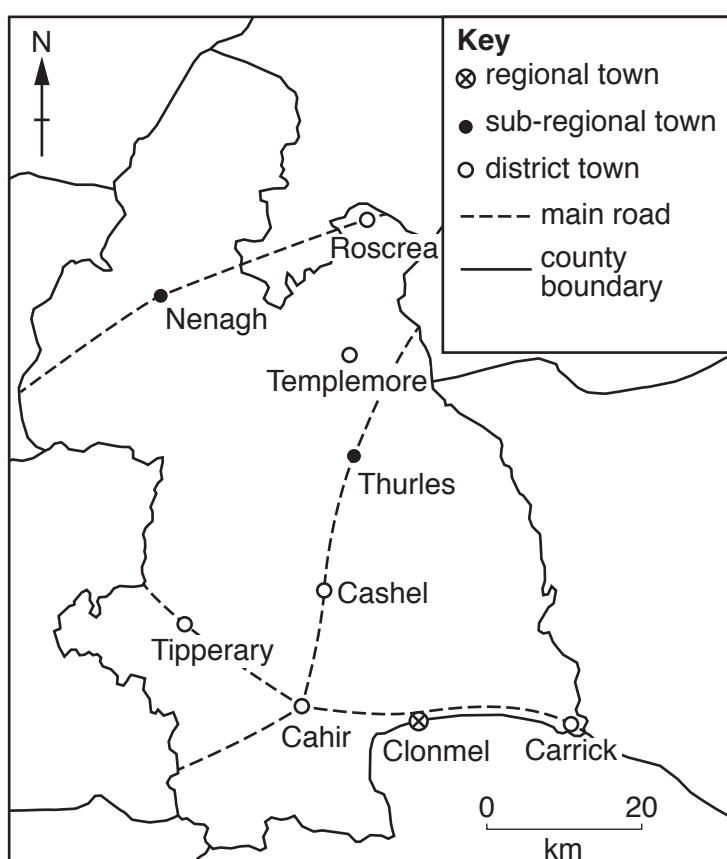


Fig. 3.2

Describe the distribution of settlements shown in Fig. 3.2.

.....

 [2]

- (c) (i) Using evidence from Fig. 3.2, suggest why Templemore has not grown into a larger settlement.

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

- (ii) Using evidence from Fig. 3.2, suggest why Cahir has grown into an important settlement.

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

- (iii) Using evidence from Fig. 3.2, suggest a disadvantage of the location of Clonmel as the regional town (highest in the settlement hierarchy) of County Tipperary.

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

[Total: 8]

4 Fig. 4.1 (Insert) shows a coast in Scotland.

(a) Fig. 4.2 shows a student's field sketch of the coast.

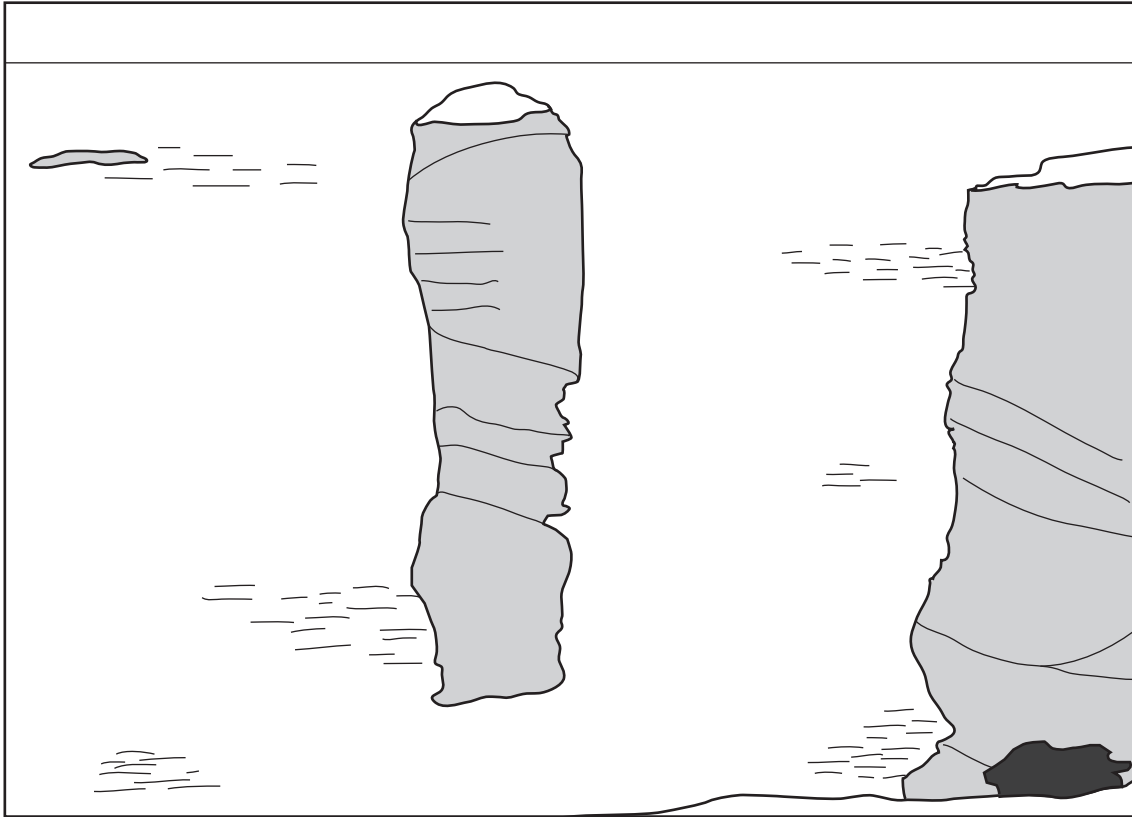


Fig. 4.2

Using Fig. 4.1 to help you, **add labelled arrows to Fig. 4.2** to describe the features of the coast. [6]

(b) Suggest how the feature in the centre of the photograph may change in the future.

.....

.....

.....

.....

.....

..... [2]

[Total: 8]

5 Fig. 5.1 shows the world distribution of areas of hot desert climate.

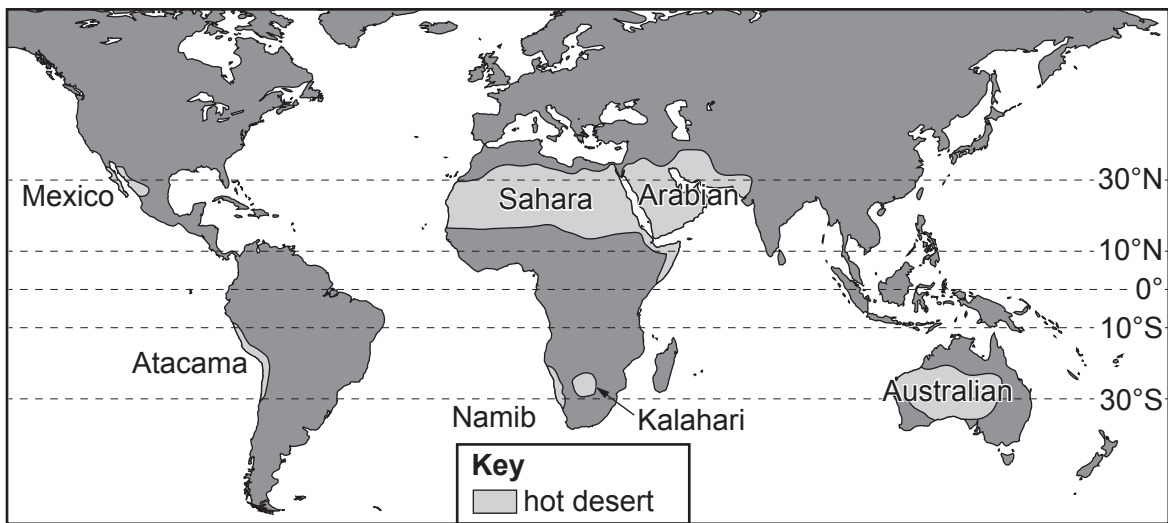


Fig. 5.1

(a) Which **two** of the following statements describe the areas of hot desert climate shown in Fig. 5.1? Tick (✓) only **two** boxes below.

	tick (✓)
they are mostly between 30°N and 30°S	
they are on the Equator	
they are in every continent	
they are mostly on the west sides of continents	
they are in temperate latitudes	
they are within 10 degrees of the Equator	

[2]

(b) Fig. 5.2 shows the climate of part of the Sahara Desert, shown in Fig. 5.1. Study Fig. 5.2 and answer the question on the opposite page.

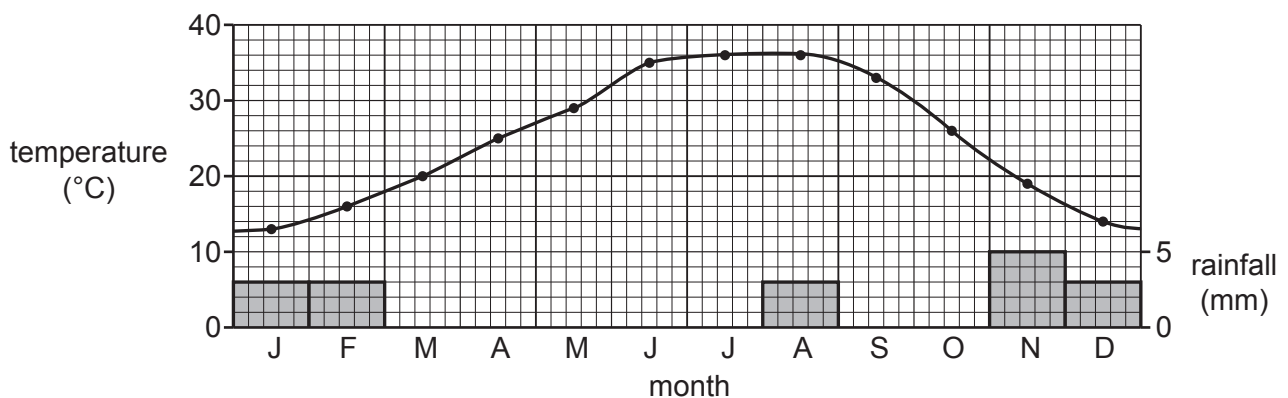


Fig. 5.2

Which **three** of the following statements describe the climate of the area shown in Fig. 5.2?
Tick (✓) only **three** boxes below.

	tick (✓)
there is low annual rainfall	
rain falls throughout the year	
August is the driest month	
most rain falls in winter	
the hottest monthly temperature is 30°C	
there is a high annual range of temperature	
January temperatures are hot	
summers are cool	
temperatures are high throughout the year	

[3]

(c) Fig. 5.3 (Insert) shows the vegetation of an area of hot desert climate.

(i) Describe the main features of the vegetation shown on Fig. 5.3.

.....

.....

.....

.....

..... [2]

(ii) Using evidence from Fig. 5.3 **only**, explain **one** way that the vegetation shown in Fig. 5.3 is adapted to the climate.

.....

.....

..... [1]

[Total: 8]

- 6 (a) Which **two** of the following are non-renewable fuels? Tick (✓) only **two** boxes below.

	tick (✓)
geothermal	
oil	
wind	
biofuels	
solar	
natural gas	
wave power	
tidal power	

[2]

- (b) Nuclear power divides people's opinions. Some people are for its development and other people are against it. Suggest why people are for and against nuclear power.

For

.....

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.....

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Against

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.....

..... [6]

[Total: 8]

[illegible]

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