

Write your name here

Surname

Other names

Centre Number

Candidate Number

Edexcel GCSE

Geography B

**Unit 3: Making Geographical Decisions
The Future of Antarctica**

Foundation Tier

Sample Assessment Material

Time: 1 hour

Paper Reference

5GB3F/01

You must have:

Pre-released Resource Booklet

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 54.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed
- Questions labelled with an **asterisk** (*) are ones where the quality of written communication will be assessed.
- The marks available for spelling, punctuation and grammar are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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Answer ALL the questions.

SECTION A – INTRODUCING ANTARCTICA

1 Use Section A in the Resource Booklet to answer this question. You will also need to refer to other resources for particular questions as instructed.

(a) (i) Give **three** reasons why Captain Scott, an early explorer, thought Antarctica was **'an awful place'**.

(3)

1

2

3

(ii) Suggest **two** ways in which the **environment** makes Antarctica a **'very special place'** for tourists to visit.

(4)

1

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(iii) Describe **two** ways in which the **wildlife** makes Antarctica a '**very special place for**' tourists to visit.

(2)

1

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(b) Look at page 17 of the Resource Booklet which gives details of the Antarctic Treaty System (ATS).

(i) Explain **two** benefits of the ATS.

(4)

1

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2

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(ii) Choose **two** of the statements about the ATS shown in Table 4.

Using your **own** words say how each statement suggests that not everyone supports the ATS.

(2)

Statement number

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Statement number

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(Total for Question 1 = 15 marks)

TOTAL FOR SECTION A = 15 MARKS



SECTION B – THREATS TO ANTARCTICA’S ENVIRONMENT

2 Use Section B in the Resource Booklet to answer this question.

(a) (i) Complete the table below to summarise the threats to Antarctica.

Use the key to insert the correct answer.

(3)

Threats	Extent of threat	Present problem	Future problem	Success in management of threat at present	Degree of damage at present on Antarctic
Fishing in southern oceans	R	✓	✓	**	**
Global warming	G	✓	✓		***
Mining	L			*	None
Ozone hole	G	✓	✓	**	**
Research stations		✓	X	*	**
Tourism	L	X	✓	*	*

Key to use	Insert G (Global) R (Regional) L (Local)	✓ for present and/or future X no problem changes as in H	* managing well ** quite hard to manage *** very hard to manage	None * minor ** major *** very severe
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(ii) State **two** pieces of **evidence** from the resources which show that global warming is having an impact on Antarctica.

(2)

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(iii) State the type of emissions which caused the ozone hole to form.

(1)



(iv) Suggest **one** reason why people are concerned about the ozone hole above Antarctica.

(2)

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(v) Suggest **one** reason why the ozone hole is proving a difficult problem to solve.

(2)

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(b) (i) Many people think tourism is becoming unsustainable in the **Antarctic Peninsula**.

Use evidence from the resources to explain why people think this.

(4)

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(ii) Suggest **two** ways that research stations could be managed **sustainably** to prevent them having an impact on Antarctica's environment.

(4)

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(Total for Question 2 = 18 marks)

TOTAL FOR SECTION B = 18 MARKS



SECTION C – MAKING DECISIONS

Spelling, punctuation and grammar will be assessed in *(a).

3 Use all the resources in the booklet but with particular reference to those in Section C.

The issue

The future development of Antarctica is a battle between conservationists and those who want to exploit the resources.

You should consider the following three options for Antarctica's future:

Option 1	Make Antarctica a World Park managed by UN. No further development should be allowed. Antarctica should be conserved as a wilderness area.
Option 2	Allow small scale sustainable development only on the Antarctica peninsula. Examples include ecotourism, new designs for research stations, sustainable shellfish industry.
Option 3	Permit some large scale development of resources for fishing, tourism and mining throughout Antarctica provided the developments are sustainably managed.

*(a) (i) Choose the option you think is best for Antarctica.

My chosen option number is

Explain why you chose this option as best for Antarctica.

(8)

Spelling, punctuation and grammar.

(4)



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(ii) Give **three** possible disadvantages of your chosen option.

(3)

1

2

3

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Edexcel GCSE

Geography B

Unit 3: Making Geographical Decisions The Future of Antarctica

Paper 3F and 3H

Sample Assessment Material (SPaG)
Resource Booklet

Paper Reference
5GB3F/01
5GB3H/01

Do not return the Resource Booklet with the question paper

Instructions to Candidates

Use this Resource Booklet to prepare for the examination for Unit 3: Making Geographical Decisions. You will be asked to use the resources in the examination.

Your teacher will go through the Resource Booklet, over a period of 10 hours, in the lessons leading up to the examination.

The Resource Booklet must be handed in to your teacher at the end of each lesson. You must not write on the booklet. No notes are to be taken into the exam.

This Resource Booklet will be given back to you when you take the examination.

Contents of the Resource Booklet

Section A – Introducing Antarctica

- Fact file ● Antarctica's Environment

(pages 2 to 7)

Section B – Threats to Antarctica's Environment

- Global threats ● Regional threats ● Local threats

(pages 8 to 15)

Section C – Making Decisions

- The Antarctic Treatment System ● The Future of Antarctica

(pages 16 to 19)

Edexcel would like to thank the British Antarctic Survey (BAS) for making data maps and images available and for reviewing and checking this resource booklet.

Turn over ►

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Suggested Activities

General

You should:

- begin by reading through all of the materials to have a good idea what each resource is about
- list all geographical terms used and make sure you understand their meaning.

Section A

- Learn the key facts about Antarctica.
- Use the reference maps to find out about the size of Antarctica and its remote position. See where the locations of all the research stations are (including the UK station at Rothera) and where the top tourist sites on the Antarctica Peninsula are. When you are studying the resources, make links with the topics you have studied. Think about what makes the natural environment of Antarctica so hostile and yet so special, and why it needs a unique way of being governed (see ATS resources on page 16).

Section B

- Work your way through all the resources on threats to Antarctica. Think about their relative importance, and whether they lead to present or future pressures.
- Think about how the threats can cause damage to the unique Antarctic environment and how difficult the threats are to manage.
- You should consider the role that sustainable development can play in managing these threats.

Section C

Think about:

- how successfully Antarctica is managed at present using the Antarctic Treaty System (ATS)
- whether Antarctica should be a protected continent with no further development
- whether there should be development, if so what kind and where should it be allowed
- what increased exploitation might do to the continent.

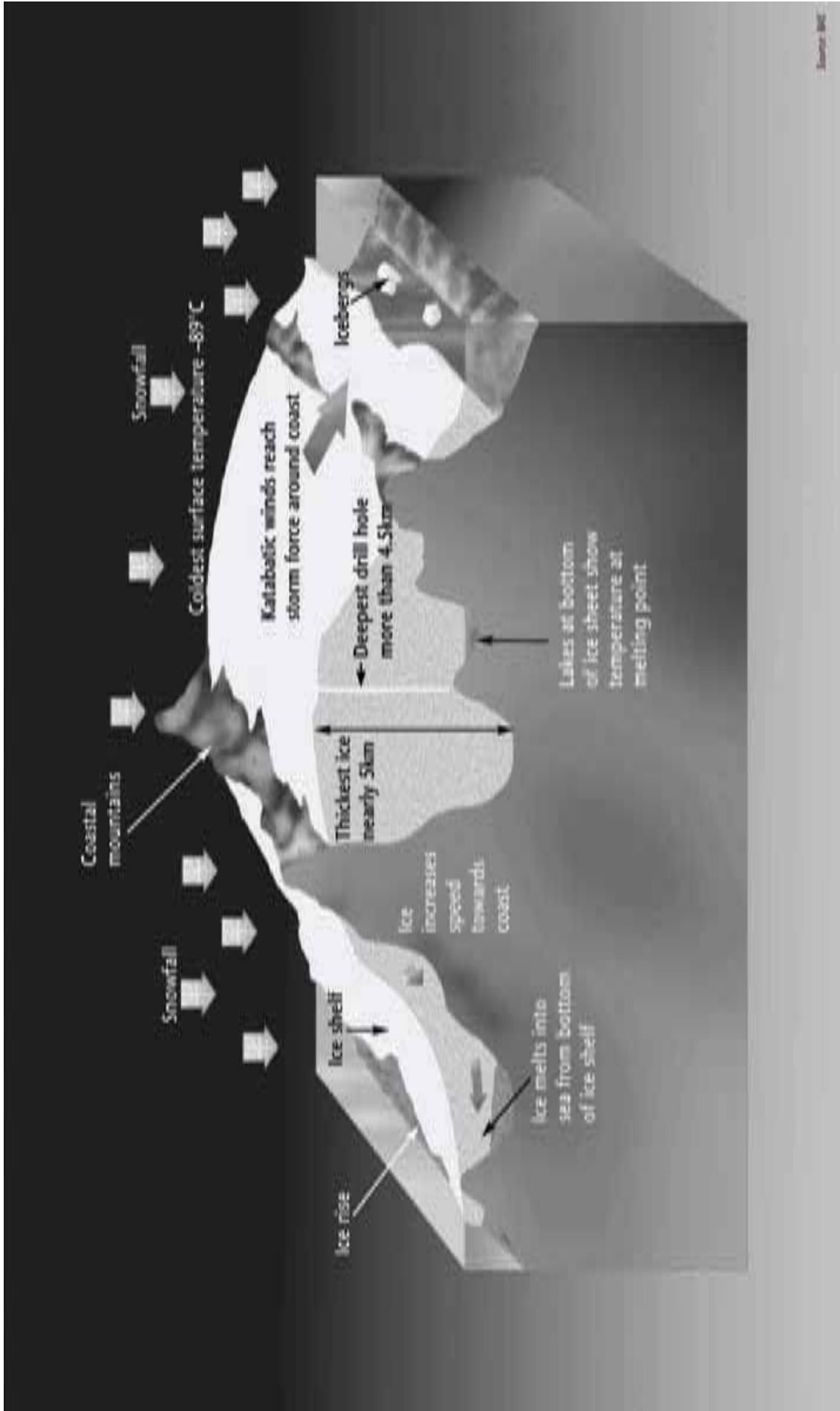
Background research

- Carry out some background research using the following websites:
 - **www.discoveringantarctica.org.uk** is a website especially designed for schools with a wide range of useful resources about Antarctica.
 - **www.antarctica.ac.uk** is the British Antarctic Survey (BAS) website. You can download all sorts of useful information. There are some excellent image resources which show you what Antarctica looks like and the animals that live there.
 - **<http://earth.google.com/>** for satellite images of Antarctica.
 - **<http://lima.usgs.gov/>** is the Landsat Image Mosaic of Antarctic website, containing many satellite images of Antarctica.
 - **www.iaato.org** has details about tourist activities in Antarctica, and how tourism is managed in the region.
 - **www.wwf.org.uk** has a very useful fact sheet on Antarctica.

SECTION A – INTRODUCING ANTARCTICA

1 Fact File

- Antarctica is a continent and covers an area of 14 million km², nearly 60 times the size of the UK.
- The inland ice sheet which covers over 99% of Antarctica contains 90% of the world's total ice and over 70% of the world's fresh water.
- The peaks of the Transantarctic mountains rise above the ice sheet, which is over 4km deep in places. The highest point is Mount Vinson at 4897m above sea level.
- Antarctica is classified as a polar desert. Snow falls and builds up gradually and compacts into ice which flows from the ice sheet towards the coast as huge **glaciers**. In many places these extend out to sea as massive floating **ice shelves**.
- Antarctica contains no **indigenous** (native) peoples. Whilst only around 1000 scientists and support staff work there in winter, in summer the number rises to over 10,000. To these can be added nearly 40,000 tourists who visit during the summer, nearly all on cruise ships.
- All activities are regulated by the Antarctic Treaty System (1961) and its associated agreements, which designate Antarctica as a natural reserve devoted to peace and science.

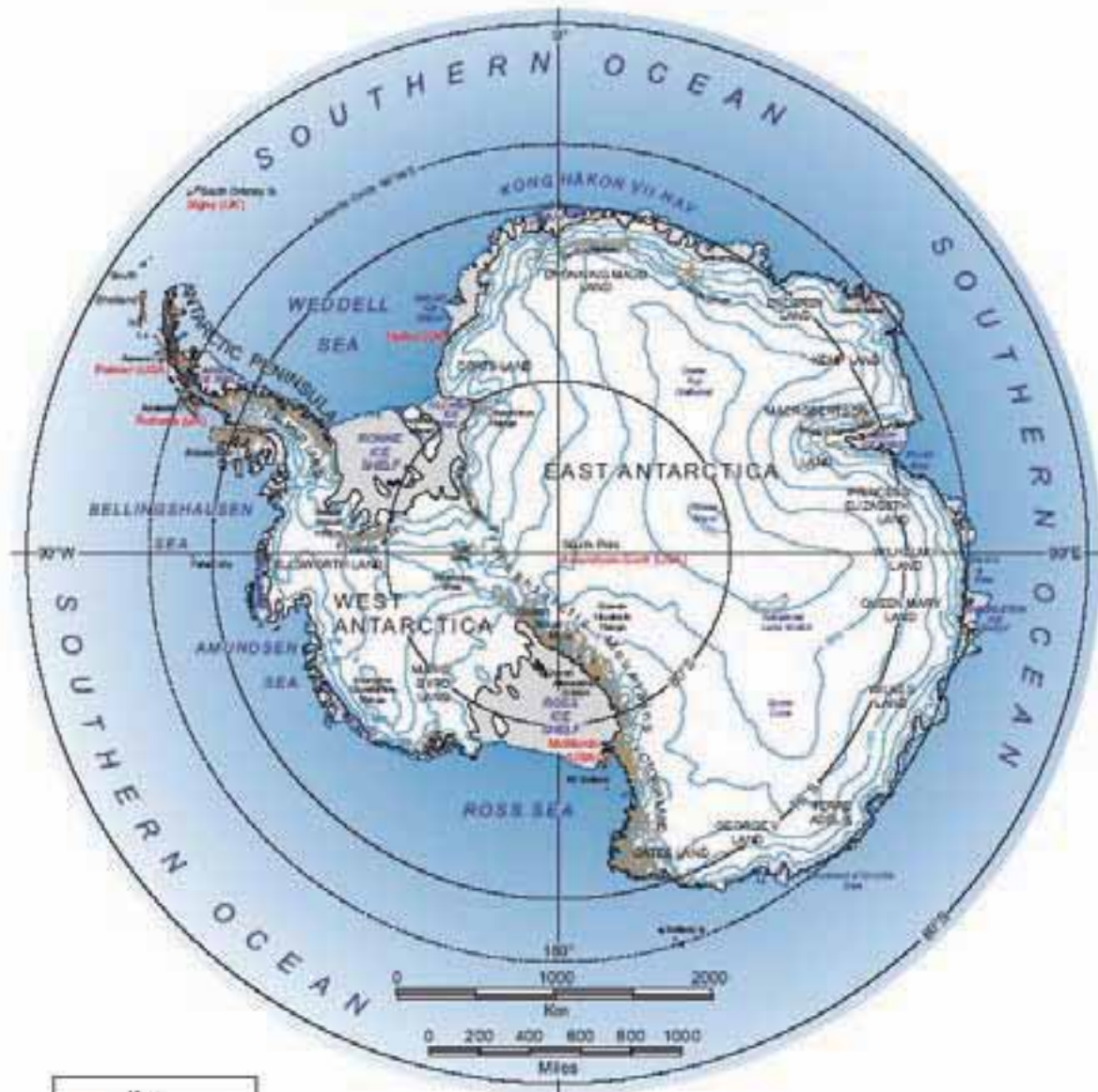


(Source: BAS Antarctic Schools Pack)

Figure 1 – A block diagram of Antarctica

ANTARCTICA OVERVIEW MAP

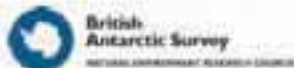
This map shows the major geographical features on the Antarctic continent and the USA and UK research stations, to accompany the Landsat Image Mosaic of Antarctica (LIMA). For information about LIMA and to access the imagery, go to <http://lima.usgs.gov>.



To find more detailed maps of Antarctica:
 Order maps and posters from the LIMA website: <http://lima.usgs.gov/order.php>
 British Antarctic Survey Map Catalogue: <http://www.antarctica.ac.uk/magic/newmapcat/mapcat.html>
 SCAR (Scientific Committee for Antarctic Research) map catalogue: <http://sadc-maps.sad.gov.au/>
 For a complete gazetteer of placenames in Antarctica visit: http://www3.pma.gov.au/SCAR_GAZE/
 For a map showing all research stations operating in Antarctica visit: <http://www.comap.org/>

To find out interesting facts about Antarctica see:
 'Antarctica in Context' on <http://lima.usgs.gov/download.php>

To find out more about Antarctica and British Antarctic Survey research, visit:
www.antarctica.ac.uk



(Source: LIMA/NASA/BAS)

Figure 2 – A map of the continent of Antarctica

2 Antarctica's Environment

2 A The extreme climate

Rothera Research Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean temperature (°C)	0.8	0.4	-2.2	-4.0	-4.9	-11.7	-10.9	-9.9	-6.5	-3.2	-1.0	-1.2
Mean wind speed (km/hr)	16.7	22.2	25.9	22.2	20.4	14.8	22.2	27.8	20.4	29.7	18.5	22.2

(Source: www.discoveringantarctica.org.uk)

Table 1 – The climate at Rothera Station (UK), Adelaide Island, Antarctic Peninsula

In terms of climate Antarctica is a continent of extremes. It is the coldest, windiest, driest and highest of all the continents. In the words of the famous British polar explorer Captain Scott '*Great God, this is an awful place*'. It is the **coldest** place on Earth with extreme temperatures, especially in the interior. The world's record lowest temperature of -89.6°C was recorded at the Russian Vostok station. Even on the coast in the Summer temperatures are rarely above freezing point.

It is one of the **windiest** places on Earth. Strong winds of up to 300 km per hour can blow down the valleys from the interior to the coast causing 'white outs' or blizzards which can last for weeks.

It is one of the **driest** places on Earth. Snowfalls are equivalent to only 150 mm of rain per year at South Pole.

There is huge concern that climate change could result in significant melting of the Antarctic ice sheet. This may disrupt the Earth in a major way, leading to a rise in global sea levels. If the West Antarctic Ice Sheet were to melt, it would raise global sea levels by 5 m.

2 B Wildlife

Antarctica is the world's largest wildlife sanctuary. The continent and the surrounding ocean are home to millions of birds and seals. Only a few of these, such as Emperor penguins and Weddell seals, can survive in Antarctica's harsh environment throughout the year. Whilst the whole continent is protected by the ATS, there are some areas which are designated as Antarctic Specially Protected Areas. These areas contain highly endangered plant and animal life.

There are three major ecosystems – marine, land based and fresh water. The land-based ecosystem consists almost entirely of lichens, mosses and small insects, as a result of isolation, lack of continuous ice-free sites and extreme climate. There are no trees or land mammals in Antarctica, and only two species of plants. The mosses and lichens are slow growing, extremely fragile and can be easily destroyed by seals hauling themselves across them.



(Source: BAS)

Figure 3 – Tourists from a cruise ship visit a penguin colony.



Fur seal pup



Elephant Seal



Weddell Seal



Minkie Whale



Chinstrap penguins



King penguin



Giant petrel



Emperor penguins

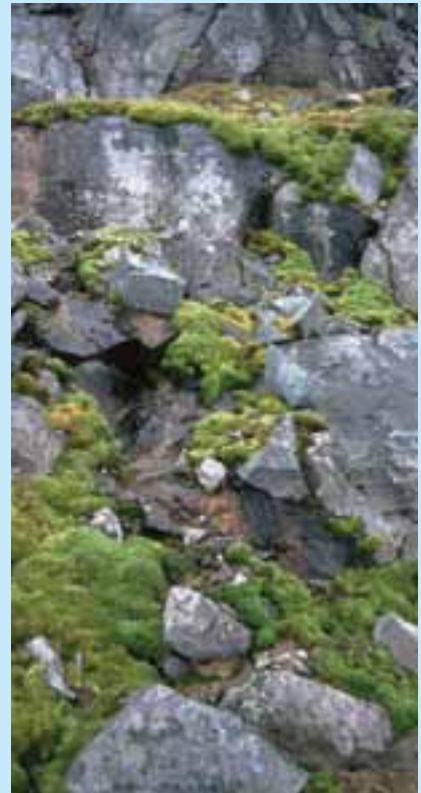
Antarctica's Wildlife and Scenery

Antarctica is a scenic paradise.

- For **bird watchers** there are 11 different species of penguin living in colonies.
- You can also see the **albatross**. These huge birds fly huge distances around the southern oceans looking for food.
- You can see **moss banks** which are thousands of years old.
- There are six species of **seal**. Fur seals used to be hunted for their fur pelts. Numbers are increasing rapidly as they are now protected.
- Large areas of the Southern Ocean have been designated as a **whale** sanctuary. Since 1986 the International Whaling Commission has banned all commercial whaling, but Japan still hunts whales for scientific purposes.
- The wildlife live in a spectacular and beautiful polar environment of icebergs, glaciers and mountains.



Wandering albatross



Moss bank



Gentoo penguin



Macaroni penguin

(Source: BAS)

Figure 4 – A variety of different wildlife found in Antarctica and South Georgia

SECTION B – THREATS TO ANTARCTICA'S ENVIRONMENT

This section explores how pressures from human activities are posing threats (both present and future) to Antarctica's environment at a variety of scales. Technology is making it easier to exploit the harsh and hostile environment. The pressures frequently conflict with each other, but also with the conservation of Antarctica as the world's last great wilderness.

1 Global Threats

1 A Climate Change

*The Antarctic Peninsula is one of the areas most affected by rising temperatures (up 3°C since 1950). Most scientists now believe this is due to **global warming**, as a result of human actions leading to the emission of **greenhouse gases** (CO₂, methane). The increase in temperature has caused the melting of many glaciers and the collapse of several ice shelves (e.g. Larsen) in 2002 in the region. Locally these changes have had considerable impact on ecosystems, for example exposing new areas of land.*

Scientists are still uncertain as to the likely impact of global warming on the Antarctic ice sheet. But melting is happening faster than predicted.

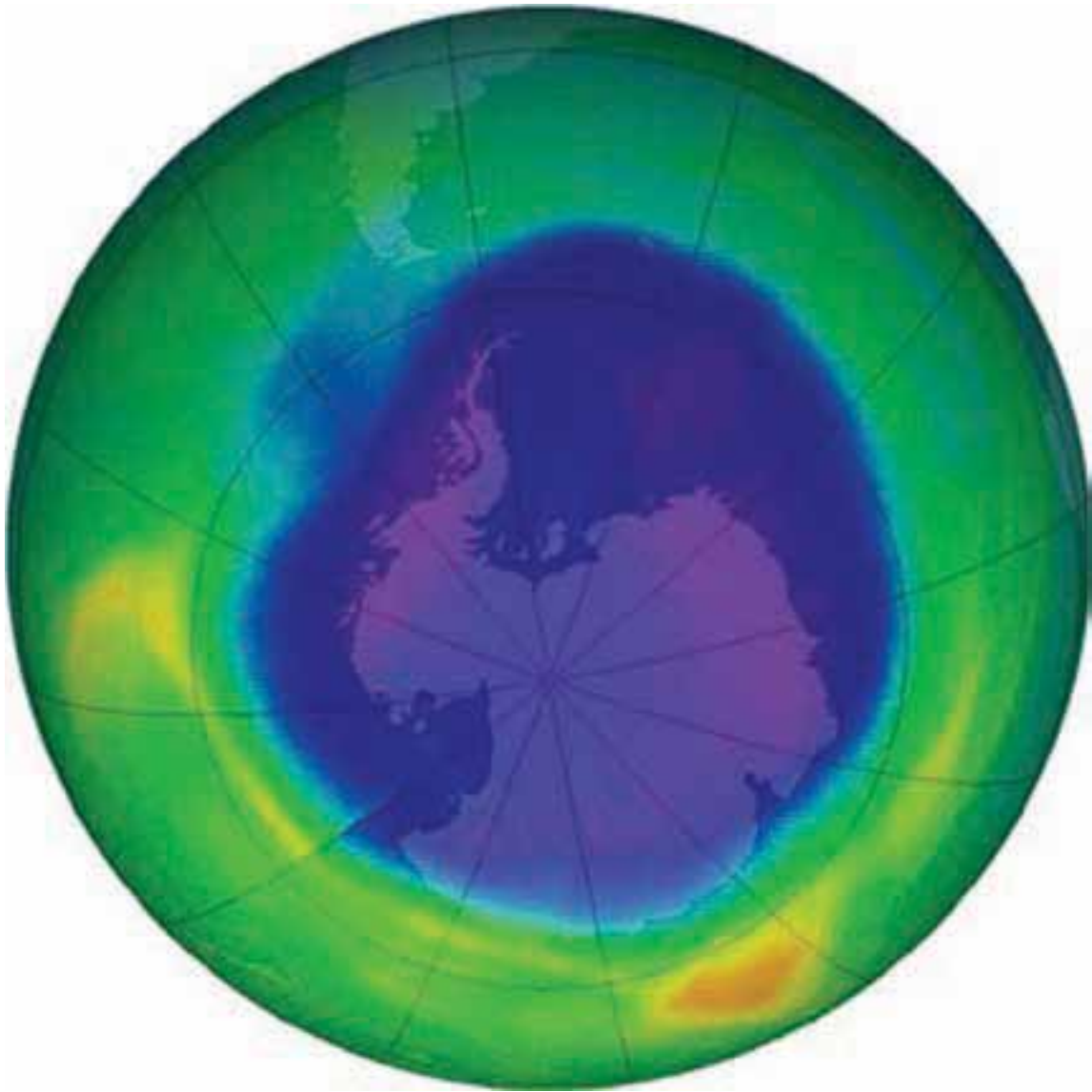
*In order to **lessen** the impacts of global warming, global solutions, such as the Kyoto Protocol, to reduce greenhouse gas emissions are needed. Global agreement is very hard to get. It also must be supported by national and local strategies to cut down on fossil fuel use. All nations are having to develop strategies to **adapt** to, and reduce the impact of, climate change.*

1 B Ozone depletion

*The discovery by scientists at the British Antarctic Survey (BAS) of an annual hole in the stratospheric (upper atmosphere) ozone layer in 1985 caused huge concern. This is because ozone absorbs harmful ultra-violet radiation (UVB) from the sun. UVB radiation is very harmful to humans and can cause skin cancer, and also affects eco-system productivity. The ozone hole over Antarctica forms at the end of the Antarctic winter when the atmosphere is very cold. This destruction of ozone, most marked in the Antarctic spring, means the loss of protection for the Earth from ultra-violet radiation (UVBs). This is very harmful to humans, and also affects ecosystem productivity. Scientists suspected that CFCs might be responsible for the ozone depletion. Following International agreements such as the 1993 **Montreal Protocol** to restrict CFC use, ongoing measures suggest that the hole is getting smaller and shallower.*

The CFC emissions come from the developed nations and more recently from Newly Industrialised Countries (NICs) such as India and China. The problem is that not all countries have signed the Montreal Protocol, and trade in illegally produced CFCs is occurring. Also because CFCs are such stable gases it will take at least 50 years for the ozone hole to disappear even if CFC production stops totally.

Figure 5 shows the ozone hole over Antarctica on 13th September 2007. The hole was approximately the size of North America.



(Source: NASA)

Figure 5 – Ozone depletion in Antarctica

2 Regional Threats – exploitation of the Southern Ocean

The Southern Ocean which surrounds Antarctica forms over 10% of the global ocean.

Man has exploited the Southern Ocean for over 200 years. In the 1800s millions of fur seals were hunted for their pelts, and in the 1900s whales were killed in their hundreds of thousands for their meat, bone and oil.

In the 1900s fishing became established in the Southern Ocean. For some types of fish, such as Antarctic cod, it took only a few years to reduce the stock to very low levels. As one species became scarce, fishermen turned their attention to another.

To prevent over-fishing becoming an ecological disaster for the Southern Ocean, the Antarctic Treaty nations agreed the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) in 1982. This protects the whole Southern Ocean ecosystem rather than the individual fish species being caught. CCAMLR now regulates fishing activity and ensures that fish and krill are left for penguins, seals and whales to eat. Problems remain, however, with illegal or pirate fishing, which is very difficult to police.

3 Local Threats – direct threats to Antarctica’s environment

3 A Threats from scientific research stations

The value of science

The Antarctic Treaty (1961) established Antarctica as a continent for science. Since then, Antarctica has become a globally important natural laboratory for finding out about how the earth evolved and how it is changing today.

- studying life at the edge – looking at how animals and plants survive the extreme environment
- measuring weather in the upper atmosphere
- monitoring the ozone hole
- monitoring changes in the ice sheets to see how they are responding to climate change
- recording changes in the Earth’s climate by analysing ice cores.

Environmental impact of science

Most research stations are concentrated on the ice free coastal margins of Antarctica which make up under 1% of the continent, often in areas of fragile ecosystems and wildlife hotspots such as the Fildes Peninsula on King George Island. There was a rush in the 1970s and 80s to establish research stations, coinciding with the negotiations about mineral exploitation.

The US McMurdo Research Station is the largest base in Antarctica. In the past, rubbish was dumped into the sea near the station and the sea floor is now heavily polluted by fuel and toxic waste. Now the station is run on strict environmental policies. Over 90% of waste produced at the station is now removed and recycled in the US.

As a result of the Environmental Protocol to the Antarctic Treaty (1998) there has been a dramatic change in attitude towards eliminating, reducing and recycling waste and cleaning up the stations. Now all scientific activities have an Environmental Impact Assessment (EIA) and solid waste is recycled and removed by ship. Renewable energy systems are being introduced. Local problems remain however with raw or partially treated sewage dispersed in local waters. Although some old bases and rubbish dumps have been cleaned up, others have been abandoned with no attempt to restore the environment.

A recent controversy has been the building of an ice “road” from McMurdo base to the South Pole as a supply route for the US Antarctic Program. The road will only be used during the Antarctic summer; and will enable tractors to tow cargo to the South Pole for the first time. This will mean fewer aircraft will be needed, saving fuel and reducing emissions.



(Source: Wikipedia)

Figure 6 – The US McMurdo Research Station, Ross Island, Antarctica.

2 B Future minerals exploitation

There has been considerable speculation about the possible mineral wealth of Antarctica. There are claims that the continent is as rich in minerals as Southern Africa and South America, to which Antarctica was once attached over 200 million years ago. There are deposits of coal in the Transantarctic mountains. But over 50 years of geological mapping has not revealed any mineral deposits in quantities which would be worth mining, especially in such harsh conditions. The Environmental Protocol bans all commercial mining. In the future, improvements in technology might enable minerals exploitation of the sea bed around Antarctica. Some countries are now considering making claims for parts of the continental shelf around the continent.

Reasons to exploit	Reasons not to exploit
1. The growing world thirst for oil and gas from newly industrialised countries (China, India).	1. High risk of activities damaging and destroying the environment, such as the threat of major oil spills.
2. Rising prices make exploitation worthwhile for the oil and mining companies.	2. Increased risk of minerals exploitation and development leading to territorial disputes.
3. Developments in new technology from the Arctic make it possible to mine in the Antarctic.	3. Huge costs to prospect because of the harsh continent and lack of any infrastructure.
4. Melting of the ice sheets may expose mineral deposits and lower exploitation costs.	4. Development is not sustainable. More should be done to conserve existing resources and develop renewables and keep Antarctica pristine.

Table 2 – Reasons for and against the exploitation of Antarctica

2 C Tourism in Antarctica

Tourists first visited Antarctica as long ago as 1958. But only since the 1980s, when ice-strengthened vessels became available have numbers started to escalate. Many people are fascinated by Antarctica, often after watching films such as 'March of the Penguins', and there is growing demand to see the continent at first-hand. In 2007, 37,500 tourists visited Antarctica, more than 5000 of them British.

*The vast majority of tourists visit Antarctica by cruise ship, similar to the one shown in Figure 7. Tourists will spend about two weeks cruising the Antarctic Peninsula, often going ashore in small inflatable boats to visit wildlife, heritage sites and research stations. But only 20 or so sites are safe for people to go ashore, and the best sites receive thousands of visitors every year, such as Port Lockroy and Deception Island. Currently tourism is well regulated by IAATO (International Association of Antarctica Tour Operators) with whom tourist companies are **voluntarily** registered to follow environmental and safety code of practice. Under the ATS the most visited landing sites have special guidelines to protect them from impact and ensure tourist safety. Table 3 shows the potential impact of tourism on the environment.*

Potential Impacts	Part of the environment at risk	Ways to minimise impact
Disturbance of wildlife	Breeding birds, hauled out seals	Impose minimum approach distances to wildlife. Educate visitors to behave responsibly.
Litter, waste, fuel spills	Damages land-based ecosystems Marine wildlife, particularly seals and birds, becoming entangled in rubbish or coated in fuel	Ensure ship operation conforms to international maritime standards. Ensure ships are ice-strengthened and have modern ice navigation equipment. Limit size of tourist vessels entering Antarctic waters. Ensure ship has an oil spill response plan in case of an accident. Oil spill equipment available and crew trained in cleanup techniques.
Environmental degradation (e.g. trampling)	Fragile moss mats	Limit numbers going ashore. Avoid sensitive areas. Brief tourists before arrival.
Removing historic artefacts, fossils, bones	Historic sites, fossils	Tell tourists not to collect souvenirs. Brief tourists before arrival.
Disruption to important scientific research	Research stations, field study sites	Allow only a few tourist visits per season. Brief tourists before arrival. Guide tourists around station.

Table 3 – The potential impact of tourism on the environment

There are significant concerns about the future of the tourist industry in Antarctica and opinions are divided about whether tourism should now be controlled by the ATS, and limits placed on the numbers of tourists and ships going to the region.

Particular issues include:

- *The development of land-based adventure tourism, already established at Patriot Hills, in the Ellsworth Mountains could cause serious environmental impact if large-scale tourist developments are allowed, such as hotel resorts and air services.*
- *Cruise ships are not only more numerous but much larger with some very large ships taking 3500 people. At the moment they do not land but cruise the islands off the Antarctic Peninsula. Larger ships are not ice-strengthened, and carry more damaging heavy fuel oil.*
- *Concerns have risen about the safety and environmental impact of the tourist industry. In 2007, the small expedition cruise ship Explorer sank after hitting an iceberg in Antarctica. Fortunately, there was no loss of life but the ship was wrecked sinking to the sea bed with over 190,000 litres of fuel on board.*
- *Development of an improved tourist management strategy for Antarctica is needed, including the introduction of shipping safety and environmental guidelines.*

Antarctica

Antarctica is often called the "Great White continent" and it is one of the most pristine environments in the world. It was made famous by the heroic expeditions of Scott, Amundsen and Shackleton.

During our voyage on the Penguin Express you will see that Antarctica is an area of outstanding beauty and is home to many different species of wildlife.



Great photo opportunities await you!



The Penguin Express arriving in the Antarctic

The Penguin Express

Your journey will be on board a first class expeditionship, which is specially adapted to exploring Antarctica. It will also offer many comforts that you would expect at home. The most important feature is our experienced crew. They will guide you through the different parts of our cruise and lead the expeditions on the ship's zodiacs (smaller boats for up to 15 passengers). They will also give informative evening talks in the ships and library. There are only 39 cabins and suites on the Penguin Express, which means that every passenger gets the attention they deserve.



The route of the Penguin Express

Arctic Adventure cruise – route

- **Day 1** Board the Penguin Express for an evening departure from the historic port of Ushuaia in Argentina.
- **Day 2 to Day 3** Cruise through the Drake Passage where the cold polar waters sink beneath the warmer temperate waters. Watch albatrosses and petrels follow the ship.
- **Day 4** Visit to King George Island, the largest of the South Shetland Islands, where you can go ashore to Potter Bay.
- **Day 5** Land at Neko Harbour, your first stop on the Antarctic mainland. Here you will find spectacular scenery and wildlife. Watch out for blue-eyed shags, cape petrels, weddell, crabeater, leopard seals, orcas and humpback whales. The wildlife is not afraid of humans.
- **Day 6** Sail south past the dramatic cliffs and glaciers of the Lemaire Channel. Go ashore at Petermann Island, the southernmost point of your journey and home to colonies of Gentoo and Adelie penguins. Take a zodiac ride to see the glaciers.
- **Day 7** Head north to Paradise Bay where again you will have time to explore the surroundings by zodiac. This evening visit Cuverville Island, with its dramatic scenery and home to a large Gentoo colony.
- **Day 8** Sail on to Deception Island, the largest active volcano in the area, where you can swim in the thermal waters and walk around an historic whaling station.
- **Day 9** Return crossing of the Drake Passage.

Figure 7 – A Tourism brochure (Adapted from Kuoni World Wide Brochure 2008)

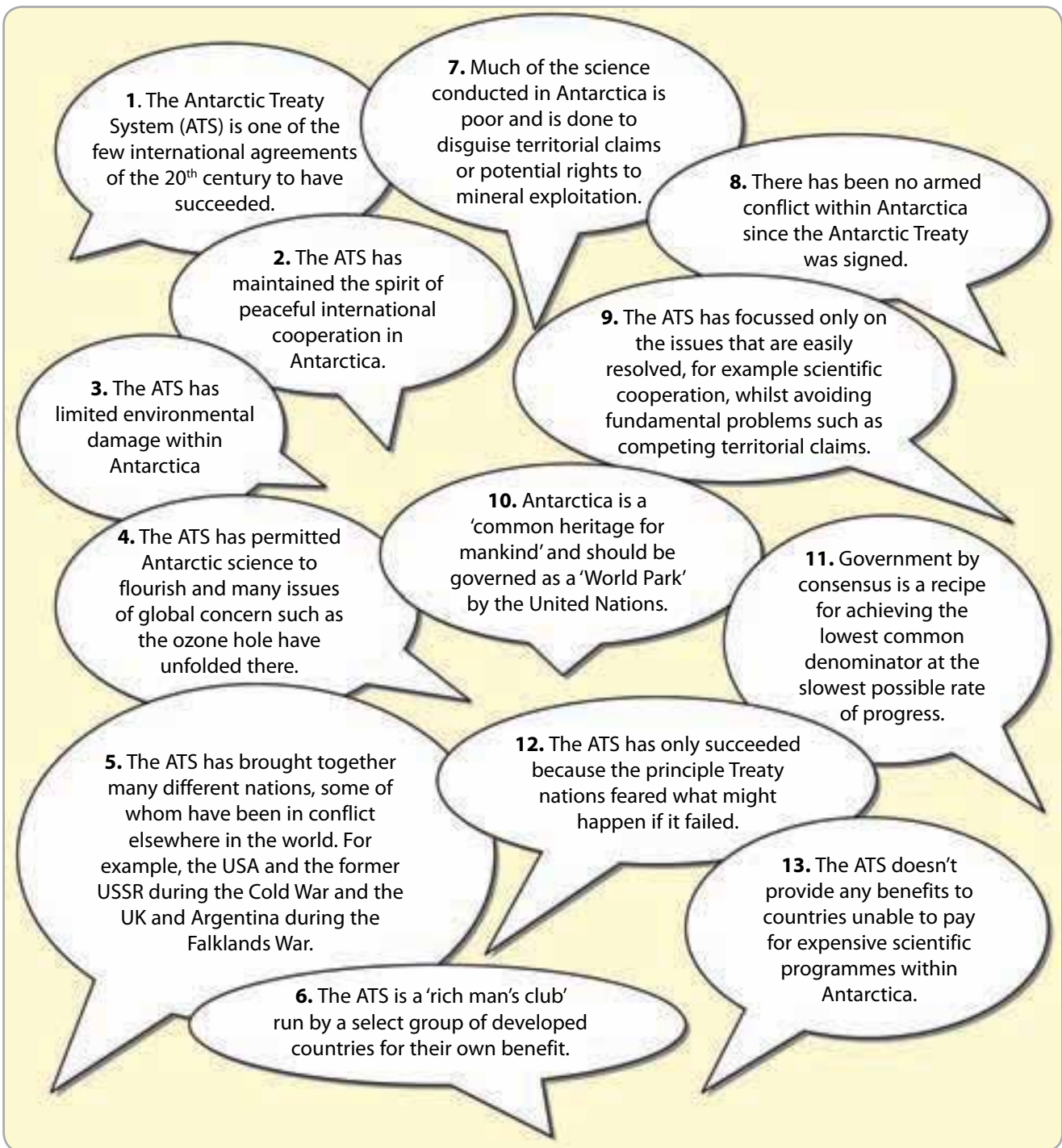
SECTION C – MAKING DECISIONS

1 The Antarctic Treaty System – How Antarctica is governed

The system of international governance that has been agreed for Antarctica is unique. The Treaty established Antarctica as a region of peace and science. Nearly 50 countries have now signed representing 80% of the world's people. Since 1961 a number of separate international agreements have been adopted including the **Environmental Protocol 1998**. The protocol sets out principles for environmental protection, with sections on conservation of flora and fauna, prevention of marine pollution, waste disposal and management and Environmental Impact Assessment. The Protocol bans mining in Antarctica, and requires the environmental assessment of all activities before they can go ahead.

1. Military activities are not allowed.	7. Treaty nations will meet regularly to consider ways of furthering the principles and objectives of the Treaty.
2. Freedom of scientific investigation and co-operation shall continue.	8. Treaty nations will try to ensure that no one engages in any activity contrary to the principles of the Treaty.
3. Territorial claims are not recognised and no new territorial claims can be made.	9. The treaty may be modified/updated at any time by unanimous agreement.
4. Nuclear explosions and radioactive waste disposal are banned.	10. The treaty must be accepted by any nation wishing to join.
5. The treaty applies to all land including ice shelves but not to the seas within the area. Activities south of latitude 60°S are governed by it.	11. The original treaty was signed in 1959 and came into operation in 1961.
6. All research stations, ships and aircraft operating in Antarctica have to be open to inspection at any time.	

Table 4 – The terms of the Antarctic Treaty



(Source: BAS)

Figure 8 – Comments on the Antarctic Treaty System

2 The Future of Antarctica – Two Views

2 A Maintaining and strengthening the Antarctic Treaty – the view of Treaty nations

- The Antarctic Treaty is working well, with more nations signing up every year.
- Current fishing levels in the Southern Ocean are below the quota of total allowable catch for many species, such as krill.
- Levels of pollution in Antarctica are extremely low by global standards.
- Most research stations are making a valuable contribution to science especially to the study of climate change. Nearly all are now sustainably managed to minimise fuel use and waste disposal.
- Tourism is currently well managed by the tour operators and is at sustainable levels.
- Global warming is a world issue – activities in Antarctica have little or no impact.
- No problems have been experienced over mineral exploitation as the Environmental Protocol has been observed.
- Antarctica remains the world's last great wilderness region.
- The Treaty enables scientists from around the world to work together to study some of the most important global threats to the planet, such as climate change and ozone depletion.

2 B Creating Antarctica 'World Park' – the Greenpeace Vision

In 1994, Greenpeace suggested the idea of a World Park in order to protect Antarctica. There was concern that Antarctica could not cope with increasing threats and protection of the Antarctic environment should be the most important consideration.

The Greenpeace vision of a World Park is guided by **four** principles:

- the recognition of the value of the continent as the world's last great wildernesses
- the protection of **all** wildlife and ecosystems
- the use of the continent for high quality, collaborative scientific activity
- maintaining the continent as a zone of peace, free of all military consideration in order to focus on **Protection** of the Antarctic environment as the main consideration.

Note: Greenpeace is a campaigning environmental pressure group

c. Arguments against development

- Antarctica is unique as the world's last great wilderness. Once it is developed the continent's near pristine state will be lost forever.
- Should development take place damage will be very severe in such a fragile and vulnerable environment. It takes the environment a long time to recover in the cold climate.
- Most resources are finite and would only last a few decades. There would be extensive short term damage for little benefit. The long term strategy should be better stewardship of current resources so that resources in the Antarctic would not be needed.
- The research programmes rely on a completely natural and unpolluted environment

d. Arguments for development

- The world's population is still rising, and as development takes place, for example in China, more resources will be needed.
- Developers have a large amount of experience in the Arctic of sustainable design, development and management and can thus protect the unique environment in Antarctica.
- Development can be strictly controlled through the Antarctic Treaty and zoned in order to minimise environmental impacts.
- The world should be able to share more fully in the beauty and scientific, environmental and economic value of Antarctica.

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Mark Scheme

Sample Assessment Material

GCSE Geography B (5GB3F)
Unit 3: Making Geographical
Decisions

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Sample Assessment Material

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Placing a mark within a level mark band

- The instructions below tell you how to reward responses within a level. Follow these unless there is an instruction given within a level. However, where a level has specific guidance about how to place an answer within a level, **always** follow that guidance.
- **2 mark bands**
Start with the presumption that the mark will be the higher of the two.
An answer which is poorly supported gets the lower mark.
- **3 mark bands**
Start with a presumption that the mark will be the middle of the three.
An answer which is poorly supported gets the lower mark.
An answer which is well supported gets the higher mark.
- **4 mark bands**
Start with a presumption that the mark will be the upper middle mark of the four.
An answer which is poorly supported gets a lower mark.
An answer which is well supported and shows depth or breadth of coverage gets the higher mark.

- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:

i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear

ii) select and use a form and style of writing appropriate to purpose and to complex subject matter

iii) organise information clearly and coherently, using specialist vocabulary when appropriate.

Spelling, Punctuation and Grammar Marking Guidance

- The spelling, punctuation and grammar assessment criteria are common to GCSE English Literature, GCSE History, GCSE Geography and GCSE Religious Studies.
- All candidates, whichever subject they are being assessed on, must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Spelling, punctuation and grammar marking criteria should be applied positively. Candidates must be rewarded for what they have demonstrated rather than penalised for errors.
- Examiners should mark according to the marking criteria. All marks on the marking criteria should be used appropriately.
- All the marks on the marking criteria are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the marking criteria.
- Examiners should be prepared to award zero marks if the candidate's response is not worthy of credit according to the marking criteria.
- When examiners are in doubt regarding the application of the marking criteria to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked unless the candidate has replaced it with an alternative response.
- Handwriting may make it difficult to see if spelling, punctuation and grammar are correct. Examiners must make every effort to assess spelling, punctuation and grammar fairly and if they genuinely cannot make an assessment, the team leader must be consulted.
- Specialist terms do not always require the use of complex terminology but the vocabulary used should be appropriate to the subject and the question.
- Work by candidates with an amanuensis, scribe or typed script should be assessed for spelling, punctuation and grammar.
- Examiners are advised to consider the marking criteria in the following way:
 - How well does the response communicate the meaning?
 - What range of specialist terms is used?
 - How accurate is the spelling, punctuation and grammar?

Sample Mark Scheme

Unit 3F: Making Geographical Decisions

Question Number	Correct Answer	Reject	Marks
1 (a)(i)	South-West	All incorrect answers	1

Question Number	Correct Answer	Reject	Marks
1 (a) (ii)	Cornwall	All incorrect answers	1

Question Number	Correct Answer	Acceptable Answers	Reject	Marks
1 (b) (i)	It fell	Accept: <ul style="list-style-type: none"> • It fell quite a bit • It fell by 86 • It fell by 13%/10-15% 	It rose / was stable	1

Question Number	Correct Answer	Acceptable Answers	Reject	Marks
1 (b)(ii)	It rose	Accept: <ul style="list-style-type: none"> • It rose quite a bit • It rose by 58 • It rose by 10% 	It fell / was stable	1

Question Number	Correct Answer	Reject	Marks
1 (c)	Any two of: <ul style="list-style-type: none"> • To be near work (1) • To live in a village (1) • To be near friends / family (1) • Because Grampound is such a strong community (1) • To retire (1) • For a change of house size (accept 'for a smaller house' or 'a large house', but award just 1 mark) (1) • To be in a village in which there is a school / shop (award just 1 mark for use of an example) (1) <i>Or any valid suggestion evidenced from the booklet (1)</i> 1 mark per correct suggestion	General statements e.g. <ul style="list-style-type: none"> • Because they like it (unspecified reason why) • Because people like living in villages 	2

Question Number	Correct Answer	Acceptable Answers	Reject	Marks
1 (d) (i)	8.6% bar to be drawn	Accept bar drawn anywhere between 8.0 and 9.0%	Incorrectly drawn / located	1

Question Number	Correct Answer	Reject	Marks
1 (d)(ii)	31.9%	All incorrect answers	1

Question Number	Acceptable Answers	Reject	Marks
1 (e)	<p>Accept any of:</p> <ul style="list-style-type: none"> • Low incomes in Cornwall / Grampound (1) – award 1 extra mark for example e.g. tourism (1) and 1 further mark if developed – e.g. ‘therefore people cannot afford housing’ (1) • House prices have risen rapidly (1) plus 1 mark if developed e.g. ‘because of demand from those retiring’. • Cornwall’s population is rising fast (or ‘Inward migration’) (1) – and 1 mark if developed e.g. ‘leading to increased demand’ (1) • People sell up in cities (1) – plus extra mark(s) is developed e.g. ‘where incomes are higher (1)’ ‘and decide to move to Cornwall where housing is cheaper (1)’ • Declining economy (1) – award 1 extra mark for example e.g. farming (1) – and more marks if developed further e.g. ‘leading to high unemployment’ (1) ‘so people can’t afford to buy houses’ (1). • Local people have to compete with holiday lets (1), or second homes (1) – with a further mark if developed further e.g. ‘against people who have more money’ (1). <p>1 mark per correct suggestion – with a second mark (exceptionally, a third) if developed. Award 2 marks per answer for either 2 correct points, or for developed points.</p> <p>3 marks maximum can be awarded for a well-developed response to one reason, e.g. ‘<i>Cornwall has low incomes (1) so that people cannot afford housing (1) except those who move into the county with more money (1)</i>’</p>	Reasons given without context e.g. ‘second homes’, ‘tourism’, ‘people are better off in cities’	4

Question Number	Acceptable Answers	Reject	Marks
1 (f)	<p>Accept any of:</p> <ul style="list-style-type: none"> • It might spoil the scenery / might not look good (1) – and 1 mark if developed or exemplified e.g. 'it's difficult to blend new houses in' • It might not fit in with existing housing (1) – and 1 mark if developed or exemplified e.g. 'because many cottages are old / part of a conservation Area' • Spoil the historic nature or feel of the village (1) – and 1 mark if developed or exemplified e.g. 'because more people could mean more traffic' • Spoil the conservation area (1) – and 1 mark if developed or exemplified e.g. 'new houses won't be built from the same materials' • Increase the number of cars / traffic in the village (1) – and 1 mark if developed or exemplified e.g. 'making it more dangerous to cross the road' • Use up Greenfield space / countryside / reduce farmland (1) – and 1 mark if developed or exemplified e.g. 'which could spoil the Area of Outstanding Natural Beauty' <p>1 mark per correct suggestion – with a second mark (exceptionally, a third) if developed. Award 2 marks per answer for either 2 correct points, or for developed points.</p> <p>3 marks maximum can be awarded for a well-developed response to one reason, e.g. <i>'People there might have lived in Grampound for a long time (1) so that many will prefer older cottages / might not like new housing (1) especially if they bring in lots more people and destroy the peace and quiet (1)'</i></p>	Reasons given without context e.g. 'countryside will get used up'	4

Section B

Question Number	Correct Answer	Reject	Marks
2 (a) (i) (ii) (iii)	Inward migration: the number of people who move into Cornwall from outside Listed buildings: buildings of interest which are protected by law Greenfield site: An area of farmland which has never been built on before	All incorrect answers	3 x 1

Question Number	Acceptable Answers	Reject	Marks
2 (b)	<p>Advantages Accept any two of:</p> <ul style="list-style-type: none"> • Strong community (1) – and 1 mark if developed or exemplified e.g. ‘where there are several things going on in places like the village hall’ • Near to local towns e.g. Truro (1) – and 1 mark if developed or exemplified e.g. ‘for work’. • Regular bus services (1) – and 1 mark if developed e.g. ‘making it easy to go shopping’ • Several shops and tradespeople in the village (1) – and 1 mark if developed or exemplified e.g. ‘making it more dangerous to cross the road’ • Surrounding landscape is attractive • Older houses in the village make it look attractive • <i>plus other points on merit</i> <p>Disadvantages Accept any two of:</p> <ul style="list-style-type: none"> • Cornwall / Grampound is isolated geographically (1) – and 1 mark if developed or exemplified e.g. ‘Buses are only once an hour (1)’. • Unemployment is high (1) • Local wages low (1) – and 1 mark if developed e.g. ‘in tourism where jobs are seasonal’ • Primary industries (or e.g. farming) are declining • Not many opportunities for young people. • Environmental factors – e.g. noise from main road / traffic climbing hill through the village (1) • Too few pavements • <i>plus other points on merit</i> <p>1 mark per correct suggestion, with second mark if developed. Award 2 marks per answer for either 2 correct points, or for one developed points.</p>	<p>Reasons given without context for advantages e.g. ‘not much tourism’, ‘people like it there’ or unevidenced statements e.g. ‘it’s countryside so there wouldn’t be much crime’</p> <p>Or for disadvantages e.g. ‘there’s not much to do’ ‘it’s not safe there’</p>	4

Question Number	Acceptable Answers	Reject	Marks
2 (c)	<p>Accept any of:</p> <ul style="list-style-type: none"> • Brownfield sites already have services (1) – plus 1 mark if developed or exemplified e.g. 'so it saves money putting in water', or 'e.g. roads' • Helps to keep the look of the village (1) – plus 1 mark if developed or exemplified e.g. 'as new buildings often look out of place' • Protects the conservation area (1) • Stops farmland from being used up (1) • Prevents spoiling scenery with new building (1) • Uses spaces that might be derelict (1) – and 1 mark if developed or exemplified e.g. 'and spoil the look of the village' or 'e.g. the old garage site' • <i>plus other points on merit</i> <p>1 mark per correct suggestion – with a second mark (exceptionally, a third) if developed. Award 2 marks per answer for either 2 correct points, or for developed points.</p> <p>Marks can be awarded for a full response to one reason if that is developed well enough; the candidate need not 'max out' on one reason.</p>	Reasons given without context e.g. 'houses can't be built there', ' the countryside is attractive'	2

Question Number	Acceptable Answers	Reject	Marks
2 (d)	<p>Accept any two of:</p> <ul style="list-style-type: none"> •traditional materials that match existing houses are expensive (1) – and 1 mark if developed or exemplified e.g. ‘this would make new housing too expensive’. •There is little space in which to build (1) – and 1 mark if developed or exemplified e.g. ‘the only spaces left are those such as gardens’. •Many buildings are listed (1) – and 1 mark if developed or exemplified e.g. ‘and can’t be demolished or altered’. •Spaces that could be built on aren’t for sale – and 1 mark if developed or exemplified e.g. ‘like the old garage’ •There are few places that could be built on without taking up farmland / green space. •<i>plus other points on merit</i> <p>1 mark per correct point, with a second mark if developed, and a third (but not a fourth) if well-developed. Award 2 marks per answer for either 2 correct points, or for one developed point.</p>	Reasons given without context e.g. ‘there isn’t much space left’	4

Question Number	Indicative content
2 (e)	<p>Take the whole answer in applying levels. Candidates must cover both benefits and problems to reach Level 3; cap those who deal only with one aspect at top of Level 2 (4 marks).</p> <p>This answer ought to outline / describe the issues surrounding conservation areas. Expect that good answers will use the resources specifically to highlight particular issues for Grampound, whilst others may be 'placeless' or generalise, without necessarily referring to evidence from the booklet.</p> <p>Guidance</p> <p>Benefits could include:</p> <ul style="list-style-type: none"> • Protection of historic buildings • Protection of the landscape • Preventing modern developments that do not fit in the architecture. <p>Problems might include:</p> <ul style="list-style-type: none"> • It prevents newer housing being built which people might need • Traditional buildings usually cost more which people might not be able to afford. • Filling in gaps or building on gardens might have just as bad an effect as allowing new development. <p>Applying Levels</p> <p>Look for levelled qualities as follows:</p> <ul style="list-style-type: none"> • Expect that Level 1 statements will be basic, lacking development, and without any use of examples. A single developed statement can reach the top of Level 1. • Expect that further points made beyond a developed statement take the candidate to Level 2. Level 2 statements will be general, with sound general reasoning but without precise examples. A well-developed statement takes a candidate to low Level 2. Two developed statements take a candidate to the top of Level 2. • Two well-developed statements take a candidate to the top of Level 3. Level 3 responses will also be detailed, using precise examples. <p>Synopticity</p> <p>Candidates may also be credited for the use of material outside the Grampound Resource Booklet, e.g. from Unit 2 Changing Rural Environments. They may draw in other examples of places or themes they have studied, used as follows:</p> <ul style="list-style-type: none"> • Knowledge – e.g. to support or reject Options in Section C using examples where similar projects have / have not worked • Understanding – to conceptualise problems, e.g. using terms such as 'negative multiplier' in describing rural decline, which do not appear in the Resource Booklet. • Skills – in applying material that they have researched to support arguments. <p>This should be marked on a level basis as follows:</p> <ul style="list-style-type: none"> • Level 1 Basic / undeveloped statement - e.g. 'They used this kind of approach in national parks' • Level 2 General / developed statement - e.g. 'This approach has been used in the Lake District to increase affordable housing' • Level 3 Detailed / well-developed statement, e.g. 'This approach was used in Grasmere, where affordable housing was built to stop local people moving away'

Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-2	Basic description, lacking structure; describes 1-2 benefits or problems, but these are not developed and lack detail or specificity. Undeveloped statements (or just a single developed statement) e.g. 'there'll be more housing for people to live in'. Little or no use of geographical terminology; spelling, punctuation and grammar inaccurate.
Level 2	3-4	Generalised description; some structure with use of general evidence to show how Grampound might benefit / have problems. Identifies 2-3 benefits and problems, with some detail, though this is never specific. Statements are developed, or a single statement may be well-developed. Clearly written but with limited geographical terminology, and some errors in spelling, punctuation and grammar.
Level 3	5-6	Detailed description; well structured, with use of specific evidence to show a range of ways in which Grampound might benefit / have problems. Good understanding of issues, expressed in detail and specific reference to resources. At least two statements are well-developed to reach the top of level 3. Well communicated with good use of geographical terminology, and good quality spelling, punctuation and grammar.

Section C

Question Number	Indicative content
3 (a)	<p>All five options offer plenty of room for discussion. Any of the options could be considered; there are no 'loss leaders'.</p> <p>Guidance</p> <p>Benefits for Option A include:</p> <ul style="list-style-type: none"> • It provides the most housing. • It is easy to build as it is on a Greenfield site • It offers lower densities of housing than might be allowed for the Greenfield sites • It allows for the greatest amount of affordable housing <p>Benefits for Option B include:</p> <ul style="list-style-type: none"> • It maintains the historic character of the village • It improves a site that is currently near-derelict • It provides workplaces as well as housing • It is within the conservation area so doesn't expand the built up area of Grampound. <p>Benefits for Option C include:</p> <ul style="list-style-type: none"> • It maximises an opportunity to a) build the greatest number of houses, b) provide affordable housing, c) provide workplaces • It would provide housing for all the people who want to live in Grampound, and some • It would combine the restoration of an area of historic value with current needs of the village. <p>Benefits for Option D include:</p> <ul style="list-style-type: none"> • Has the greatest value in environmental improvement in the village as it improves all sites that are either derelict or have become eyesores • Maintains the conservation area without expanding the built up area or footprint of the village • Protects Greenfield sites. <p>Benefits for Option E include:</p> <ul style="list-style-type: none"> • Maintains the conservation area without expanding the built up area or footprint of the village • Does not impact upon those such as the owner of the garage site who do not wish to sell. <p>Applying Levels</p> <p>Look for levelled qualities as follows:</p> <ul style="list-style-type: none"> • Expect that Level 1 statements will be basic, lacking development, and without any use of examples. A single developed statement can reach the top of Level 1. • Expect that further points made beyond a developed statement take the candidate to Level 2. Level 2 statements will be general, with sound general reasoning but without precise examples. A well-developed statement takes a candidate to low Level 2. Two developed statements take a candidate to the top of Level 2. • Two well-developed statements take a candidate to the top of Level 3. Level 3 responses will also be detailed, using precise examples. <p>Synopticity</p> <p>Candidates may also be credited for the use of material outside the Grampound Resource Booklet, e.g. from Unit 2 Changing Rural Environments. They may draw in other examples of places or themes they have studied, used as follows:</p>

	<ul style="list-style-type: none"> • Knowledge – e.g. to support or reject Options in Section C using examples where similar projects have / have not worked • Understanding – to conceptualise problems, e.g. using terms such as ‘negative multiplier’ in describing rural decline, which do not appear in the Resource Booklet. • Skills – in applying material that they have researched to support arguments. <p>This should be marked on a level basis as follows:</p> <ul style="list-style-type: none"> • Level 1 Basic / undeveloped statement - e.g. 'They used this approach in national parks' • Level 2 General / developed statement - e.g. 'This approach has been used in the Lake District to increase affordable housing' • Level 3 Detailed / well-developed statement, e.g. 'This approach was used in Grasmere, where affordable housing was built to stop local people moving away' 	
Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-3	Lacks structure; identifies a few benefits, but these are limited and described without detail, and non-specific. Generalised answers – e.g. ‘there’ll be more housing for people to live in’. Basic use of geographical terminology.
Level 2	4-6	Some structure with use of evidence to show how Grampound might benefit. Identifies a few specific benefits, with some detail, though this is varied. Clearly communicated but with limited use of geographical terminology.
Level 3	7-9	Well structured, with sound use of evidence to show a range of ways in which Grampound might benefit. Good understanding of issues, expressed in detail and specific reference to resources. At least two statements are well-developed to reach the top of level 3. Well communicated with good use of geographical terminology.
SPaG Level 0	0	Errors severely hinder the meaning of the response or candidates do not spell, punctuate or use the rules of grammar within the context of the demands of the question.
Level 1	1	<i>Threshold performance</i> Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.
Level 2	2	<i>Intermediate performance</i> Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.
Level 3	3-4	<i>High performance</i> Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

Question Number	Acceptable Answers	Reject	Marks
3 (b)	<p>Accept any three points from among the following:</p> <p>Guidance Problems with Option A include:</p> <ul style="list-style-type: none"> • It is conditional upon the Tannery scheme (1) • By itself, it provides fewer affordable houses (1). • Greenfield sites contain no infrastructure – it all has to be built (1) adding cost (1) <p>Problems with Option B include:</p> <ul style="list-style-type: none"> • It is costly (1) because of all the renovation work needed (1) and previous contamination / industrial pollution (1) • It provides no affordable housing (1) <p>Problems with Option C include:</p> <ul style="list-style-type: none"> • It involves the loss of Greenfield land (1) • It would make a big impact on the village during construction work (1) • It would have the biggest impact on traffic in the village (1) • It would substantially increase Grampond’s population – perhaps a loss of character (1). <i>This point must be developed for 1 mark – ‘increase population’ alone will not do.</i> <p>Problems with Option D include:</p> <ul style="list-style-type: none"> • It could be expensive with restoration work needed (1) (i.e. similar points to ‘B’ above) • It does not provide for affordable housing (1) • It could increase the density of the conservation area (1) just by adding more housing units to places that are already built up (1). <p>Problems with Option E include:</p> <ul style="list-style-type: none"> • It does not provide for affordable housing (1) • It does not actually solve any problems – it would not deal with either affordable housing or increasing the housing stock • There are no guarantees – one outcome of this policy is ‘nothing’! • <i>plus other points on merit</i> 	<p>Reasons given without context or specificity e.g. ‘countryside will get used up’ ‘it will increase the population’ ‘traffic will be worse’</p>	3

Question Number	Indicative content
3 (c)	<p>Guidance</p> <p>This answer ought to summarise problems faced by different sites. Like Question 3(a), good answers will use resources specifically to highlight benefits for Grampound, whilst others may be 'placeless' or generalise, without referring to evidence. High quality answers might combine site factors – e.g. 'My option guarantees affordable housing with improving the look of the village'. Low quality answers may be very generalised or repeat the response to question 3a without answering the question.</p> <p>Benefits of the chosen scheme would include any points above for Question 3 but could also address wider issues, such as 'there might be more building work for local people' or 'more people would help to keep the shop open when so many have closed'.</p> <p>Applying Levels</p> <p>Look for levelled qualities as follows:</p> <ul style="list-style-type: none"> • Expect that Level 1 statements will be basic, lacking development, and without any use of examples. A single developed statement can reach the top of Level 1. • Expect that further points made beyond a developed statement take the candidate to Level 2. Level 2 statements will be general, with sound general reasoning but without precise examples. A well-developed statement takes a candidate to low Level 2. Two developed statements take a candidate to the top of Level 2. • Two well-developed statements take a candidate to the top of Level 3. Level 3 responses will also be detailed, using precise examples. <p>Synopticity</p> <p>Candidates may also be credited for the use of material outside the Grampound Resource Booklet, e.g. from Unit 2 Changing Rural Environments. They may draw in other examples of places or themes they have studied, used as follows:</p> <ul style="list-style-type: none"> • Knowledge – e.g. to support or reject Options in Section C using examples where similar projects have / have not worked • Understanding – to conceptualise problems, e.g. using terms such as 'negative multiplier' in describing rural decline, which do not appear in the Resource Booklet. • Skills – in applying material that they have researched to support arguments. <p>This should be marked on a level basis as follows:</p> <ul style="list-style-type: none"> • Level 1 Basic / undeveloped statement - e.g. 'They used this approach in national parks' • Level 2 General / developed statement - e.g. 'This approach has been used in the Lake District to increase affordable housing' • Level 3 Detailed / well-developed statement, e.g. 'This approach was used in Grasmere, where affordable housing was built to stop local people moving away'.

Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-2	Basic, and lacking structure; identifies 1-2 benefits or problems, but these are not developed and lack detail or specificity. Undeveloped statements (or just a single developed statement) e.g. 'there'll be more people in the village'. Little or no use of geographical terminology; spelling, punctuation and grammar inaccurate.
Level 2	3-4	Generalised; some structure with use of general evidence to show how Grampound might benefit / have problems. Identifies 2-3 benefits and problems, in some detail, though not specific. Statements are developed, or a single statement may be well-developed e.g. 'more people would mean more children in the village school'. Clearly written but with limited geographical terminology, and some errors in spelling, punctuation and grammar.
Level 3	5-6	Detailed; well structured, with use of specific evidence to show a range of ways in which Grampound might benefit / have problems. At least two statements are well-developed to reach the top of level 3. Good understanding of issues, expressed in detail and specific reference to resources, e.g. 'more people would mean more children in the village, which would help to keep the school open'. Well communicated with good use of geographical terminology, and good quality spelling, punctuation and grammar.

Write your name here

Surname

Other names

Centre Number

Candidate Number

Edexcel GCSE

Geography B

Unit 3: Making Geographical Decisions The future of Antarctica

Higher Tier

Sample Assessment Material

Time: 1 hour

Paper Reference

5GB3H/01

You must have:

Pre-released Resource Booklet

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 54.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (*) are ones where the quality of written communication will be assessed.
- The marks available for spelling, punctuation and grammar are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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2/2



PEARSON

SECTION B – THREATS TO ANTARCTICA'S ENVIRONMENT

2 Use Section B in the Resource Booklet to answer this question.

(a) (i) For **either** global warming **or** ozone depletion complete the table below using the key provided.

(3)

Threats	Extent of threat	Timespan		Success in management of threat	Degree of damage at present
		Present	Future		
Sealing, whaling, fishing in Southern Oceans	R	✓	✓	*	**
Global warming	G				
Oil and mineral extraction	L	X	✓	*	none
Ozone depletion	G				
Research station and science projects	L	✓	X	*	**
Tourism	L	X	✓	*	*

Key to use	Insert G (Global) R (Regional) L (Local)	✓ for a problem X no problem	✓ a problem X no problem	* good success in solution ** proving hard to solve ** very complex to solve	None * minor ** major *** very severe
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(b) Sustainable strategies are needed to manage Antarctica.

Using examples explain why sustainable strategies are needed for each of the following:

(i) **Research stations**

(4)

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(ii) **Tourism**

(4)

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(Total for Question 2 = 17 marks)

TOTAL FOR SECTION B = 17 MARKS



SECTION C – MAKING DECISIONS

Spelling, punctuation and grammar will be assessed in *(a).

3 Use all the resources in the booklet but with particular reference to those in Section C.

There are different and conflicting views about the **future development of Antarctica**. The advantages of **exploiting** the resources have to be weighed up against the environmental impacts, pollution threats and dangers of international disputes. Many see the **conservation** of the world's last great wilderness as absolutely vital and non-negotiable.

The issue

You should consider the following four options for the future of Antarctica:

Option 1	Maintain the current situation, as the Antarctic Treaty is working and protecting Antarctica well.
Option 2	Make Antarctica a World Park managed by the UN to strengthen conservation and avoid threats for example from mining and land-based tourism development.
Option 3	Allow limited small scale sustainable developments, for example new research stations or ecotourism, but only in the Antarctic peninsula.
Option 4	Permit development of resources throughout Antarctica provided the developments are sustainably managed.

Tasks

*(a) Choose **one** option which you think would be best for Antarctica.

Option number

Justify your choice of this option as best for Antarctica. You should briefly mention any possible disadvantages in your justification.

(10)

Spelling, punctuation and grammar.

(4)

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(Total for Question 3 = 22 marks)

TOTAL FOR SECTION C = 22 MARKS
TOTAL FOR PAPER = 54 MARKS



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Mark Scheme

Sample Assessment Material

GCSE Geography B (5GB3H)
Unit 3: Making Geographical
Decisions

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Sample Assessment Material

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Placing a mark within a level mark band

- The instructions below tell you how to reward responses within a level. Follow these unless there is an instruction given within a level. However, where a level has specific guidance about how to place an answer within a level, **always** follow that guidance.
- **2 mark bands**
Start with the presumption that the mark will be the higher of the two.
An answer which is poorly supported gets the lower mark.
- **3 mark bands**
Start with a presumption that the mark will be the middle of the three.
An answer which is poorly supported gets the lower mark.
An answer which is well supported gets the higher mark.
- **4 mark bands**
Start with a presumption that the mark will be the upper middle mark of the four.
An answer which is poorly supported gets a lower mark.
An answer which is well supported and shows depth or breadth of coverage gets the higher mark.

- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:

i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear

ii) select and use a form and style of writing appropriate to purpose and to complex subject matter

iii) organise information clearly and coherently, using specialist vocabulary when appropriate.

Spelling, Punctuation and Grammar Marking Guidance

- The spelling, punctuation and grammar assessment criteria are common to GCSE English Literature, GCSE History, GCSE Geography and GCSE Religious Studies.
- All candidates, whichever subject they are being assessed on, must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Spelling, punctuation and grammar marking criteria should be applied positively. Candidates must be rewarded for what they have demonstrated rather than penalised for errors.
- Examiners should mark according to the marking criteria. All marks on the marking criteria should be used appropriately.
- All the marks on the marking criteria are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the marking criteria.
- Examiners should be prepared to award zero marks if the candidate's response is not worthy of credit according to the marking criteria.
- When examiners are in doubt regarding the application of the marking criteria to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked unless the candidate has replaced it with an alternative response.
- Handwriting may make it difficult to see if spelling, punctuation and grammar are correct. Examiners must make every effort to assess spelling, punctuation and grammar fairly and if they genuinely cannot make an assessment, the team leader must be consulted.
- Specialist terms do not always require the use of complex terminology but the vocabulary used should be appropriate to the subject and the question.
- Work by candidates with an amanuensis, scribe or typed script should be assessed for spelling, punctuation and grammar.
- Examiners are advised to consider the marking criteria in the following way:
 - How well does the response communicate the meaning?
 - What range of specialist terms is used?
 - How accurate is the spelling, punctuation and grammar?

Sample Mark Scheme

Unit 3H: Making Geographical Decisions

Question Number	Correct Answer	Acceptable Answers	Reject	Marks
1 (a)	Accept any of: <ul style="list-style-type: none"> • In Cornwall (1) • In south-west England (1) / UK • On the south-west peninsula (1) • In far (1) south-west England / UK (1) • the most southerly county (1) in England (1) 1 mark per correct suggestion.	Any acceptable distances from other points referenced by: <ul style="list-style-type: none"> • distance e.g. '250 miles / 350 km from London' • places – e.g. 'between Truro and St Austell' 	Generalised e.g. 'In southern England' 'In the UK'	2

Question Number	Correct Answer	Acceptable Answers	Reject	Marks
1 (b)	Accept any of: <ul style="list-style-type: none"> • It fell 1951-1981 • It rose 1981-2001 • It fell overall 	Accept: <ul style="list-style-type: none"> • It fell by 86 to 1981, or It fell by 13% (accept 10-15%) • It rose by 58 after 1981 or rose by 10% 	Generalised responses: e.g. 'It fell quite a bit then rose quite a bit'	2

Question Number	Correct Answer	Acceptable Answers	Reject	Marks
1 (c) (i)	23% to be shaded in	Accept: <ul style="list-style-type: none"> • 22%-24% as long as it stops short of 25%, or extends just beyond 21% 	Any incorrect responses	1

Question Number	Correct Answer	Acceptable Answers	Reject	Marks
1 (c) (ii)	Key to show shading (1) and 'People who want no more than 10 new houses' (1) Both to be shown for 1 mark	Accept: <ul style="list-style-type: none"> • 'People who want new housing' in key provided that shading is given 	Answers without key shading or with key shading and no legend.	1

Question Number	Acceptable Answers	Reject	Marks
1 (d)	<p>Accept any of:</p> <ul style="list-style-type: none"> • Low incomes in Cornwall / Grampound (1) – plus 1 mark if developed for example e.g. because of tourism (1) and a further mark if well-developed – e.g. 'therefore people cannot afford housing' (1) • House prices have risen rapidly (1) – plus 1 mark if developed e.g. 'because of demand from people moving from outside' (1) and a further mark if well-developed – e.g. 'taking housing beyond the reach of local people' (1) • Cornwall's population is rising fast (or 'Inward migration') (1) – and more if developed e.g. 'leading to increased demand' (1) • People sell up in cities (1) and decide to move to Cornwall (1) where housing is cheaper (1) • Declining economy (1) plus 1 extra mark if developed with example e.g. farming (1) – and 1 mark if well-developed e.g. 'leading to high unemployment' (1) 'so people can't afford to buy houses' (1). • Local people compete with holiday lets (1), or second homes (1). <p>1 mark per correct suggestion – with a second mark if developed, and a third (but not 4) if well-developed. Award 2 marks per answer for either 2 correct points, or for developed points.</p>	Reasons given without context e.g. 'second homes', 'tourism', 'people are better off in cities'	4

Question Number	Indicative content
1 (e)	<p>Guidance</p> <p>This answer ought to explain the issues about conservation areas. Expect that good answers will use the resources specifically to highlight particular issues for Grampound, whilst others may be 'placeless' or generalise, without necessarily referring to evidence from the booklet.</p> <p>Points in support of new housing include:</p> <ul style="list-style-type: none"> • Some want more houses to provide homes for people who want to live there • To increase supply of housing and bring prices down • To provide affordable housing • Create more business for local trades • So people can downsize / upsize as personal circumstances change to stop them having to move from the village or if children leave home • To make sure services survive / improve e.g. keep the school / post office / shop open, or bus services running <p>Points against new housing include:</p> <ul style="list-style-type: none"> • Spoil the historic nature or feel of the village • Spoil the conservation area or new houses won't blend in • Increased number of cars / traffic in the village making it more dangerous to cross the road • Use up Greenfield space / countryside / reduce farmland <p>Applying Levels</p> <p>Look for levelled qualities as follows:</p> <ul style="list-style-type: none"> • Expect that Level 1 statements will be basic, usually descriptive rather than explanatory, lacking development, and without the use of examples. A sole developed statement can reach the top of Level 1. • Expect that further points made beyond a developed statement take the candidate to Level 2. Level 2 statements will be general, beginning to offer explanation, with general reasoning that lacks precise examples. A well-developed statement takes a candidate to low Level 2. Two developed statements take a candidate to the top of Level 2. • Two well-developed statements take a candidate to the top of Level 3. Level 3 responses will be explanatory, using detailed and precise examples. <p>Synopticity</p> <p>Candidates may also be credited for the use of material outside the Grampound Resource Booklet, e.g. from Unit 2 Changing Rural Environments. They may draw in other examples of places or themes they have studied, used as follows:</p> <ul style="list-style-type: none"> • Knowledge – e.g. to support or reject Options in Section C using examples where similar projects have / have not worked • Understanding – to conceptualise problems, e.g. using terms such as 'negative multiplier' in describing rural decline, which do not appear in the Resource Booklet. • Skills – in applying material that they have researched to support arguments. <p>This should be marked on a level basis as follows:</p> <ul style="list-style-type: none"> • Level 1 Basic / undeveloped statement - e.g. 'They used this kind of approach in national parks'

	<ul style="list-style-type: none"> • Level 2 General / developed statement - e.g. 'This approach has been used in the Lake District to increase affordable housing' • Level 3 Detailed / well-developed statement, e.g. 'This approach was used in Grasmere, where affordable housing was built to stop local people moving away' 	
Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-2	Basic, lacking structure. Likely to be largely descriptive, with a few benefits or problems, limited in range, lacking in detail, and non-specific. Little or no explanation. Undeveloped statements (or just a single developed statement) e.g. 'people won't like lots of new houses'. Generalised answers – e.g. 'people want more housing to live in'. Limited or no use of geographical terminology; spelling, punctuation and grammar show inaccuracies.
Level 2	3-4	Generalised, with use of some evidence to show how Grampound might benefit / have problems. Some explanation; identifies a few benefits and problems, with varying detail. Statements are developed, or a single statement may be well-developed. Clearly written but with limited use of geographical terminology, and a few errors in spelling, punctuation and grammar.
Level 3	5-6	Well structured explanations, with use of detailed evidence to show a range of ways in which people might disagree. Factors identified – about the number of new houses – with specific reasons why e.g. character of the village, expense of traditional materials. At least two statements are well-developed to reach the top of level 3. Shows a good understanding of issues, expressed in detail and specific reference to resources. Well written with good use of geographical terminology, and good quality spelling, punctuation and grammar.

Section B

Question Number	Correct Answer	Acceptable Answers	Reject	Marks
2 (a) (i)	Conservation Area: an area of historical (or architectural) interest (1) which is protected by law (1) from alteration without consent (1)	<ul style="list-style-type: none"> • An area of historical buildings • Need planning consent to change anything 	Buildings which you can't change	4
(ii)	Greenfield site: Land proposed for development (1) which has previously been used for farming (1)	<ul style="list-style-type: none"> • Building land which used to be farmland • Land which has never been built on 	Land where there's nothing there	

Question Number	Acceptable Answers	Reject	Marks
2 (b)	<p>Advantages Accept any of:</p> <ul style="list-style-type: none"> • Strong community (1) – and 1 mark if developed or exemplified e.g. ‘where people support each other’ or ‘where there are several things going on in places like the village hall’ • Near to local towns e.g. Truro (1) – and 1 mark if developed or exemplified e.g. ‘for work’. • Regular bus services (1) – and 1 mark if developed or exemplified e.g. ‘making it easy to go shopping’ • Several shops and tradespeople in the village (1) – and 1 mark if developed or exemplified e.g. ‘making it more dangerous to cross the road’ • Surrounding landscape is attractive • Older houses in the village make it look attractive • <i>plus other points on merit</i> <p>1 mark per correct suggestion – with a second mark if developed or exemplified.</p>	Reasons given without context e.g. ‘second homes’, ‘tourism’, ‘people are better off in cities’	3

Question Number	Indicative content
2 (c)	<p>Guidance Answers should explain the issues against developing greenfield sites. Expect that good answers will use the resources to highlight specific greenfield issues for Grampound, whilst other poorer quality answers may be ‘placeless’ or may generalise, without necessarily referring to evidence from the booklet or that learnt elsewhere.</p> <p>The arguments against greenfield development will probably include:</p> <ul style="list-style-type: none"> • Protects the scenic quality of the local landscape – with specific credit if mentions category below ‘Area of Outstanding Natural Beauty’ • Preserves the conservation area • Preserves the medieval field systems / burgage plots around the village • Prevents modern developments that do not fit the architectural styles of the village. • Keeps the character of the village. • There are plenty of brownfield sites that could be developed first and whose re-development might improve the overall look of the village <p>Applying Levels Look for levelled qualities as follows:</p> <ul style="list-style-type: none"> • Expect that Level 1 statements will be basic, usually descriptive rather than explanatory, lacking development of statements, and lacking examples. However, a sole developed statement can reach the top of Level 1.

	<ul style="list-style-type: none"> Expect that developed explanations take the candidate to Level 2. Level 2 statements will begin to explain, but will be general in nature, lacking precise examples. A well-developed statement takes a candidate to low Level 2. Two developed statements take a candidate to the top of Level 2. Two well-developed explanations take a candidate to the top of Level 3. Level 3 responses will be explanatory, using detailed and precise examples. <p>Synopticity Candidates may also be credited for the use of material outside the Grampound Resource Booklet, e.g. from Unit 2 Changing Rural Environments. They may draw in other examples of places or themes they have studied, used as follows:</p> <ul style="list-style-type: none"> Knowledge – e.g. to support or reject Options in Section C using examples where similar projects have / have not worked Understanding – to conceptualise problems, e.g. using terms such as ‘negative multiplier’ in describing rural decline, which do not appear in the Resource Booklet. Skills – in applying material that they have researched to support arguments. <p>This should be marked on a level basis as follows:</p> <ul style="list-style-type: none"> Level 1 Basic / undeveloped statement - e.g. 'They used this kind of approach in national parks' Level 2 General / developed statement - e.g. 'This approach has been used in the Lake District to increase affordable housing' Level 3 Detailed / well-developed statement, e.g. 'This approach was used in Grasmere, where affordable housing was built to stop local people moving away because housing was so expensive' 	
Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-2	Basic, lacking structure. Likely to be largely descriptive, with a few benefits or problems. Limited in range, lacking detail, and non-specific e.g. 'it spoils the scenery'. Little or no explanation. Statements are not developed – or there is no more than a single developed statement. Limited or no use of geographical terminology; inaccuracies in basic spelling, punctuation and grammar.
Level 2	3-4	Generalised, with use of some evidence to show the problems in Grampound. Some explanation; begins to explain a few benefits and problems, with varying detail. Statements are developed, or a single statement may be well-developed. Clearly written but with limited use of geographical terminology, and a few errors in spelling, punctuation and grammar.
Level 3	5-6	Well-structured explanations, with use of detailed evidence to explain arguments against greenfield sites. Factors identified with specific reasons why e.g. the rural character of the village, loss of farm or amenity land. At least two explanations are well-developed to reach the top of level 3. Shows a good understanding of issues, expressed in detail and specific reference to resources. Well written with good use of geographical terminology, and good quality spelling, punctuation and grammar.

Question Number	Indicative content
2 (d)	<p>Guidance</p> <p>This answer ought to outline the problems in achieving new developments within conservation areas. Expect that good answers will use the resources specifically to highlight particular issues for Grampound, whilst others may be 'placeless' or generalise, without necessarily referring to evidence from the booklet.</p> <p>The difficulties are, broadly, that:</p> <ul style="list-style-type: none"> • traditional materials that match existing houses are expensive and that this would make new housing too expensive for local needs. • There is little space in which to build under present laws and that already the only spaces left are those such as gardens or infill. • Many buildings are listed and can't be demolished or altered • There are not many places that could be built on without taking up farmland / green space. <p>Applying Levels</p> <p>Look for levelled qualities as follows:</p> <ul style="list-style-type: none"> • Expect that Level 1 statements will be basic, usually descriptive rather than explanatory, lacking development of statements, and lacking examples. However, a sole developed statement can reach the top of Level 1. • Expect that developed explanations take the candidate to Level 2. Level 2 statements will begin to explain, but will be general in nature, lacking precise examples. A well-developed statement takes a candidate to low Level 2. Two developed statements take a candidate to the top of Level 2. • Two well-developed explanations take a candidate to the top of Level 3. Level 3 responses will be explanatory, using detailed and precise examples. <p>Synopticity</p> <p>Candidates may also be credited for the use of material outside the Grampound Resource Booklet, e.g. from Unit 2 Changing Rural Environments. They may draw in other examples of places or themes they have studied, used as follows:</p> <ul style="list-style-type: none"> • Knowledge – e.g. to support or reject Options in Section C using examples where similar projects have / have not worked • Understanding – to conceptualise problems, e.g. using terms such as 'negative multiplier' in describing rural decline, which do not appear in the Resource Booklet. • Skills – in applying material that they have researched to support arguments. <p>This should be marked on a level basis as follows:</p> <ul style="list-style-type: none"> • Level 1 Basic / undeveloped statement - e.g. 'They used this kind of approach in national parks' • Level 2 General / developed statement - e.g. 'This approach has been used in the Lake District to increase affordable housing' • Level 3 Detailed / well-developed statement, e.g. 'This approach was used in Grasmere, where affordable housing was built to stop local people moving away because housing was so expensive'

Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-2	Basic, lacking structure. Likely to be largely descriptive, with a few benefits or problems. Limited in range, lacking detail, and non-specific e.g. 'new houses don't fit in'. Little or no explanation. Statements are not developed – or there is no more than a single developed statement. Limited or no use of geographical terminology; inaccuracies in basic spelling, punctuation and grammar.
Level 2	3-4	Generalised, with use of some evidence to show why new housing might not fit in. Some explanation; begins to explain a few issues (e.g. in appearance of new / old properties), with varying detail. Statements are developed, or a single statement may be well-developed. Clearly written but with limited use of geographical terminology, and a few errors in spelling, punctuation and grammar.
Level 3	5-6	Well-structured explanations, with use of detailed evidence to explain difficulties in resolving how new housing could fit in. Factors identified with specific reasons why e.g. the rural character of the village, loss of farm or amenity land. At least two explanations are well-developed to reach the top of level 3. Shows a good understanding of issues, expressed in detail and specific reference to resources. Well written with good use of geographical terminology, and good quality spelling, punctuation and grammar.

Section C

Question Number	Indicative content
<p>3 (a)</p>	<p>Guidance</p> <p>All five options offer plenty of room for discussion. Any of the options could be considered; there are no 'loss leaders'.</p> <p>Benefits for Option A include:</p> <ul style="list-style-type: none"> • It provides the most housing. • It is easy to build as it is on a Greenfield site • It offers lower densities of housing than might be allowed for the Greenfield sites • It allows for the greatest amount of affordable housing <p>Benefits for Option B include:</p> <ul style="list-style-type: none"> • It maintains the historic character of the village • It improves a site that is currently near-derelect • It provides workplaces as well as housing • It is within the conservation area so doesn't expand the built up area of Grampound. <p>Benefits for Option C include:</p> <ul style="list-style-type: none"> • It maximises an opportunity to a) build the greatest number of houses, b) provide affordable housing, c) provide workplaces • It would provide housing for all the people who want to live in Grampound, and some • It would combine the restoration of an area of historic value with current needs of the village. <p>Benefits for Option D include:</p> <ul style="list-style-type: none"> • Has the greatest value in environmental improvement in the village as it improves all sites that are either derelict or have become eyesores • Maintains the conservation area without expanding the built up area or footprint of the village • Protects Greenfield sites. <p>Benefits for Option E include:</p> <ul style="list-style-type: none"> • Maintains the conservation area without expanding the footprint of the village • Does not impact upon those (e.g. owner of the garage site) who do not wish to sell. <p>Applying Levels</p> <p>Look for levelled qualities as follows:</p> <ul style="list-style-type: none"> • Expect that Level 1 statements will be basic, usually descriptive rather than explanatory, lacking development of statements, and lacking examples. However, a sole developed statement can reach the top of Level 1. • Expect that developed explanations take the candidate to Level 2. Level 2 statements will begin to explain, but will be general in nature, lacking precise examples. A well-developed statement takes a candidate to low Level 2. Two developed statements take a candidate to the top of Level 2. • Two well-developed explanations take a candidate to the top of Level 3. Level 3 responses will be explanatory, using detailed and precise examples.

	<p>Synopticity Candidates may also be credited for the use of material outside the Grampound Resource Booklet, e.g. from Unit 2 Changing Rural Environments. They may draw in other examples of places or themes they have studied, used as follows:</p> <ul style="list-style-type: none"> • Knowledge – e.g. to support or reject Options in Section C using examples where similar projects have / have not worked • Understanding – to conceptualise problems, e.g. using terms such as ‘negative multiplier’ in describing rural decline, which do not appear in the Resource Booklet. • Skills – in applying material that they have researched to support arguments. <p>This should be marked on a level basis as follows:</p> <ul style="list-style-type: none"> • Level 1 Basic / undeveloped statement - e.g. 'They used this kind of approach in national parks' • Level 2 General / developed statement - e.g. 'This approach has been used in the Lake District to increase affordable housing' • Level 3 Detailed / well-developed statement, e.g. 'This approach was used in Grasmere, where affordable housing was built to stop local people moving away because housing was so expensive' 	
Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-3	Basic, lacking structure. Makes a decision, with some basic justification but the evidence base is limited, described without detail, and non-specific e.g. ‘the old garage should be turned into housing’. Little or no explanation. Statements are not developed – or there is no more than a single developed statement. Limited or no use of geographical terminology.
Level 2	4-6	Generalised, with use of some evidence to justify decision. Some explanation; begins to explain a few issues (e.g. in appearance of new / old properties), with varying detail. Up to three statements are developed, or two statements may be well-developed, to reach the top of this band. Clearly written but with limited use of geographical terminology.
Level 3	7-9	Well-structured explanations, with use of detailed evidence to explain difficulties in resolving how new housing could fit in. Justification with specific evidence e.g. set against rural character or cost. At least three explanations are well-developed to reach the top of level 3. Shows a good understanding of issues, expressed in detail and specific reference to resources. Well written with good use of geographical terminology.
SPaG Level 0	0	Errors severely hinder the meaning of the response or candidates do not spell, punctuate or use the rules of grammar within the context of the demands of the question.
Level 1	1	<i>Threshold performance</i> Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.

Level 2	2	<i>Intermediate performance</i> Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.
Level 3	3-4	<i>High performance</i> Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

Question Number	Indicative content
3 (b)	<p>Guidance</p> <p>This answer ought to discuss and demonstrate some of the ways in which Grampound could become more sustainable as a community. Such ways might include greater availability of affordable homes, maintaining the character of the village, keeping its services and shops alive and enabling them to thrive. Like Question 3(a), good answers will use the resources specifically to highlight particular issues for Grampound, whilst others may be 'placeless' or generalise, without necessarily referring to evidence from the booklet.</p> <p>Evidence for a sustainable community might include:</p> <ul style="list-style-type: none"> • Keeps or even expands the shops and services in the village, e.g. keeps the village shop, post office, and school open. • Provides a stock of affordable housing for local people • Protects the character of the village itself e.g. the conservation area, and of the landscape around • Promotes the community • Maintains or enhances safety in the village e.g. for those crossing the road <p>Applying Levels</p> <p>Look for levelled qualities as follows:</p> <ul style="list-style-type: none"> • Expect that Level 1 statements will be basic, usually descriptive rather than explanatory, lacking development of statements, and lacking examples. However, a sole developed statement can reach the top of Level 1. • Expect that developed explanations take the candidate to Level 2. Level 2 statements will begin to explain, but will be general in nature, lacking precise examples. A well-developed statement takes a candidate to low Level 2. Two developed statements take a candidate to the top of Level 2. • Two well-developed explanations take a candidate to the top of Level 3. Level 3 responses will be explanatory, using detailed and precise examples. <p>Synopticity</p> <p>Candidates may also be credited for the use of material outside the Grampound Resource Booklet, e.g. from Unit 2 Changing Rural Environments. They may draw in other examples of places or themes they have studied, used as follows:</p> <ul style="list-style-type: none"> • Knowledge – e.g. to support or reject Options in Section C using examples where similar projects have / have not worked • Understanding – to conceptualise problems, e.g. using terms such as 'negative multiplier' in describing rural decline, which do not appear in the Resource Booklet. • Skills – in applying material that they have researched to support arguments. <p>This should be marked on a level basis as follows:</p> <ul style="list-style-type: none"> • Level 1 Basic / undeveloped statement - e.g. 'They used this kind of approach in national parks' • Level 2 General / developed statement - e.g. 'This approach has been used in the Lake District to increase affordable housing'

		<ul style="list-style-type: none"> Level 3 Detailed / well-developed statement, e.g. 'This approach was used in Grasmere, where affordable housing was built to stop local people moving away because housing was so expensive'
Level	Mark	Descriptor
Level 0	0	No acceptable response
Level 1	1-2	Basic, lacking structure; identifies a few indicators, but these are limited and described without detail, and non-specific. Generalised answers – e.g. 'there'll be more housing for people'. Statements are not developed – or there is no more than a single developed statement. Basic use of geographical terminology; inaccuracies in basic spelling, punctuation and grammar.
Level 2	3-4	Generalised, with use of some evidence to show how different indicators might make the village more sustainable. Includes some detail, though this varies. Up to two statements are developed, or one statements may be well-developed. Clearly written but with limited use of geographical terminology, and some errors in spelling, punctuation and grammar.
Level 3	5-6	Well structured, with sound use of evidence to show a range of ways in which Grampound might become more sustainable. Good understanding of issues, expressed in detail and specific reference to resources. At least three explanations are well-developed to reach the top of level 3. Well written with good use of geographical terminology, and good quality spelling, punctuation and grammar.