

Please check the examination details below before entering your candidate information

| | | | |
|--|--|--|---|
| Candidate surname | | Other names | |
| Pearson Edexcel Level 1/Level 2 GCSE (9–1) | | Centre Number | Candidate Number |
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| Time 1 hour 30 minutes | | Paper reference | 1 GA0/01 |
| Geography A PAPER 1: The Physical Environment | | | |
| You must have: Resource Booklet, calculator | | | 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.
- In Section A answer Question 1 and **two** questions from Questions 2, 3 and 4.
- In Section B and Section C answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- Where asked you must **show all your working out** with **your answer clearly identified** at the **end of your solution**.

Information

- The total mark for this paper is 94.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*
- The marks available for spelling, punctuation, grammar and use of specialist terminology are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.
- Good luck with your examination.

Turn over ►



SECTION A

The Changing Landscapes of the UK

Answer ALL parts of Question 1. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 The UK's landscape is made up of different rock types.

(a) (i) Identify which **one** of the following is a metamorphic rock.

(1)

| | |
|--------------------------|--------------------|
| <input type="checkbox"/> | A chalk |
| <input type="checkbox"/> | B granite |
| <input type="checkbox"/> | C sandstone |
| <input type="checkbox"/> | D slate |

(ii) State **one** characteristic of a metamorphic rock.

(1)

(b) Study Figure 1 in the Resource Booklet.

(i) Calculate the distance along the line between X and Y.

You must show your working in the space below.

Answer to **one** decimal place.

(2)

..... km



- (ii) Suggest **one** reason why there are few settlements in the area shown in Figure 1.

You must use map evidence in your answer.

(2)

(Total for Question 1 = 6 marks)

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**Answer only TWO questions from Question 2 (Coastal Landscapes and Processes),
Question 3 (River Landscapes and Processes) and
Question 4 (Glaciated Upland Landscapes and Processes).**

Question 2: Coastal Landscapes and Processes

If you answer Question 2 put a cross in the box ☐.

2 Coastal landscapes are constantly being changed by different processes.

(a) Study Figure 2a in the Resource Booklet.

Identify landform **X**.

(1)

| | |
|--------------------------|----------------------------|
| <input type="checkbox"/> | A cave |
| <input type="checkbox"/> | B spit |
| <input type="checkbox"/> | C stack |
| <input type="checkbox"/> | D wave cut platform |

(b) Name **one** process of sediment transport.

(1)

(c) Explain **one** reason why some cliffs erode faster than others.

(2)

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(d) Study Figure 2b in the Resource Booklet.

Examine the advantages and disadvantages of the different coastal defences shown in Figure 2b.

(8)

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(Total for Question 2 = 12 marks)



Question 3: River Landscapes and Processes**If you answer Question 3 put a cross in the box ☐.****3** River landscapes are constantly being changed by different processes.

(a) Study Figure 3a in the Resource Booklet.

Identify landform **Y**.

(1)

| | |
|--------------------------|----------------------------|
| <input type="checkbox"/> | A interlocking spur |
| <input type="checkbox"/> | B gorge |
| <input type="checkbox"/> | C point bar |
| <input type="checkbox"/> | D river cliff |

(b) Name **one** mass movement process.

(1)

(c) Explain **one** reason why river discharge changes along the course of a river.

(2)



(d) Study Figures 3b and 3c in the Resource Booklet.

Examine the effects of the river flooding shown in Figures 3b and 3c on people and the environment.

(8)



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(Total for Question 3 = 12 marks)



Question 4: Glaciated Upland Landscapes and Processes**If you answer Question 4 put a cross in the box ☐.****4** Glaciated upland landscapes are constantly being changed by different processes.

(a) Study Figure 4a in the Resource Booklet.

Identify landform **Z**.

(1)

| | |
|--------------------------|---------------------------|
| <input type="checkbox"/> | A corrie |
| <input type="checkbox"/> | B drumlin |
| <input type="checkbox"/> | C hanging valley |
| <input type="checkbox"/> | D terminal moraine |

(b) Name **one** weathering process.

(1)

(c) Explain **one** reason why a glacier may deposit some of its load.

(2)

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(d) Study Figure 4b in the Resource Booklet.

Examine how human activities may have impacted on the glaciated upland landscape shown in Figure 4b.

(8)

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(Total for Question 4 = 12 marks)

TOTAL FOR SECTION A = 30 MARKS



SECTION B

Weather Hazards and Climate Change

Answer ALL questions. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

5 The UK climate varies from place to place.

(a) Define the term **prevailing wind**.

(1)

(b) Study Figure 5a below.

| | Jan | Feb | Mar | Apr | May | June | Jul | Aug | Sept | Oct | Nov | Dec |
|-------------------------------|-----|-----|-----|-----|-----|------|-----|-----|------|-----|-----|-----|
| Mean monthly temperature (°C) | 7 | 7 | 9 | 12 | 15 | 18 | 19 | 19 | 17 | 14 | 10 | 7 |

Figure 5a

Mean monthly temperatures in London, England

Calculate the median monthly temperature in London.

You must show your working in the space below.

(2)

..... °C



(c) Study Figure 5b in the Resource Booklet.

(i) Identify the mean annual rainfall at **X**.

(1)

| | |
|--------------------------|-----------------------|
| <input type="checkbox"/> | A 601–700 mm |
| <input type="checkbox"/> | B 801–1000 mm |
| <input type="checkbox"/> | C 1251–1500 mm |
| <input type="checkbox"/> | D 2001–3000 mm |

(ii) Explain **one** reason why the amount of rainfall varies within the UK.

Use evidence from Figure 5b in your answer.

(3)

.....

.....

.....

.....

.....

.....

(Total for Question 5 = 7 marks)



6 Global climate continues to change due to natural causes.

(a) Study Figure 6a in the Resource Booklet.

(i) Calculate the range of the solar energy shown in Figure 6a.

You must show your working in the space below.

Answer to **one** decimal place.

(2)

..... W/m²

(ii) Explain **one** reason why the amount of solar energy received by the Earth changes over time.

(2)

.....

.....

.....

.....



(b) Global climate is now changing due to human activity.

Study Figure 6b below.

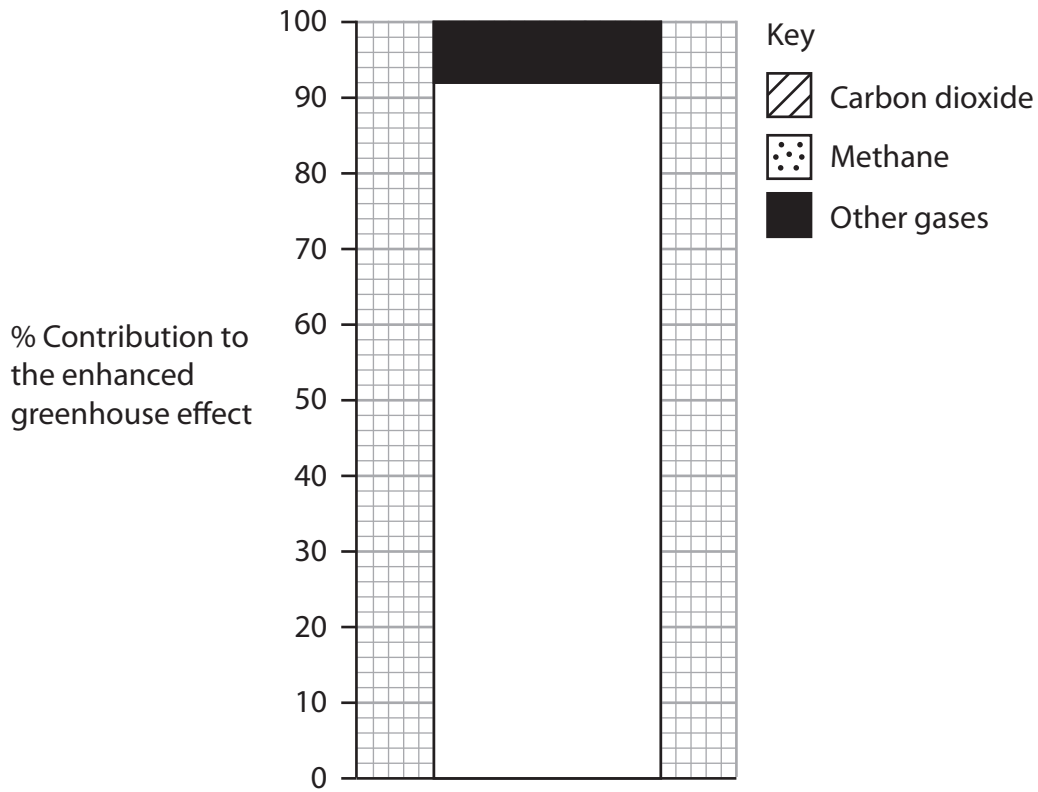


Figure 6b

Contribution of different gases to the enhanced greenhouse effect in 2015

(i) Complete Figure 6b by plotting the data below.

(2)

| Gas | % contribution to the enhanced greenhouse effect |
|----------------|--|
| Carbon dioxide | 76 |
| Methane | 16 |



(ii) Explain **one** negative effect that climate change is having on people.

(2)

.....

.....

.....

.....

(c) Tropical cyclones (hurricanes and typhoons) are extreme weather events that develop under specific conditions.

Study Figure 6c in the Resource Booklet.

Suggest **one** reason why the frequency of hurricanes varies monthly in the North Atlantic region.

Use evidence from Figure 6c in your answer.

(3)

.....

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.....

.....



(d) Study Figure 6d below.

Final death toll in Mozambique may top 1000

UK government donates £6 million in aid to help cyclone survivors

Cholera outbreak fuels death toll in cyclone-hit city

Lorry companies forced to divert around cyclone hit countries

Many people go hungry as they are without food and shelter

Businesses suffer as electricity pylons are uprooted

Figure 6d

Headlines following Tropical Cyclone Idai, March 2019

Suggest **two** different economic impacts of Tropical Cyclone Idai.

Use evidence from Figure 6d in your answer.

(4)

1

.....

.....

.....

2

.....

.....

.....



(e) Assess the following statement.

The impacts of drought are much greater in developing or emerging countries than in developed countries.

(8)

(Total for Question 6 = 23 marks)

TOTAL FOR SECTION B = 30 MARKS



P 6 5 3 9 1 R A 0 1 9 2 8

SECTION C

Ecosystems, Biodiversity and Management

Answer ALL questions. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

Spelling, punctuation, grammar and specialist terminology will be assessed in Question 7(i).

- 7 Large-scale ecosystems (biomes), such as deserts, are found in different parts of the world.

(a) Study Figure 7a in the Resource Booklet.

(i) Identify the correct statement.

(1)

| | |
|--------------------------|---|
| <input type="checkbox"/> | A The temperature is highest in May. |
| <input type="checkbox"/> | B The maximum monthly temperature is 36°C. |
| <input type="checkbox"/> | C The temperature is lowest in November. |
| <input type="checkbox"/> | D The minimum monthly temperature is 18°C. |

(ii) Calculate the mean monthly precipitation shown in Figure 7a.

You must show your working in the space below.

Answer to **two** decimal places.

(2)

.....mm



(b) Study Figures 7b and 7c in the Resource Booklet.

For each figure, suggest **one** way that the biosphere is providing resources for people.

(4)

Figure 7b

Figure 7c

(c) The UK has its own variety of distinctive ecosystems that it relies on.

(i) State **one** terrestrial ecosystem in the UK.

(1)

(ii) Explain **one** reason why UK marine ecosystems are an important resource.

(2)



- (d) The area of deciduous woodlands is increasing in some parts of the world.

Study Figure 7d below.

| Year | Approximate area (hectares) |
|------|-----------------------------|
| 1990 | 1 343 012 |
| 2017 | 1 415 918 |

Figure 7d

Approximate area of deciduous woodlands in the UK

Calculate the percentage increase in the area of deciduous woodlands in the UK between 1990 and 2017.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

..... %

- (e) Explain **one** way that animals in deciduous woodlands have adapted to their environment.

(2)

.....

.....

.....

.....



(f) Explain **one** economic cause of deforestation in deciduous woodlands.

(3)

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(g) Tropical rainforests show a range of distinguishing features.

Study Figure 7e below.

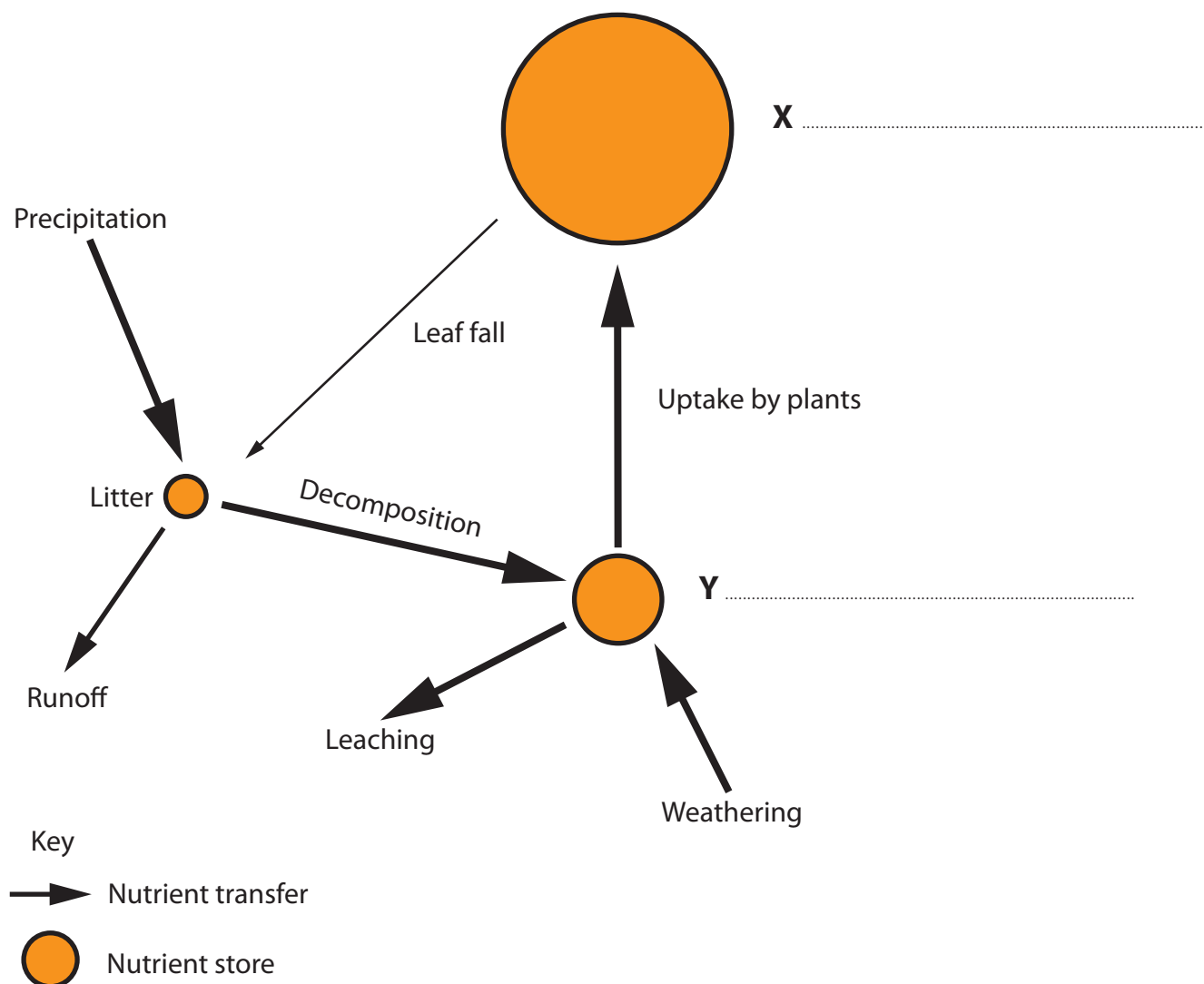


Figure 7e

The tropical rainforest nutrient cycle

Complete Figure 7e by labelling stores X and Y.

(2)



(h) Explain **one** reason why the tropical rainforest nutrient cycle is so rapid.

(3)

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In this question, up to four additional marks will be awarded for your spelling, punctuation, grammar and for your use of specialist terminology.

- (i) Evaluate the extent to which sustainable management strategies have helped to protect a tropical rainforest in a named region.

(8)

Named region



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(Spelling, punctuation, grammar and use of specialist terminology = 4 marks)
(Total for Question 7 = 34 marks)

TOTAL FOR SECTION C = 34 MARKS
TOTAL FOR PAPER = 94 MARKS



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Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Time 1 hour 30 minutes

**Paper
reference**

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Geography A

PAPER 1: The Physical Environment

Resource Booklet

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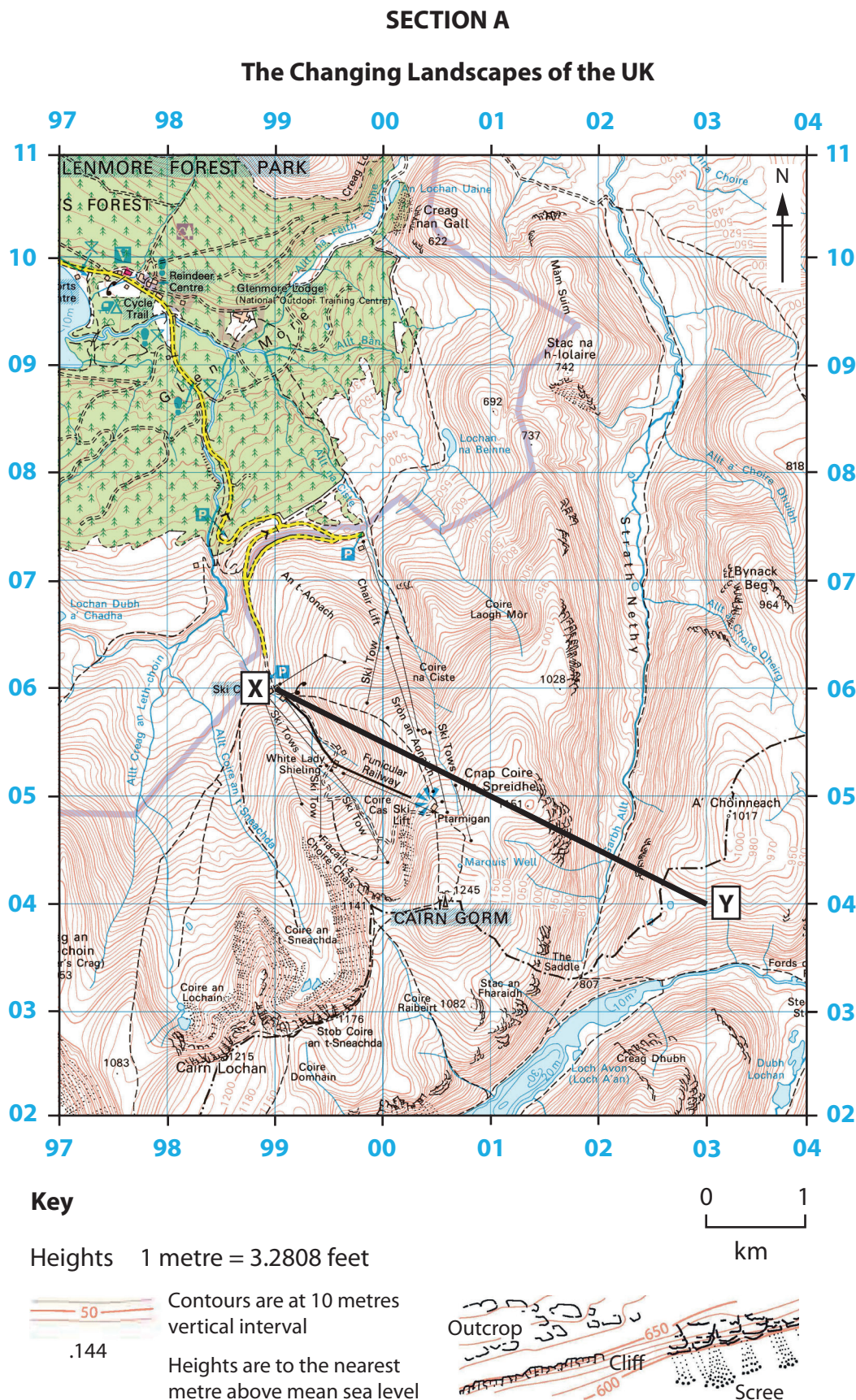
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P 6 5 3 9 1 R A

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Where two heights are shown, the first is the height of the natural ground in the location of the triangulation pillar, and the second (in brackets) to a separate point which is the natural summit

Figure 1

An area of the Scottish Highlands



Figure 2a

A coastal landscape in Norfolk, England

The beach consists of a wide sandy lower beach and a narrower shingle upper beach.

Almost all the coastline is highly developed with housing, shops and industry.

The existing defences have not been very well maintained.



40 000m³ of sediment is transported along this stretch of coast each year by longshore drift.

Sea levels are rising along this coastline.

There have been 50, mostly minor, reported flood incidents in Worthing since 1983.

Figure 2b

Coastal defences at Worthing, England



Figure 3a

A river landscape in Suffolk, England

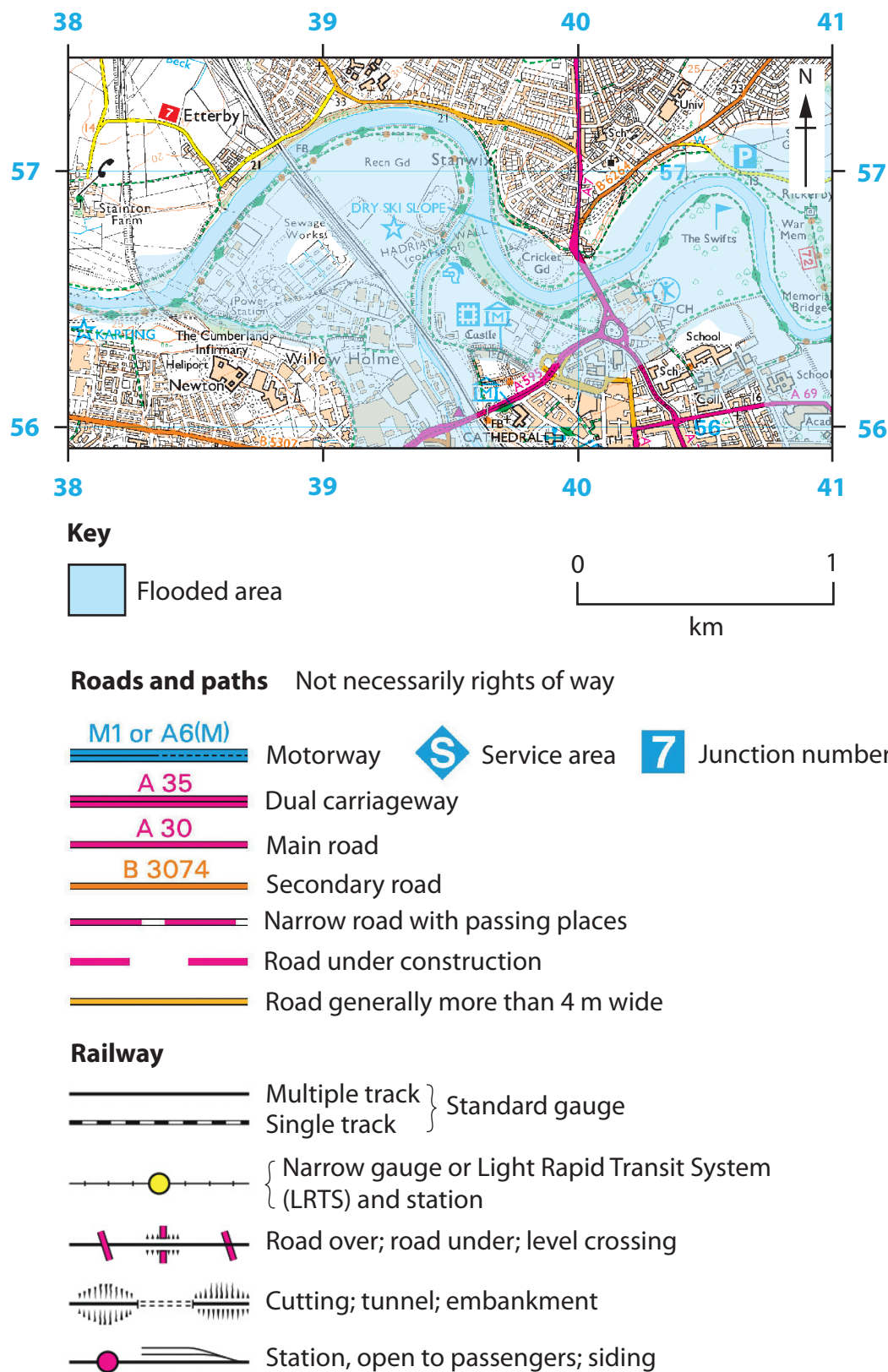
**Figure 3b****Extent of flooding on River Eden, Carlisle, England in December 2015**



Figure 3c

Rescue workers evacuating residents following flooding in Carlisle, December 2015



Figure 4a

A glaciated upland landscape in Cumbria, England

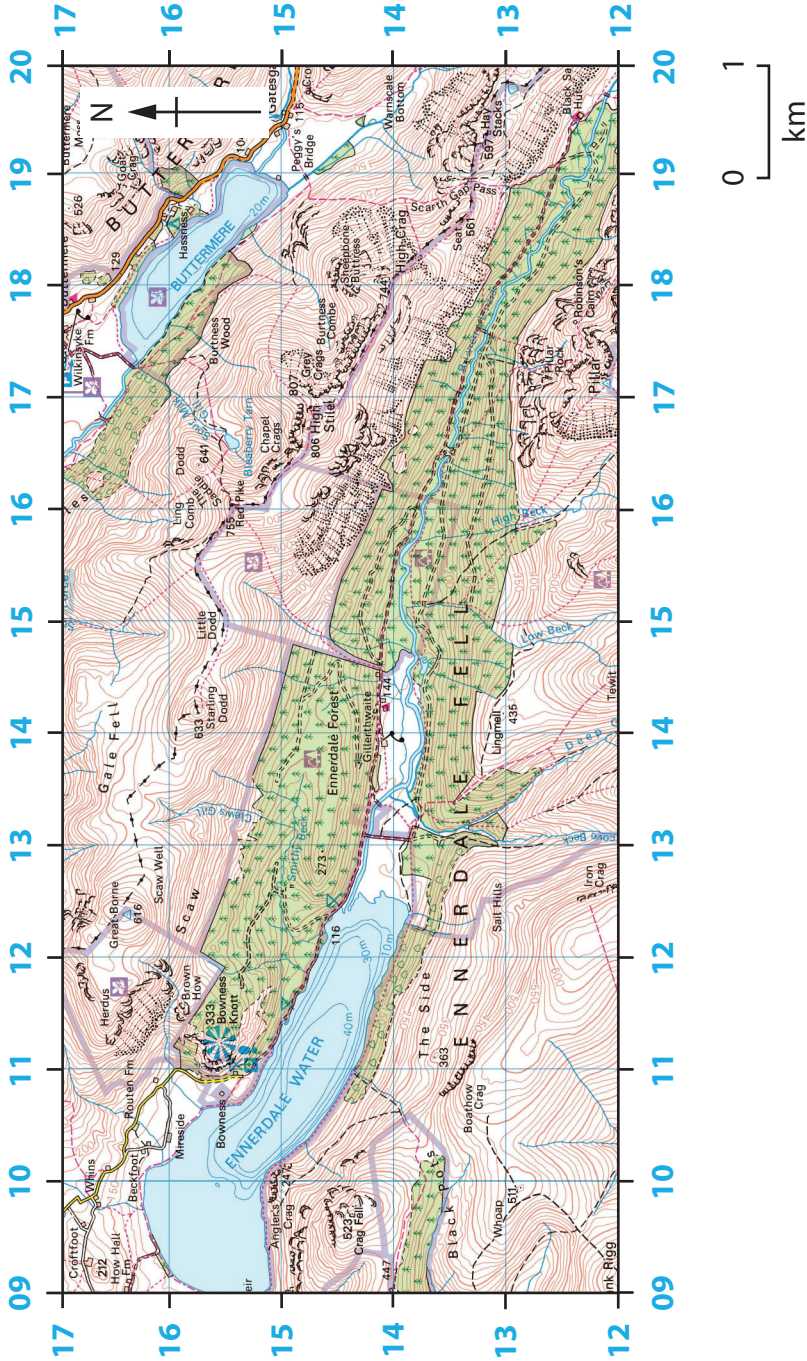
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FIGURE 4B BEGINS ON THE NEXT PAGE.

Ennerdale is a glaciated valley in the Lake District. It is a popular place for walkers and climbers.

Sheep farming is being replaced by cattle grazing on some farms. Other farms have diversified, introducing activities and accommodation to attract tourists.

Although there is some natural oak woodland, large areas of conifer were planted in the 1930s. These are managed by the Forestry Commission.












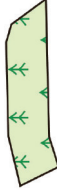

























The glacial moraines in this valley are some of the most complete in the whole of the Lake District.

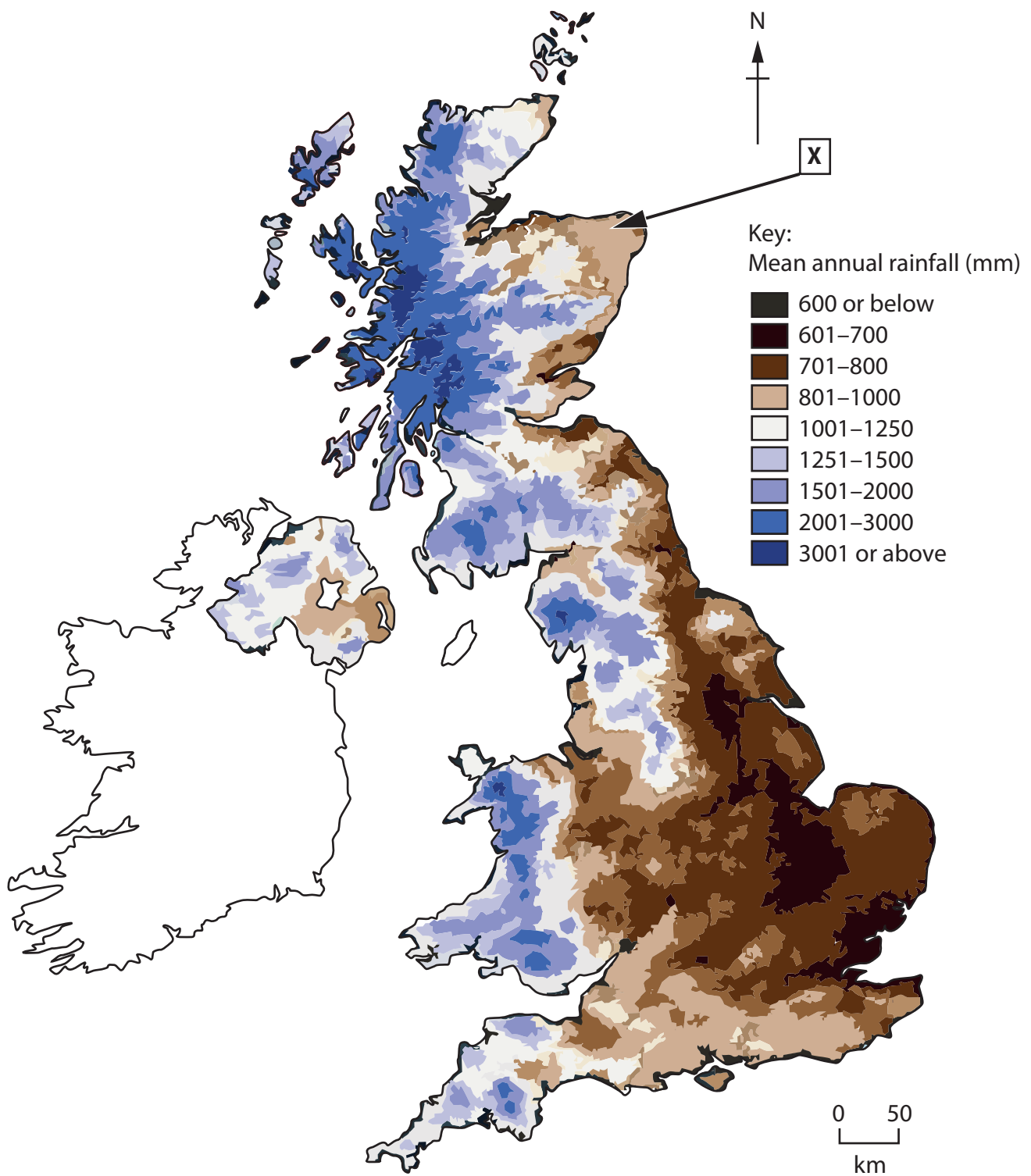
Ennerdale Water provides drinking water to the nearby town of Whitehaven.

Recreational use is concentrated along the northern and western shores of Ennerdale Water.

Figure 4b
A glaciated upland landscape in the Lake District, England

Key for Figure 4b

| | | | | | | | | |
|---|---|--|---|--|---|---------------------------------|---|---------------------|
|  P |  P&R | Parking, park and ride (all year/seasonal) |  X | Picnic site |  V | Visitor centre |  ▲ | Youth Hostel |
|  |  | Recreation/leisure/ sports centre |  | Selected places of tourist interest |  | Walks/trails |  | Coniferous wood |
|  |  | Phone, public/ emergency |  | Viewpoint |  | World Heritage site or area |  | Non-coniferous wood |
|  |  | Footbridge |  | Main road |  | Road under construction |  | Mixed wood |
|  |  | Secondary road |  | Secondary road |  | Narrow road with passing places | | |
|  |  | Bridge |  | Road generally more than 4m wide | | | | |
|  |  | Road generally less than 4m wide | | | | | | |
|  |  | Path / Other road, drive or track | | | | | | |
|  |  | Gradient: steeper than 20% (1 in 5), 14% to 20% (1 in 7 in 5) | | | | | | |
|  |  | Gates, Road tunnel | | | | | | |

SECTION B**Weather Hazards and Climate Change****Figure 5b****Mean annual rainfall in the UK, 1981–2010**

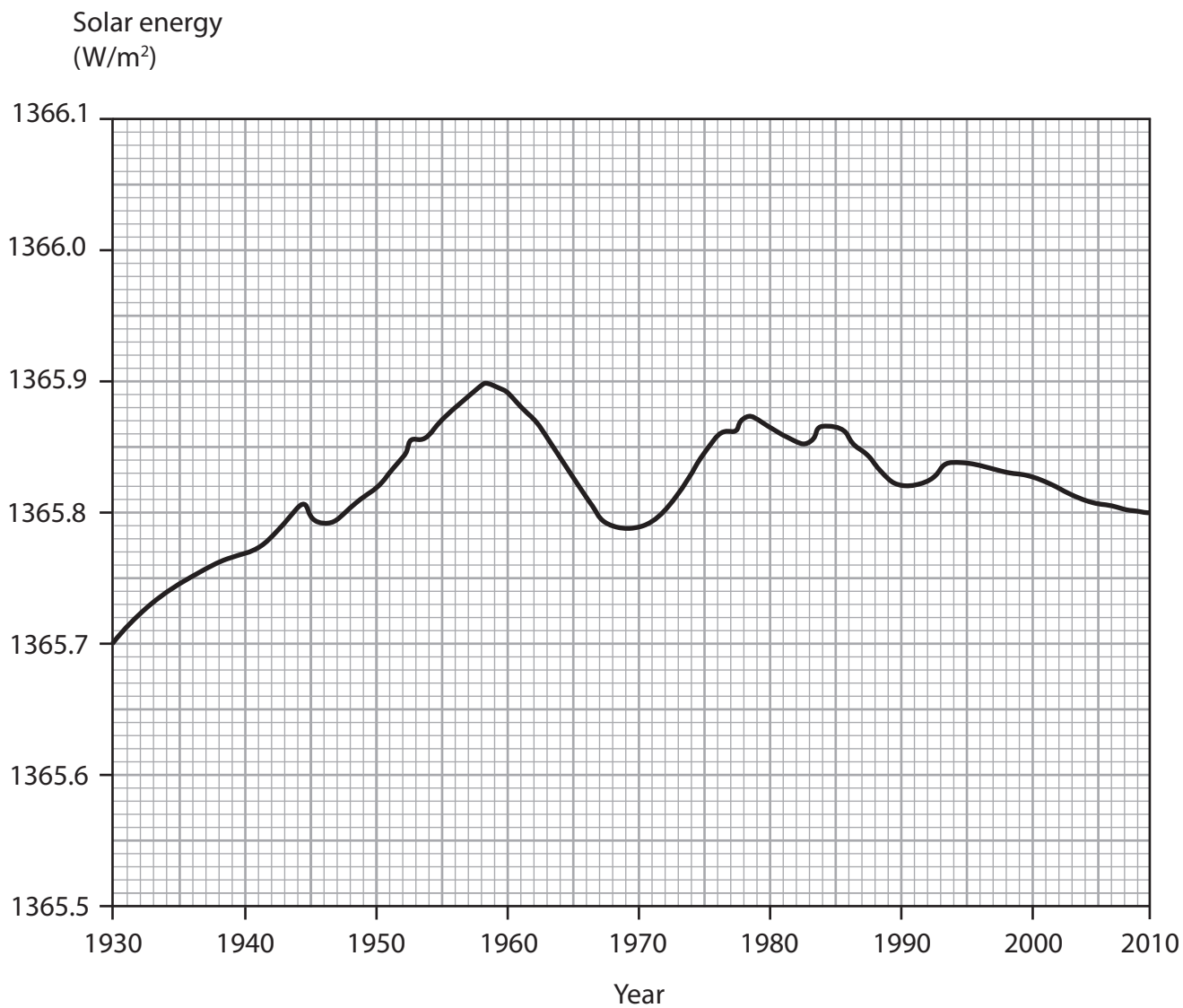


Figure 6a

Variation in solar energy received by the Earth, 1930–2010

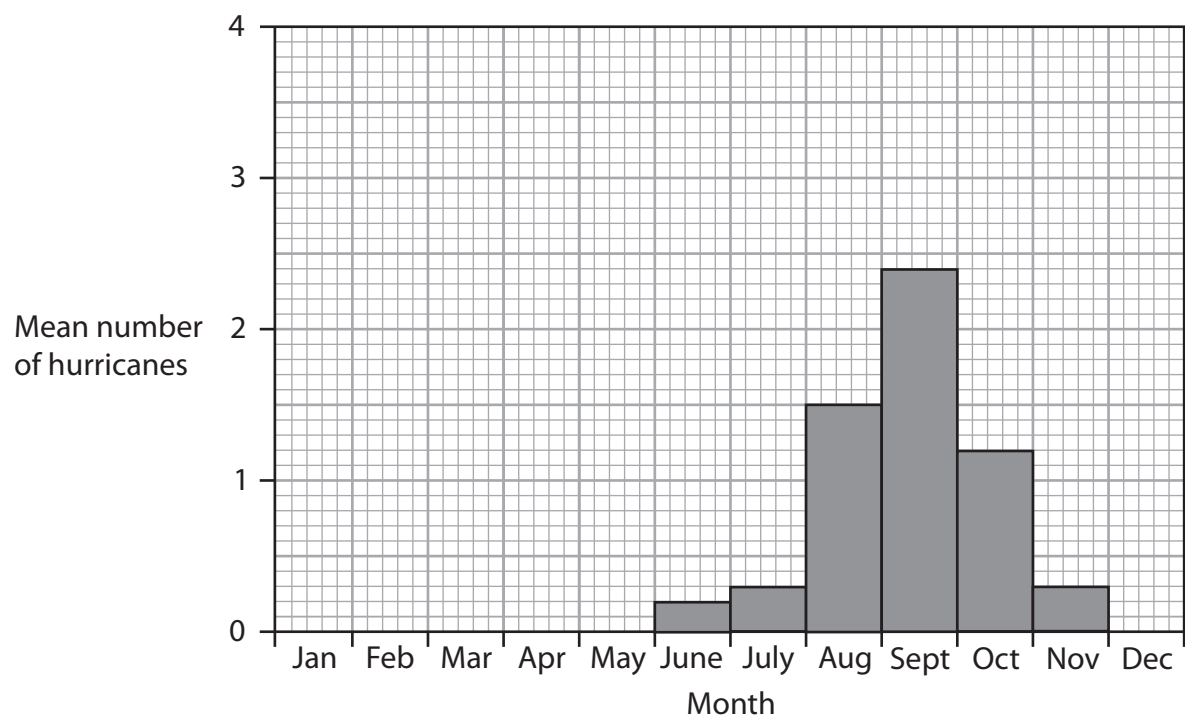
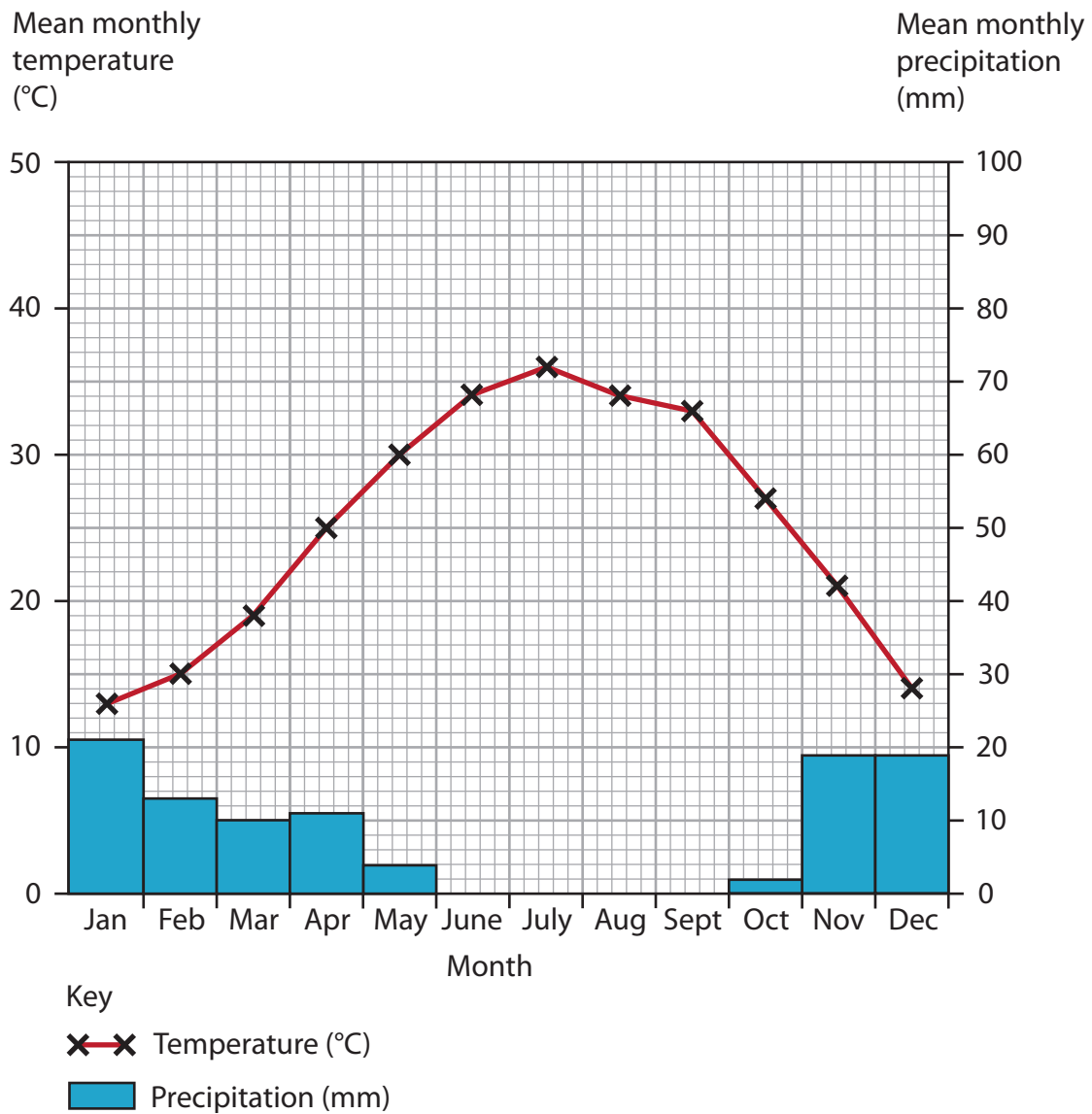


Figure 6c

Mean number of hurricanes in the North Atlantic region, 1851–2017

SECTION C**Ecosystems, Biodiversity and Management****Figure 7a****Climate graph for a desert biome in Shuwaikh, Kuwait**

| Monthly precipitation (mm) | Jan | Feb | Mar | Apr | May | June | Jul | Aug | Sept | Oct | Nov | Dec |
|----------------------------|-----|-----|-----|-----|-----|------|-----|-----|------|-----|-----|-----|
| | 21 | 13 | 10 | 11 | 4 | 0 | 0 | 0 | 0 | 2 | 19 | 19 |



Figure 7b

Resource exploitation in Belo Horizonte, Brazil



Figure 7c

Resource exploitation in Borneo, Malaysia

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