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

Time 1 hour 30 minutes

Paper reference **1GA0/01**

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 ▶

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

Pearson

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)

☒	**A** chalk
☒	**B** granite
☒	**C** sandstone
☒	**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

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(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)

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(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)

☒	**A** cave
☒	**B** spit
☒	**C** stack
☒	**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)

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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)

☒	**A** interlocking spur
☒	**B** gorge
☒	**C** point bar
☒	**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)

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(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)

☒	**A** corrie
☒	**B** drumlin
☒	**C** hanging valley
☒	**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

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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

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

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

(1)

☒	**A** 601–700 mm
☒	**B** 801–1000 mm
☒	**C** 1251–1500 mm
☒	**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)

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(Total for Question 5 = 7 marks)

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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/m^2

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

(2)

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

Study Figure 6b below.

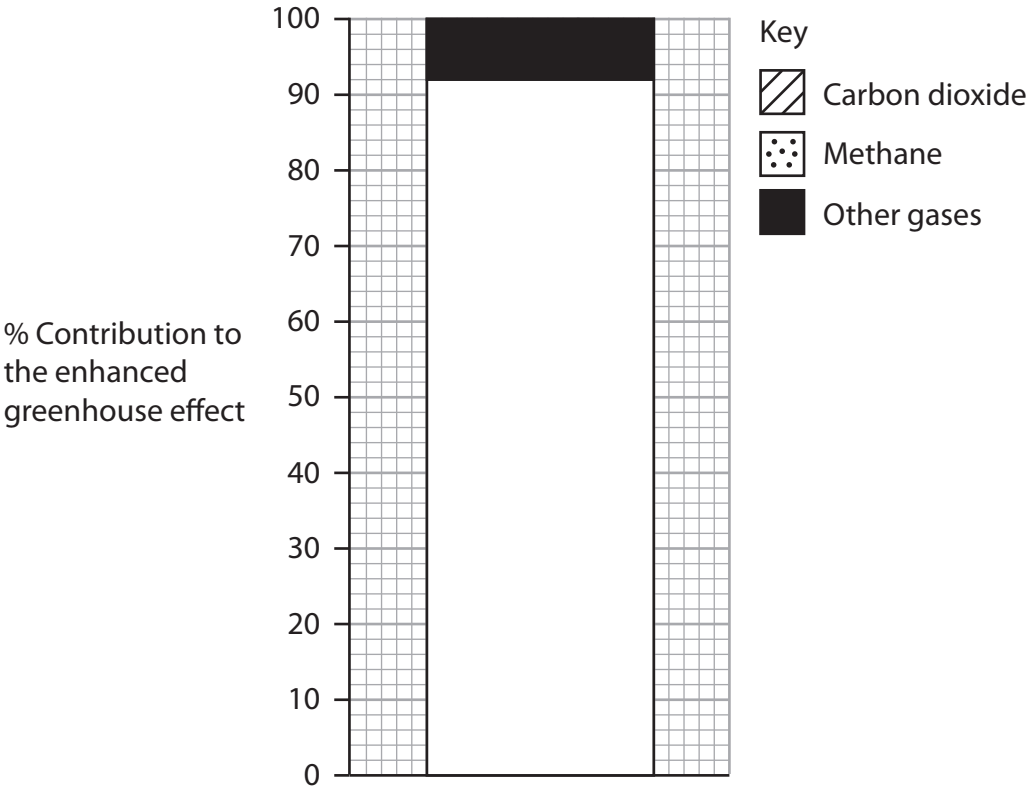


Figure 6b

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

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(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.

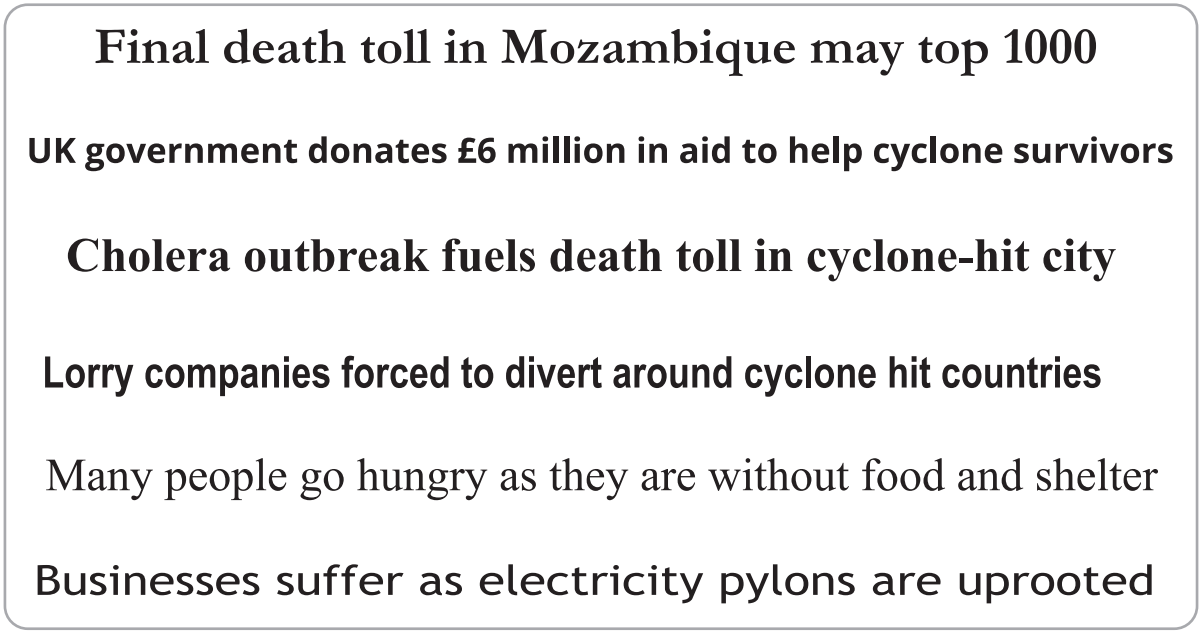


Figure 6d

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 .....

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2 .....

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(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

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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)

☒	**A** The temperature is highest in May.
☒	**B** The maximum monthly temperature is 36°C.
☒	**C** The temperature is lowest in November.
☒	**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

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(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)

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(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)

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(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.

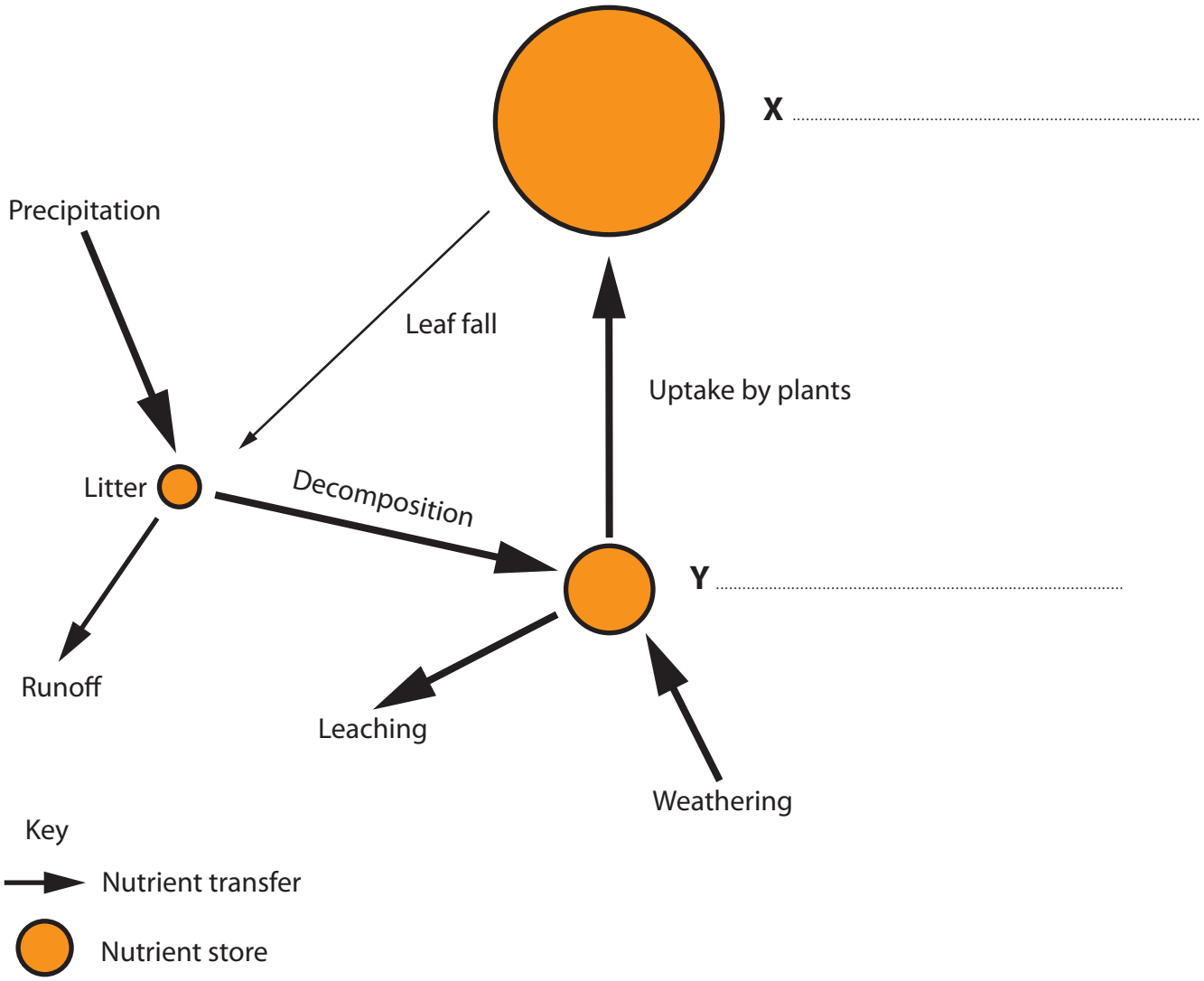


Figure 7e

The tropical rainforest nutrient cycle

Complete Figure 7e by labelling stores **X** and **Y**.

(2)

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(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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Time 1 hour 30 minutes

Paper reference **1GA0/01**

Geography A

PAPER 1: The Physical Environment

Resource Booklet

Do not return this Booklet with the question paper.

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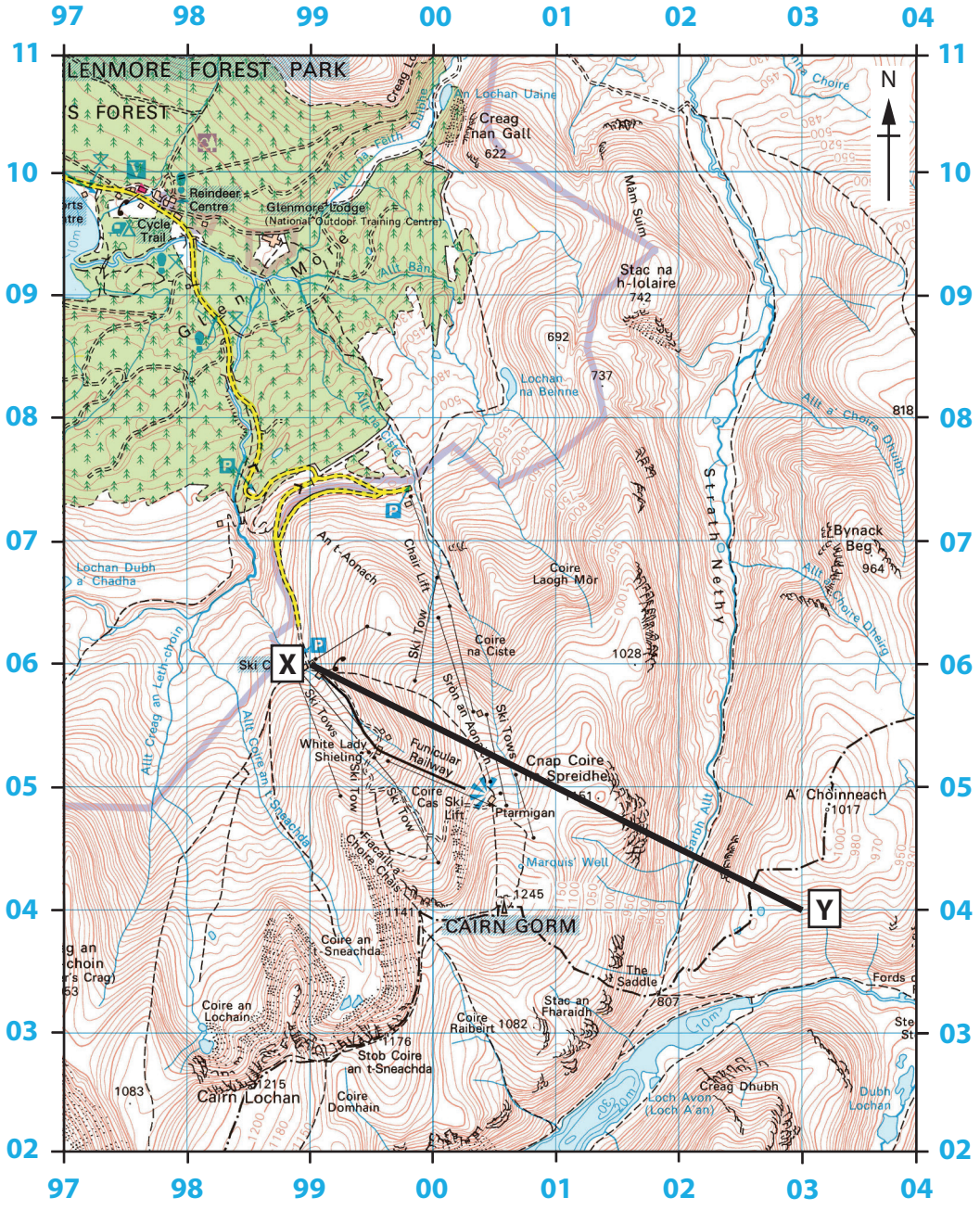
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SECTION A

The Changing Landscapes of the UK



Key

Heights 1 metre = 3.2808 feet

50 — Contours are at 10 metres vertical interval

.144 — Heights are to the nearest metre above mean sea level



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

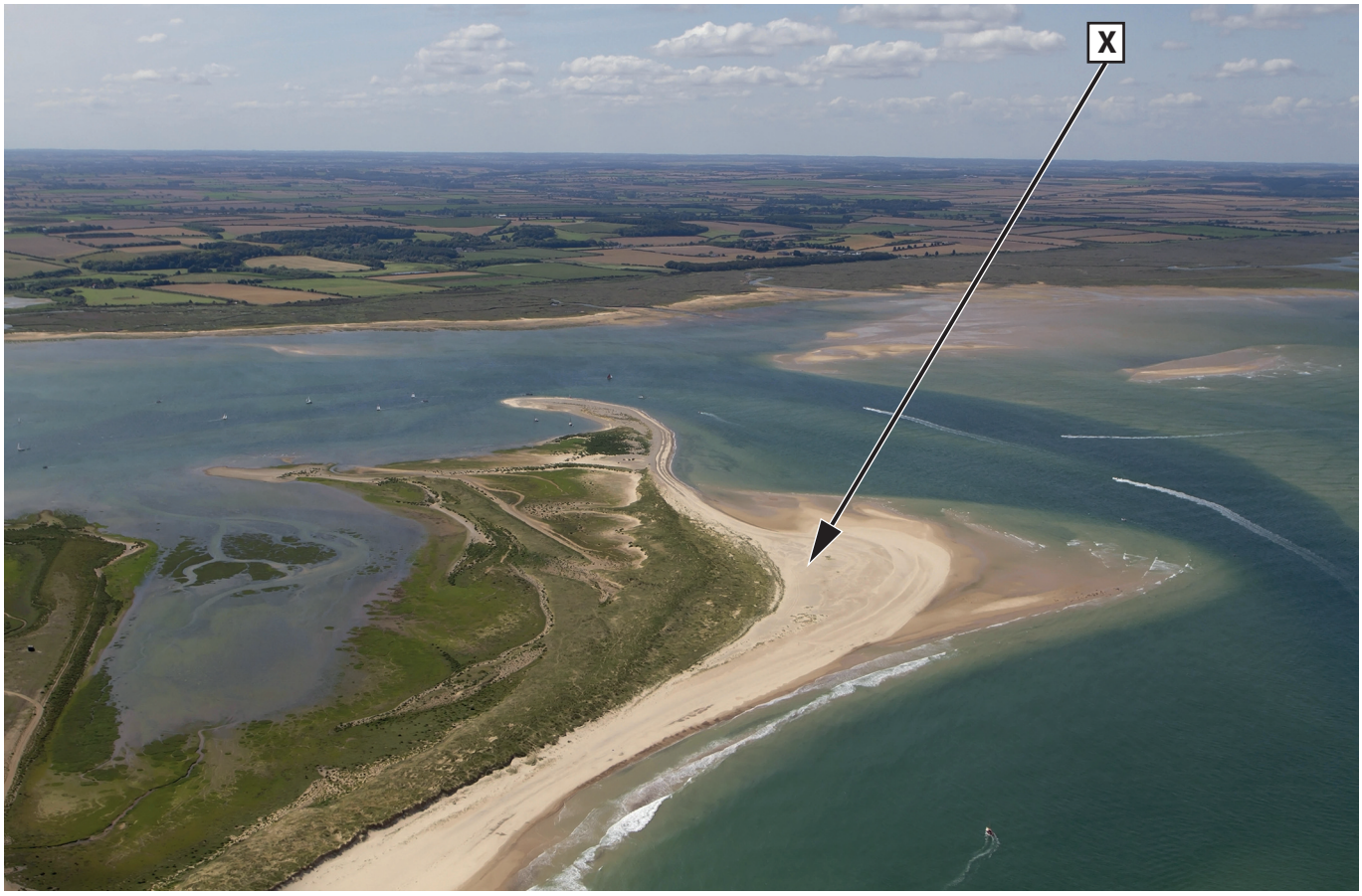


Figure 2a

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 000m^3 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.

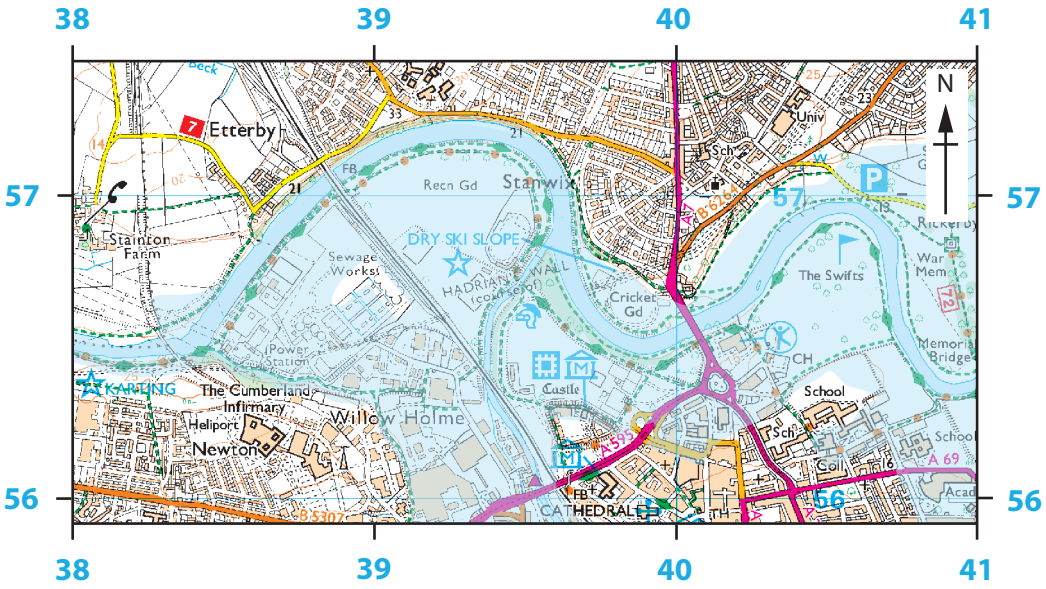
Figure 2b

Coastal defences at Worthing, England



Figure 3a

A river landscape in Suffolk, England



Key

Flooded area

0 1 km

Roads and paths Not necessarily rights of way

M1 or A6(M) Motorway

Service area

7 Junction number

A 35 Dual carriageway

A 30 Main road

B 3074 Secondary road

Narrow road with passing places

Road under construction

Road generally more than 4 m wide

Railway

Multiple track
Single track
} Standard gauge

Narrow gauge or Light Rapid Transit System (LRTS) and station

Road over; road under; level crossing

Cutting; tunnel; embankment

Station, open to passengers; siding

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

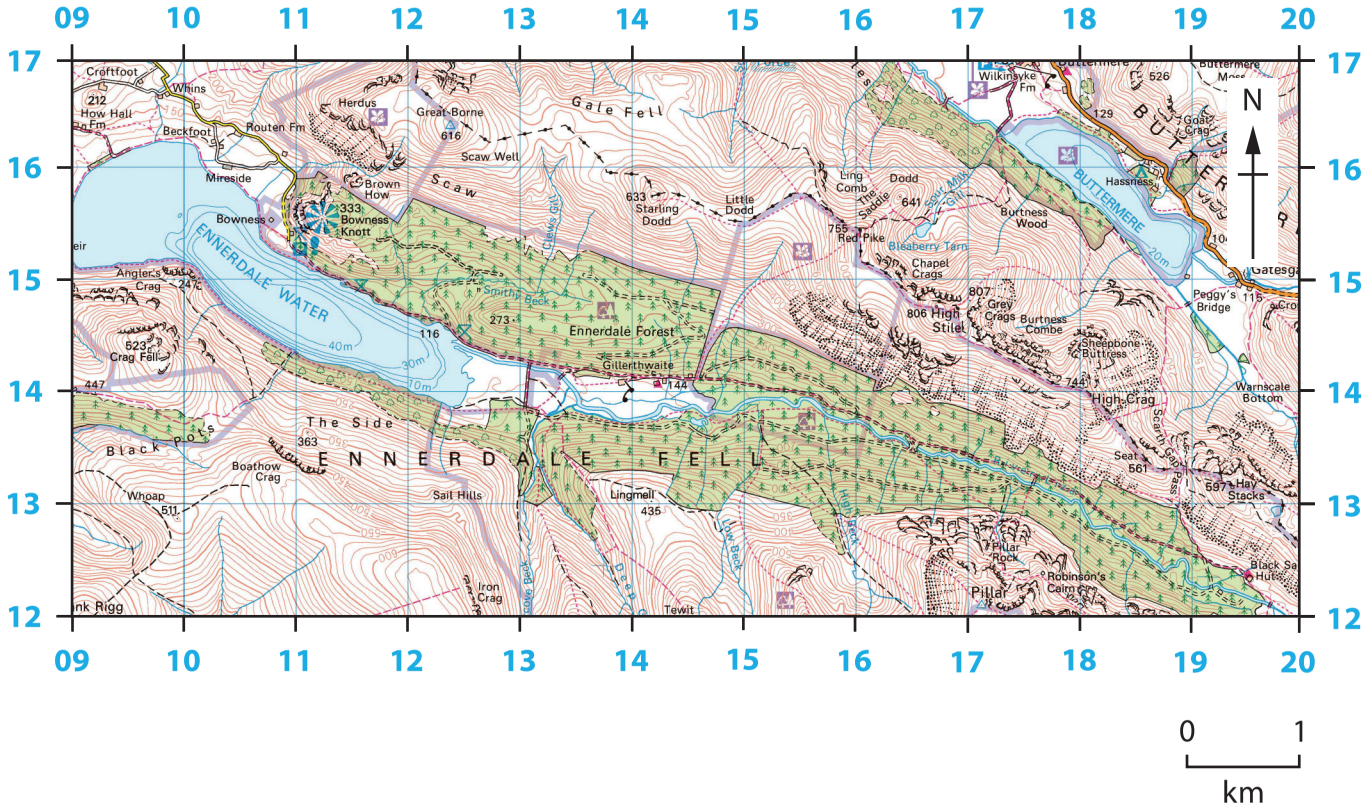
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FIGURE 4B BEGINS ON THE NEXT PAGE.

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



Parking, park and ride (all year/seasonal)


Picnic site



Visitor centre


Youth Hostel


Recreation/leisure/ sports centre


Selected places of tourist interest


Walks/trails


Coniferous wood


Non-coniferous wood


Phone, public/ emergency


Viewpoint


World Heritage site or area


Mixed wood

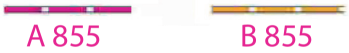


Main road

Road under construction



Secondary road



Narrow road with passing places



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

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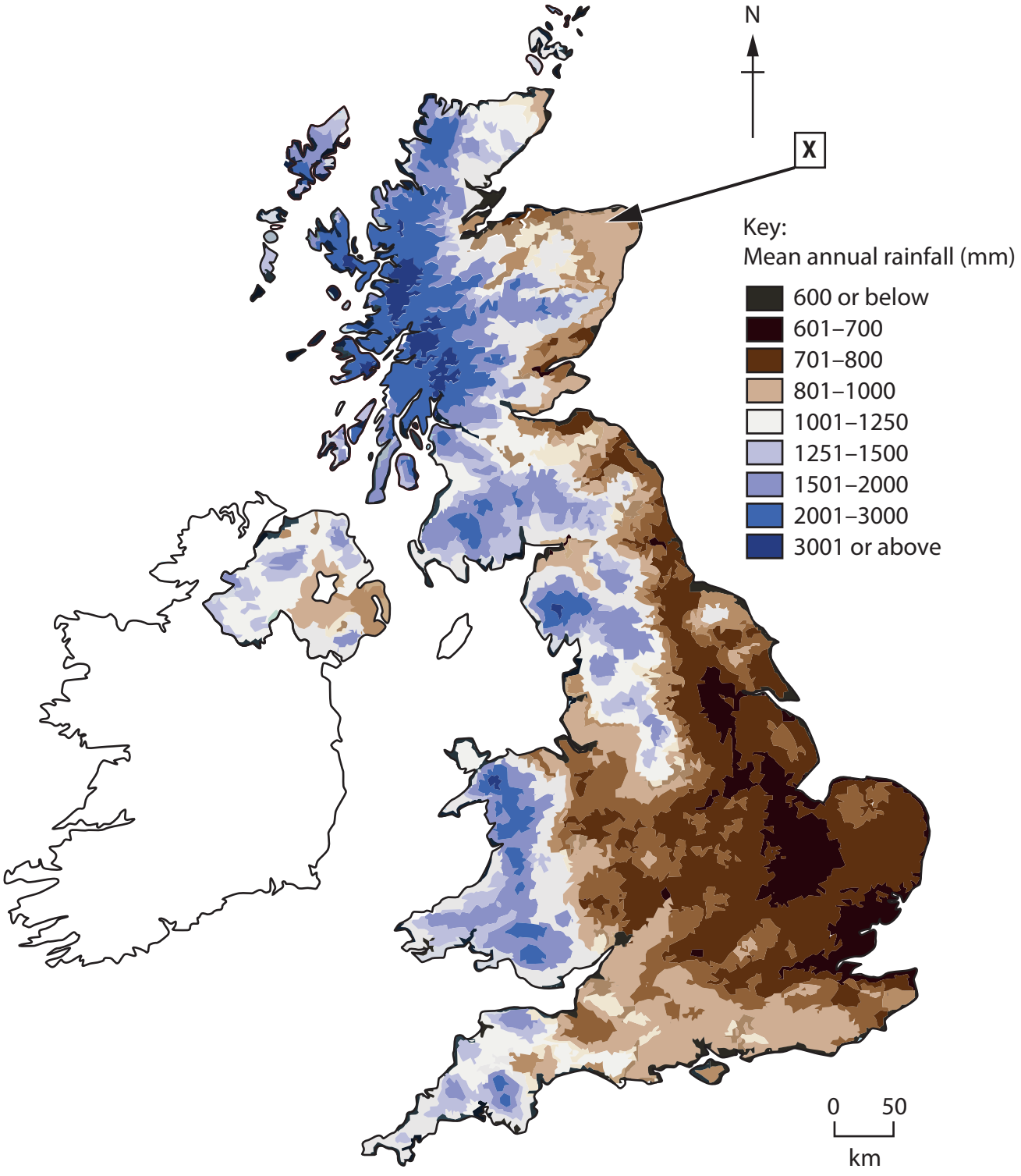


Figure 5b

Mean annual rainfall in the UK, 1981–2010

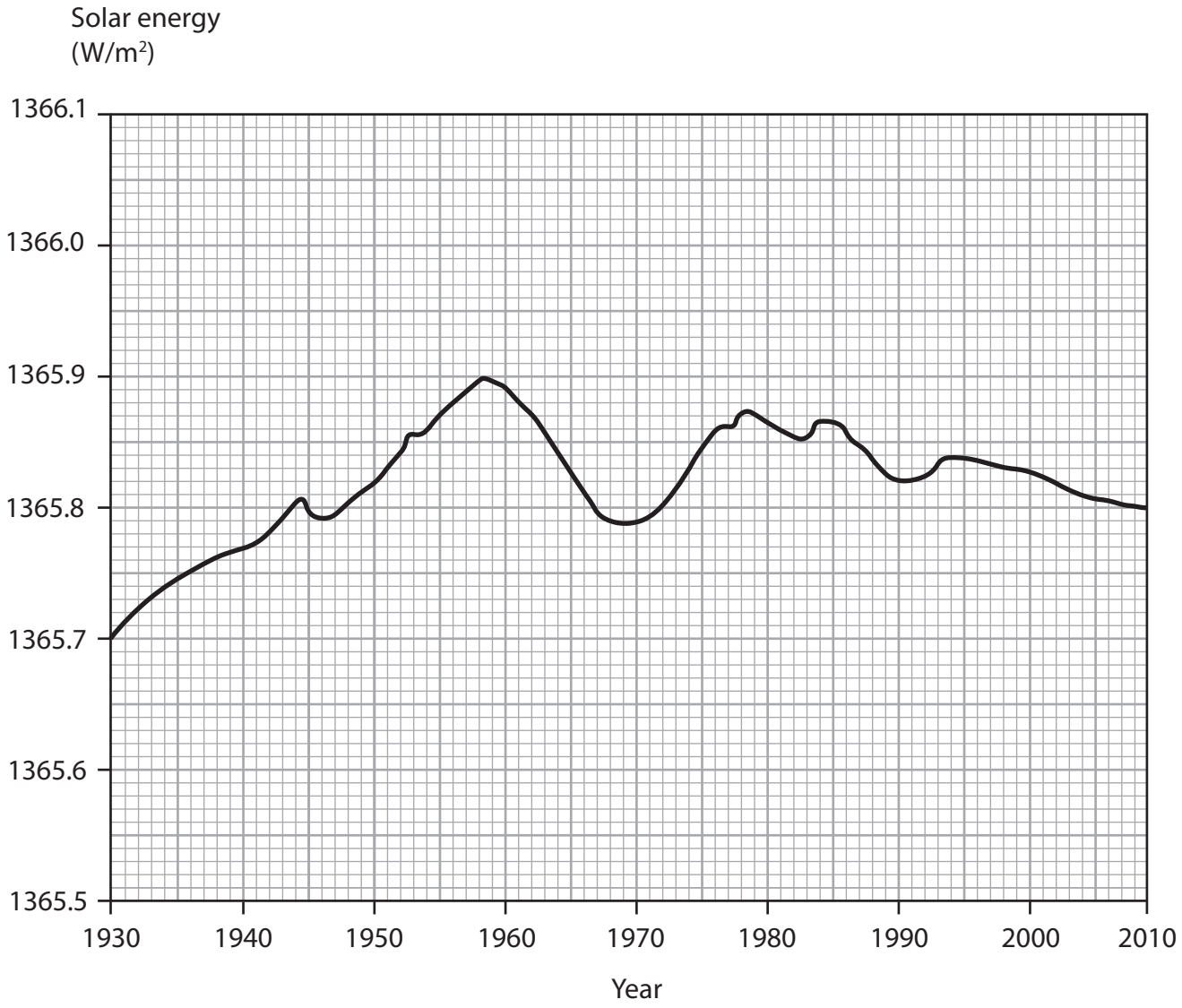


Figure 6a

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

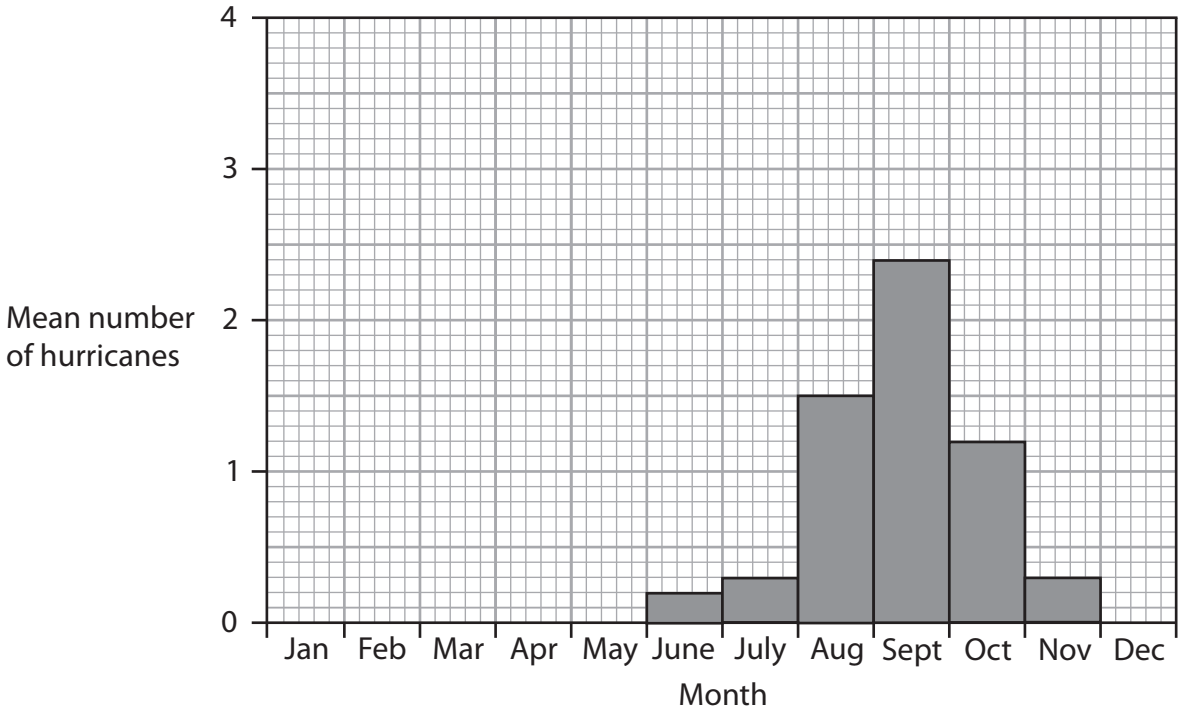


Figure 6c

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

SECTION C

Ecosystems, Biodiversity and Management

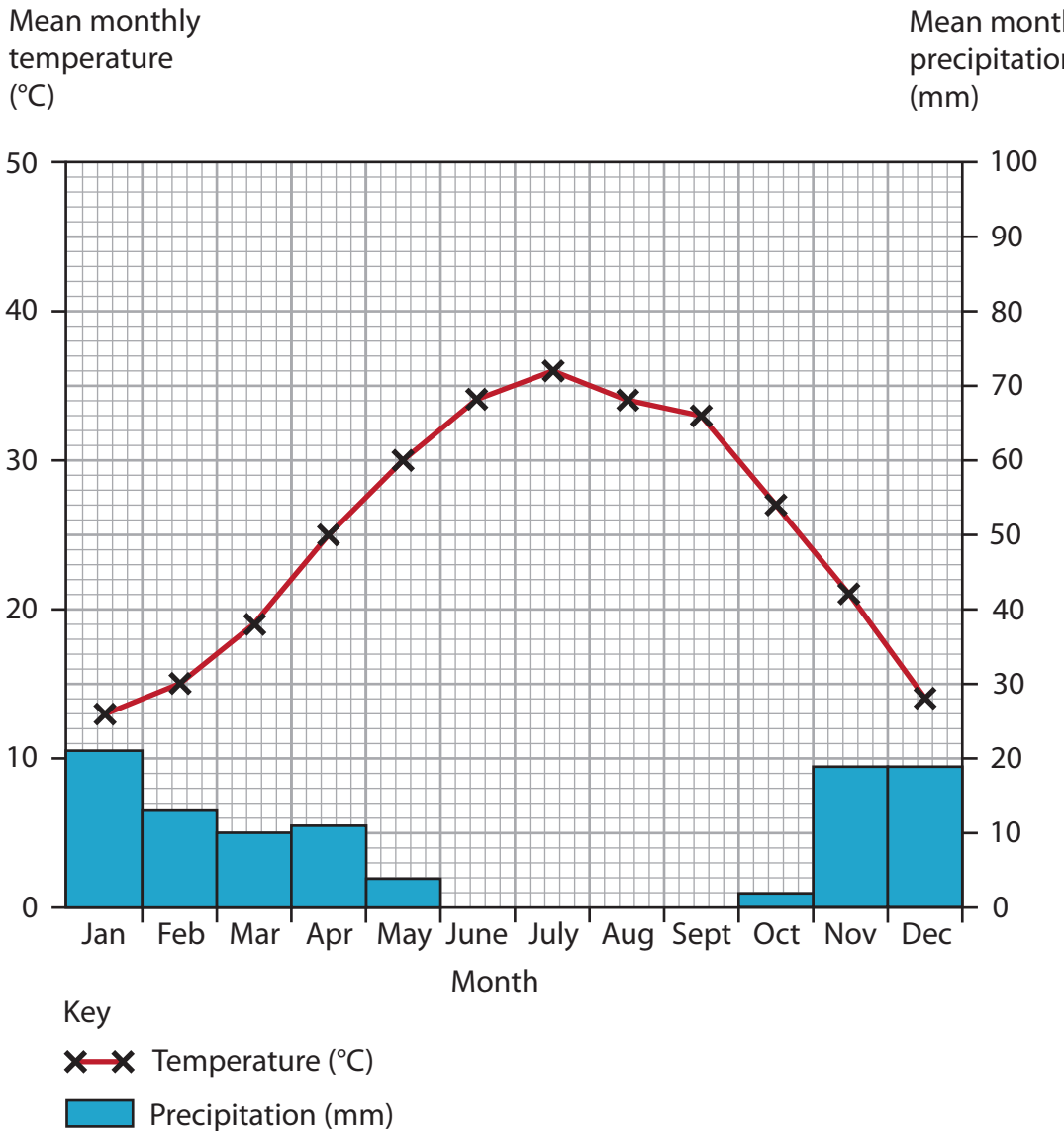


Figure 7a

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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