

Please check the examination details below before entering your candidate information

Candidate surname					Other names				
Centre Number					Candidate Number				

Pearson Edexcel International GCSE (9–1)

Wednesday 13 May 2026

Morning (Time: 1 hour 10 minutes) Paper reference **4GE1/01**

Geography
PAPER 1: Physical geography

You must have:
Resource booklet (enclosed), 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 **two** questions from Questions 1, 2 and 3.
- In Section B, answer **one** question from Questions 4, 5 and 6.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- Calculators may be used.

Information

- The total mark for this paper is 70.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.
- You should show all your working out with your answer.

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SECTION A

Answer TWO questions from this section.

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 ☒.

If you answer Question 1, put a cross in the box ☒ .

1 River environments

(a) Identify **one** type of river erosion.

(1)

- ☐ A abrasion
- ☐ B rockfall
- ☐ C sliding
- ☐ D slumping

(b) Identify the best definition of water surplus.

(1)

- ☐ A more water supply than demand
- ☐ B not enough water to meet demand
- ☐ C to supply crops with water using artificial methods
- ☐ D waste material carried away by sewers

(c) (i) Define the term **river drainage basin**.

(1)

(ii) Study Figure 1a in the Resource Booklet.

Identify the river drainage basin feature which could be found at **X**.

(1)

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(d) Explain **one** way to improve river water quality.

(2)

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(e) Study Figure 1b in the Resource Booklet.

Suggest **two** advantages of the flood prediction strategy shown.

You **must** refer to the resource in your answer.

(4)

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(f) Explain how **precipitation** and **vegetation** can affect river regimes.

(4)

precipitation

vegetation

(g) Explain **one** way climate can affect weathering processes.

(3)



(h) Study Figure 1c in the Resource Booklet.

Analyse the reasons for changes in a river’s long profile.

You **must** refer to the resource in your answer.

(8)

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(Total for Question 1 = 25 marks)



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

2 Coastal environments

(a) (i) Identify the best definition of coastal erosion.

(1)

- ☐ **A** land rises over time
- ☐ **B** sediment bounces along
- ☐ **C** sediment rolls along
- ☐ **D** wearing away of land

(ii) Define the term **longshore drift**.

(1)

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(b) (i) Identify **one** coastal soft engineering strategy.

(1)

- ☐ **A** channel straightening
- ☐ **B** cliff regrading
- ☐ **C** dam
- ☐ **D** reservoir

(ii) Explain **one** advantage of coastal hard engineering.

(2)

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(c) Explain the characteristics of constructive waves.

(3)

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

Suggest **two** ways a change in abiotic characteristics can affect the biotic parts of this ecosystem.

You **must** refer to the resource in your answer.

(4)

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

Identify **one** store shown on the nutrient cycle.

(1)

(f) Explain **two** features of a mangrove ecosystem.

(4)

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(g) Study Figure 2c in the Resource Booklet.

Analyse the causes of coastal flooding.

You **must** refer to the resource in your answer.

(8)

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(Total for Question 2 = 25 marks)



If you answer Question 3, put a cross in the box ☐.

3 Hazardous environments

(a) Identify **one** type of tectonic plate boundary.

(1)

- ☐ **A** composite
- ☐ **B** conservative
- ☐ **C** hotspot
- ☐ **D** trench

(b) Identify the best definition of a tsunami.

(1)

- ☐ **A** a dense, fast-moving flow of solidified lava, ash and gases
- ☐ **B** a mixture of water and rock that flows down a slope
- ☐ **C** a sudden shaking of parts of the Earth's surface
- ☐ **D** a tall wave caused by displacement of a large volume of water

(c) Define the term **epicentre**.

(1)



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

Suggest **one** advantage and **one** disadvantage of using remote sensing and GIS in earthquake hazard management.

You **must** refer to the resource in your answer.

(4)

advantage

disadvantage

(e) Study Figure 3b in the Resource Booklet.

Identify the type of hazard this scale is used to measure.

(1)

(f) Explain how the Coriolis force can affect the formation of tropical cyclones.

(2)



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(g) Explain how **one** scale measures tropical cyclones.

(3)

(h) Explain **two** long-term impacts of tropical cyclones.

(4)

1

2



P 7 9 0 0 2 A 0 1 3 3 2

(i) Study Figure 3c in the Resource Booklet.

Analyse the reasons why people continue to live in areas that have volcanoes on constructive plate boundaries.

You **must** refer to the resource in your answer.

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(Total for Question 3 = 25 marks)

TOTAL FOR SECTION A = 50 MARKS



SECTION B

Geographical Enquiry

Answer ONE questions from this section.

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 ☒.

If you answer Question 4, put a cross in the box ☒ .

4 Investigating river environments

A group of students carried out an enquiry to investigate the similarities and differences between three rivers.

- (a) Identify **one** health and safety risk the students may have faced when collecting data for their river investigation.

(1)

- ☒ **A** inaccurate data
- ☒ **B** not using a stopwatch
- ☒ **C** slipping on rock
- ☒ **D** small sample size

- (b) State **one** type of qualitative data the students could use in their enquiry.

(1)

- (c) Explain **one** reason why the students' quantitative data might be inaccurate.

(2)

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

Calculate the **upper quartile** for the river depth at site 4.

Give your answer to **one** decimal place.

Show your working below.

(2)

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

Calculate the **interquartile range** for the river depth at site 4.

Show your working below.

(1)

..... IQR



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

Plot the data for site 3 and site 8 from Figure 4b (shown in the Resource Booklet) to complete Figure 4c in the Question Paper.

(2)

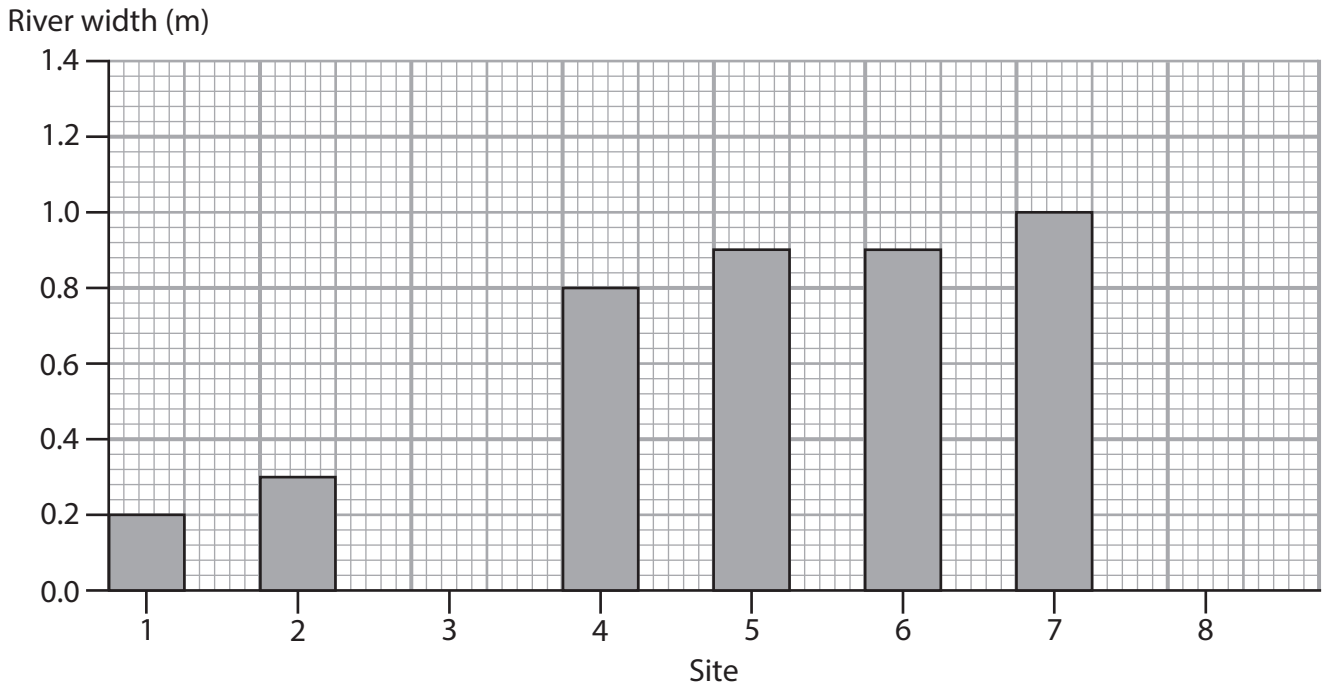


Figure 4c

(f) Study Figure 4c in the Question Paper.

Explain **one** limitation of the data presentation technique shown in Figure 4c.

(3)

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(g) You have studied a river environment as part of your own geographical enquiry.
Evaluate how useful your secondary data was in helping you reach a valid conclusion.

(8)

Title of your geographical enquiry

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(Total for Question 4 = 20 marks)



If you answer Question 5, put a cross in the box ☐.

5 Investigating coastal environments

A group of students carried out an enquiry to investigate the influence of longshore drift on three different beaches along a stretch of coast.

- (a) Identify **one** health and safety risk the students may have faced when collecting data for their coastal investigation.

(1)

- ☐ **A** inaccurate data
- ☐ **B** not using a stopwatch
- ☐ **C** slipping on rock
- ☐ **D** small sample size

- (b) State **one** type of qualitative data the students could use in their enquiry.

(1)

- (c) Explain **one** reason why the students' quantitative data might be inaccurate.

(2)



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(d) (i) Study Figure 5a in the Resource Booklet.

Calculate the **upper quartile** for the pebble size at site 4.

Give your answer to **one** decimal place.

Show your working below.

(2)

(ii) Study Figure 5a in the Resource Booklet.

Calculate the **interquartile range** for the pebble size at site 4.

Show your working below.

(1)

..... IQR



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

Plot the data for angular and well rounded pebble shape from Figure 5b (shown in the Resource Booklet) to complete Figure 5c in the Question Paper.

(2)

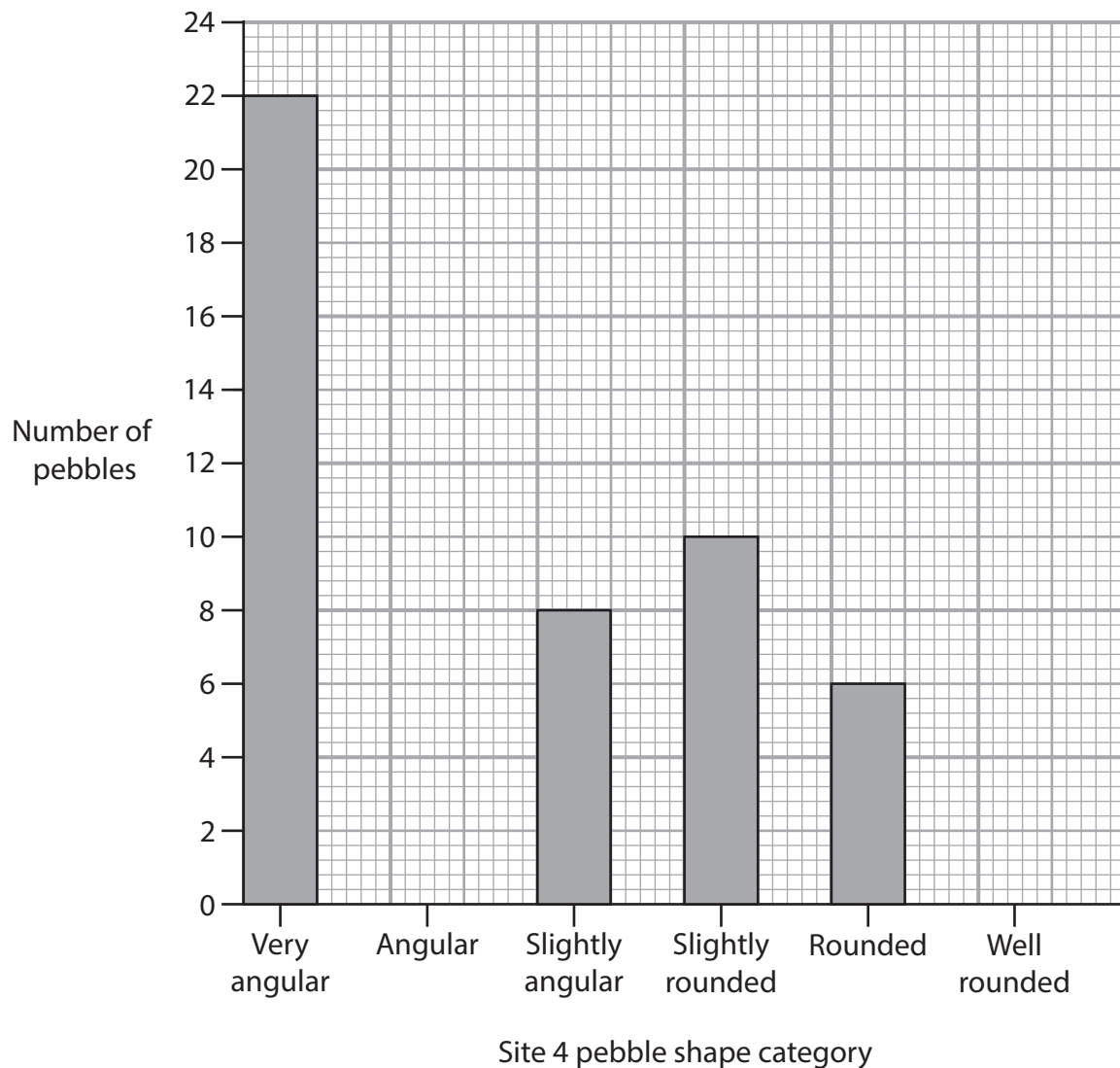


Figure 5c

(f) Study Figure 5c in the Question Paper.

Explain **one** limitation of the data presentation technique shown in Figure 5c.

(3)

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If you answer Question 6, put a cross in the box ☐.

6 Investigating hazardous environments (weather hazards)

A group of students carried out an enquiry to investigate the similarities and differences in weather at three locations at risk from a tropical cyclone.

- (a) Identify **one** health and safety risk the students may have faced when collecting data for their weather hazard investigation.

(1)

- ☐ **A** blown over
- ☐ **B** inaccurate data
- ☐ **C** not using a stopwatch
- ☐ **D** small sample size

- (b) State **one** type of qualitative data the students could use in their enquiry.

(1)

- (c) Explain **one** reason why the students' quantitative data might be inaccurate.

(2)

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- (d) (i) Study Figure 6a in the Resource Booklet.

Calculate the **upper quartile** for the temperature at site 4.

Give your answer to **one** decimal place.

Show your working below.

(2)

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

Calculate the **interquartile range** for the temperature at site 4.

Show your working below.

(1)

..... IQR



P 7 9 0 0 2 A 0 2 7 3 2

(e) Study Figure 6b in the Resource Booklet.

Plot the data for site 3 and site 8 from Figure 6b (shown in the Resource Booklet) to complete Figure 6c in the Question Paper.

(2)

Amount of
rainfall (mm)

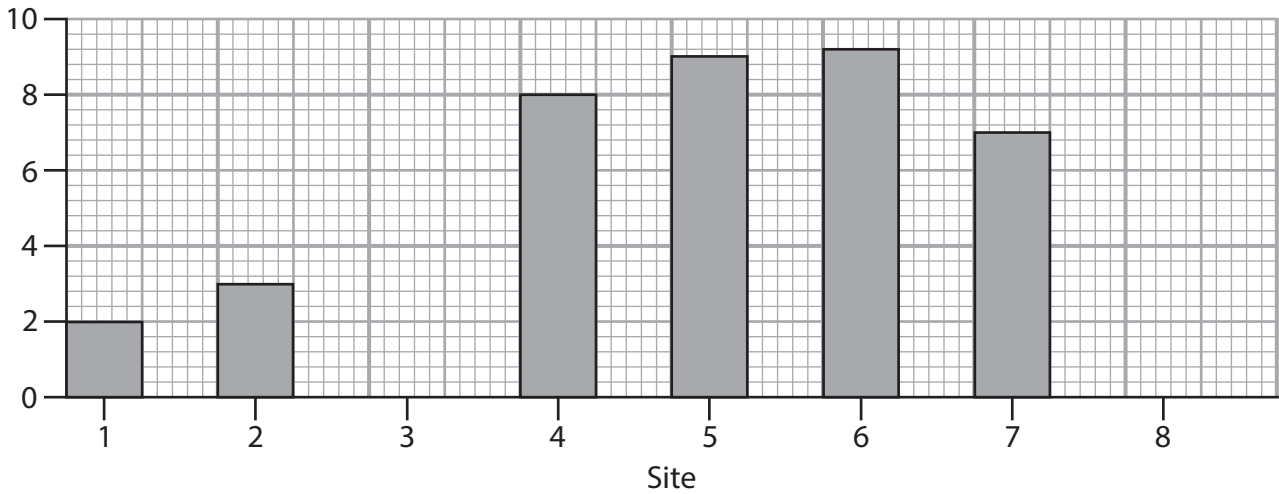


Figure 6c

(f) Study Figure 6c in the Question Paper.

Explain **one** limitation of the data presentation technique shown in Figure 6c.

(3)

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Evaluate how useful your secondary data was in helping you reach a valid conclusion.

Title of your geographical enquiry



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(Total for Question 6 = 20 marks)

TOTAL FOR SECTION B = 20 MARKS
TOTAL FOR PAPER = 70 MARKS



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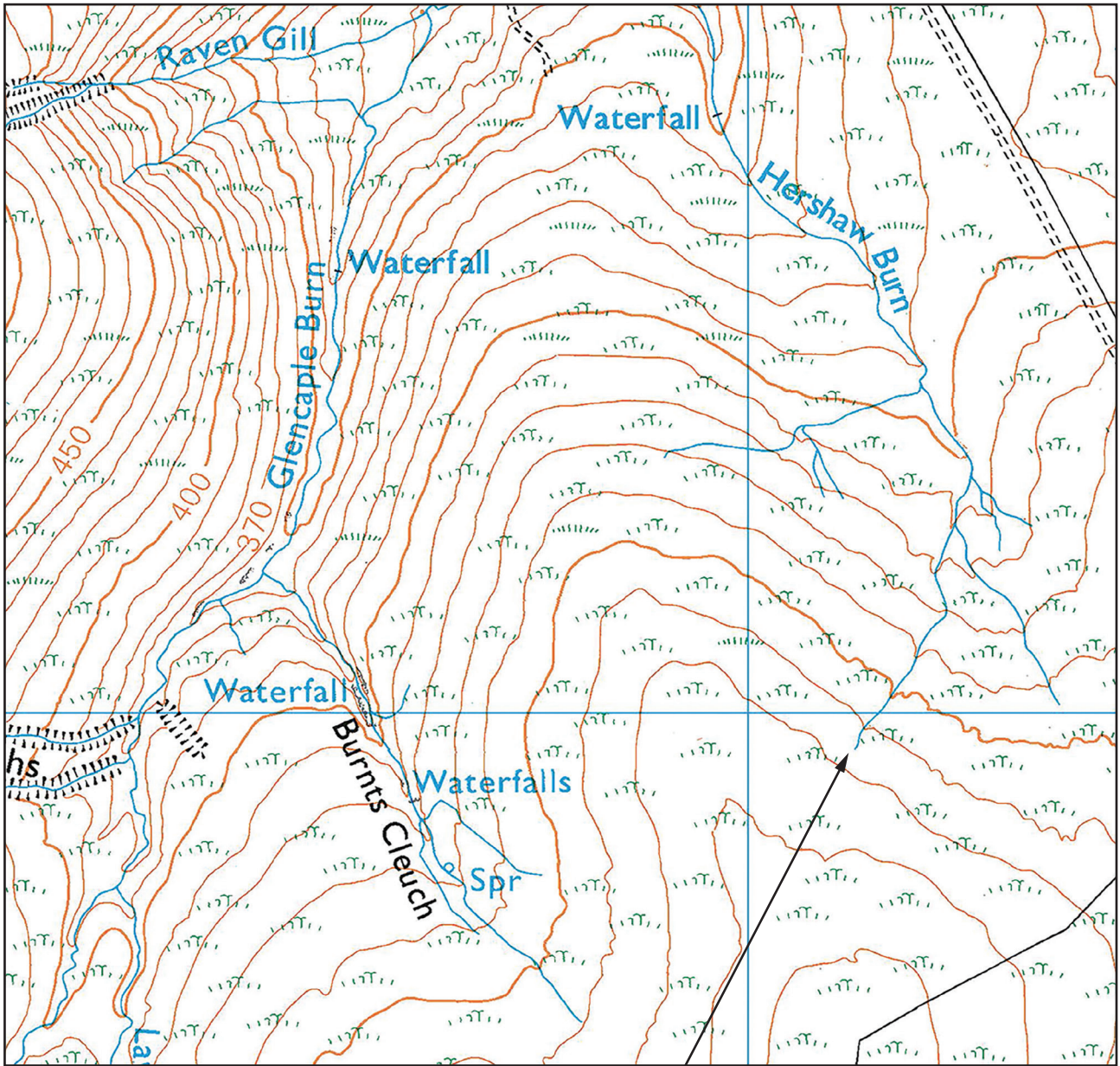


Pearson Edexcel International GCSE (9–1)**Wednesday 13 May 2026**

Morning (Time: 1 hour 10 minutes)

**Paper
reference****4GE1/01****Geography****PAPER 1: Physical geography****Resource Booklet****Do not return this Booklet with the question paper.***Turn over* ►**P79002A**©2026 Pearson Education Ltd.
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Key

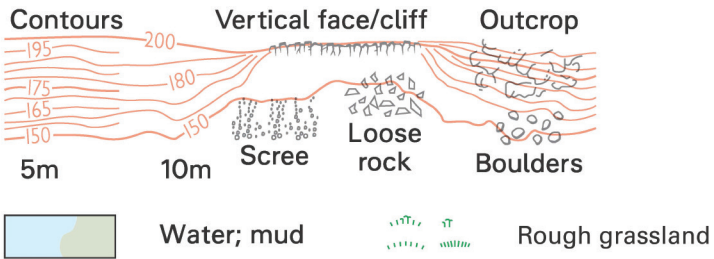
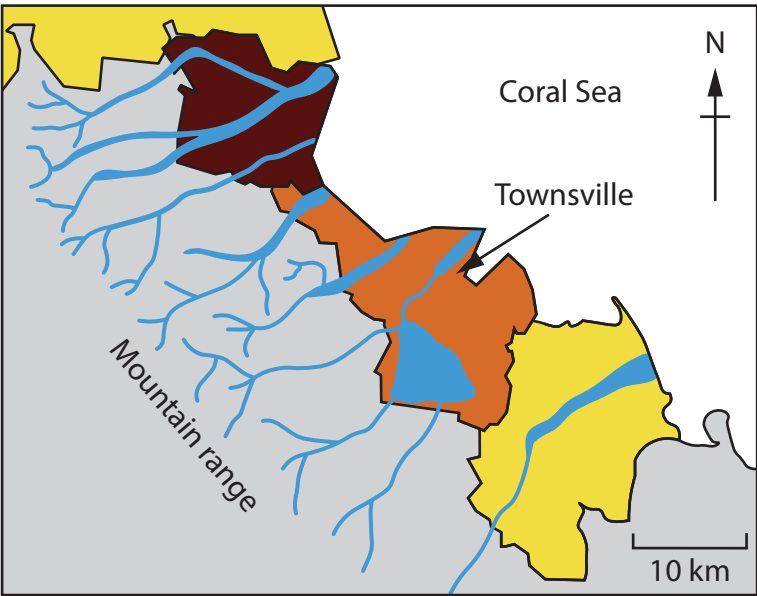


Figure 1a

OS map of an upland river landscape



 BUREAU OF METEOROLOGY



WATCH

THINK & PREPARE

 BROAD
AREA OF
FLOOD RISK

 EARLY
ADVICE FOR
POTENTIAL
FLOODING

 ISSUED
1-4 DAYS
BEFORE
IMPACT

KNOW YOUR WEATHER.
KNOW YOUR RISK.

Key: River Flood risk warning level

 Major

 Moderate

 Minor

 River

 Lake Ross

Figure 1b
Queensland, Australia, river flood warning map and infographic



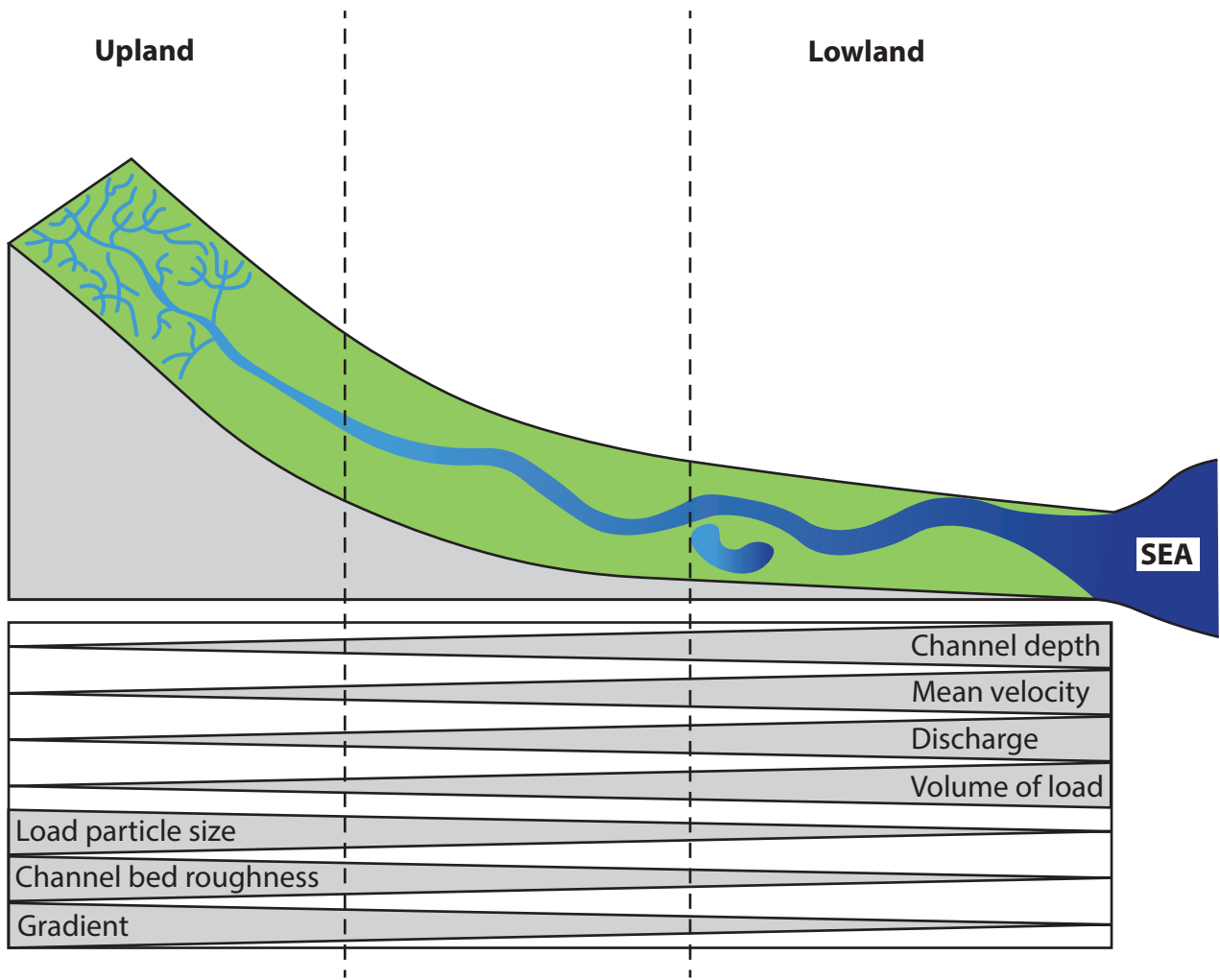


Figure 1c

River long profile diagram and (Bradshaw) model showing how river characteristics change along a river

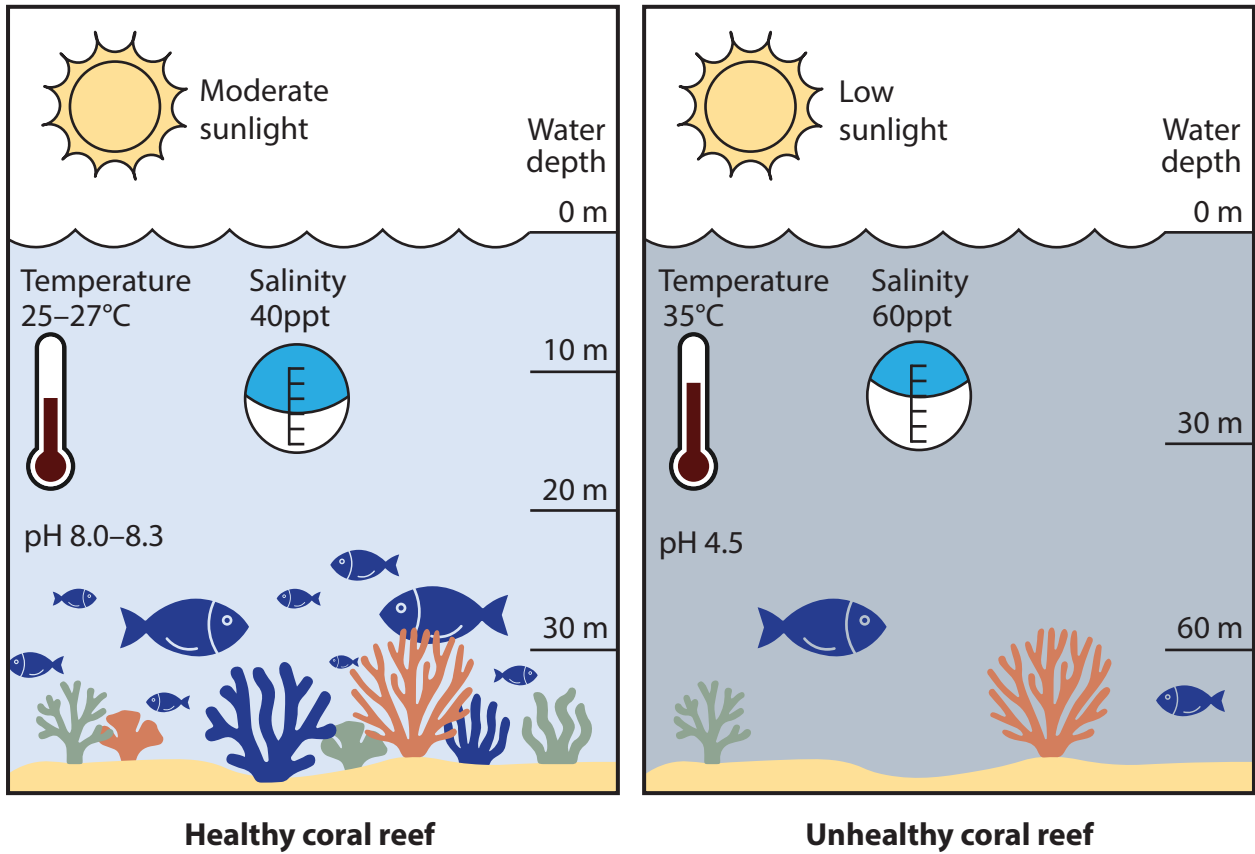


Figure 2a
Healthy and unhealthy coral reef ecosystems

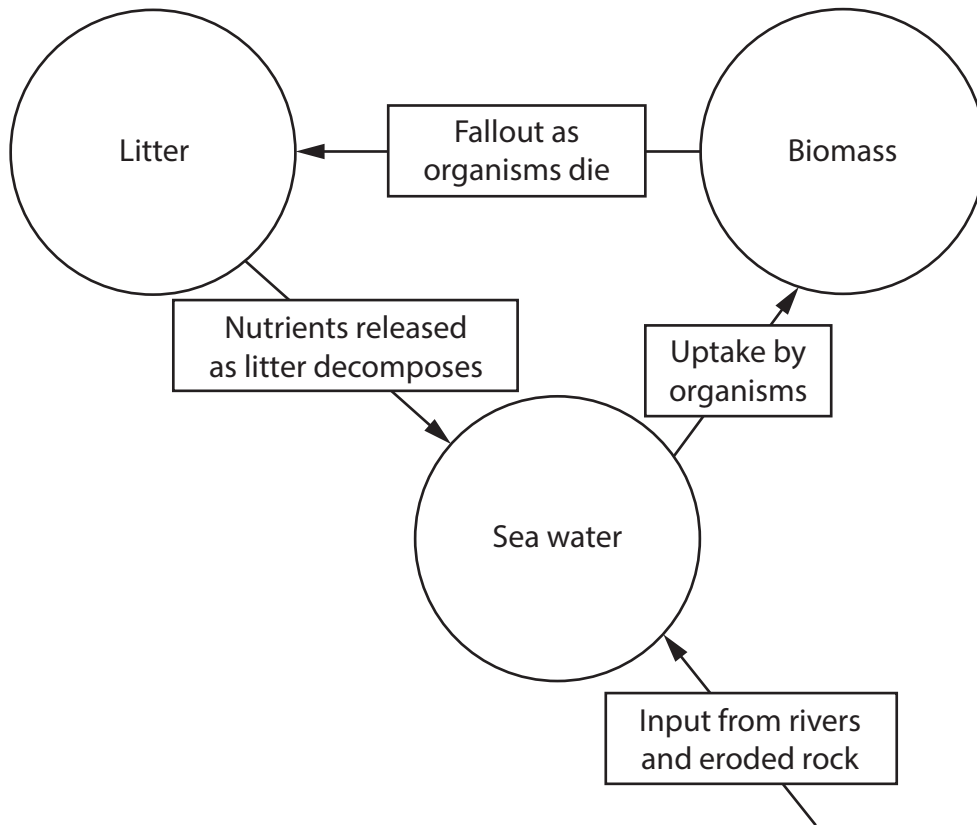
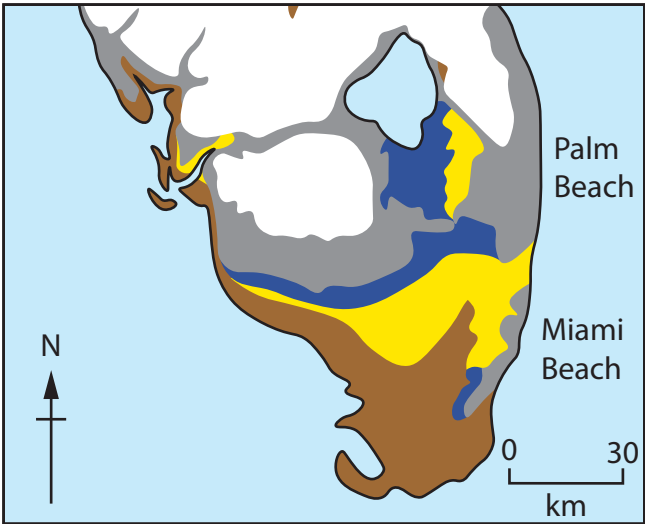


Figure 2b
Nutrient cycle of a coastal environment

Florida's height above sea level

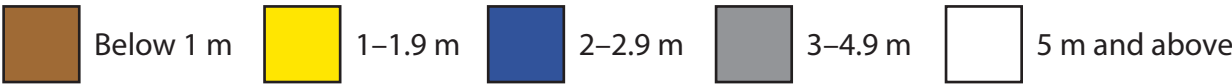
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Florida experiences on average 1 cyclone (hurricane) every 3 years. But, in 2024, from June to November, there were 15 strong storms and 11 cyclones (hurricanes) in Florida.



Average rate of sea-level rise in southeast USA is 3.0 mm per year.

Key: Height above sea level (m)



Causes of Miami Beach flood events, 1996 to 2013

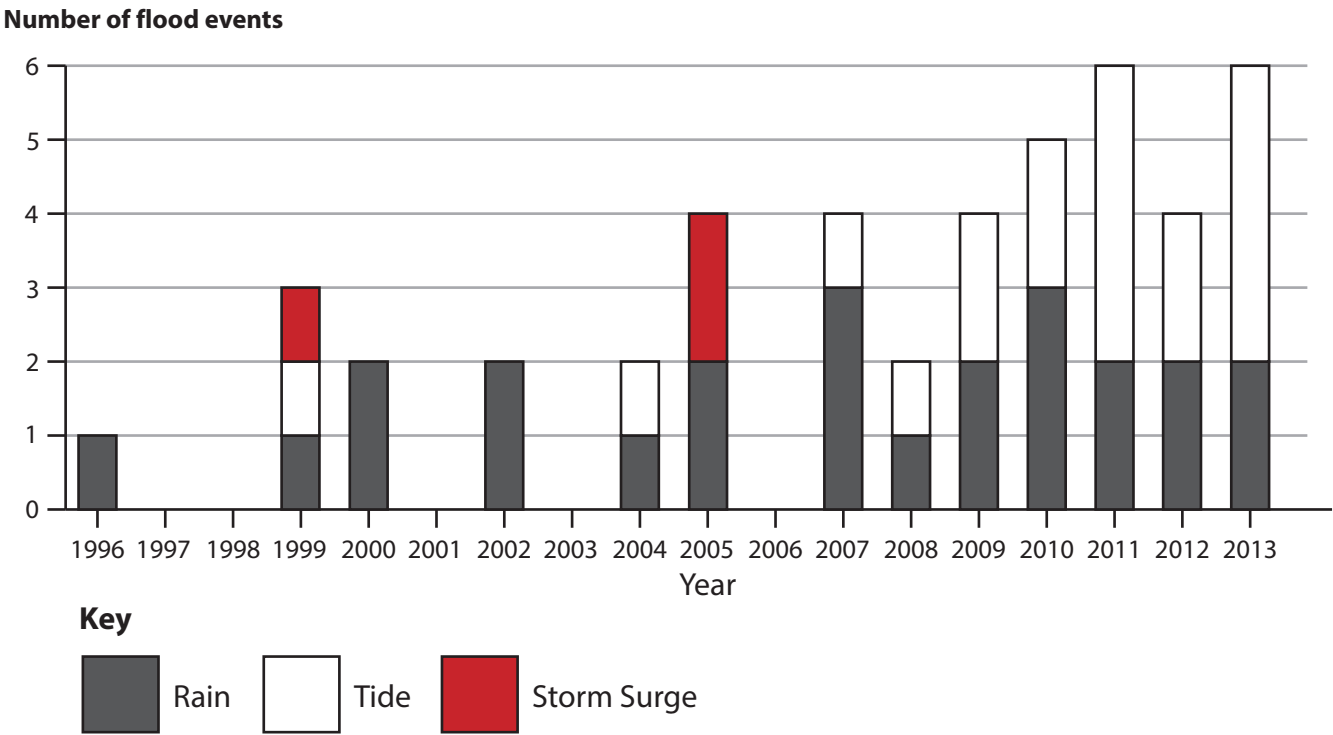
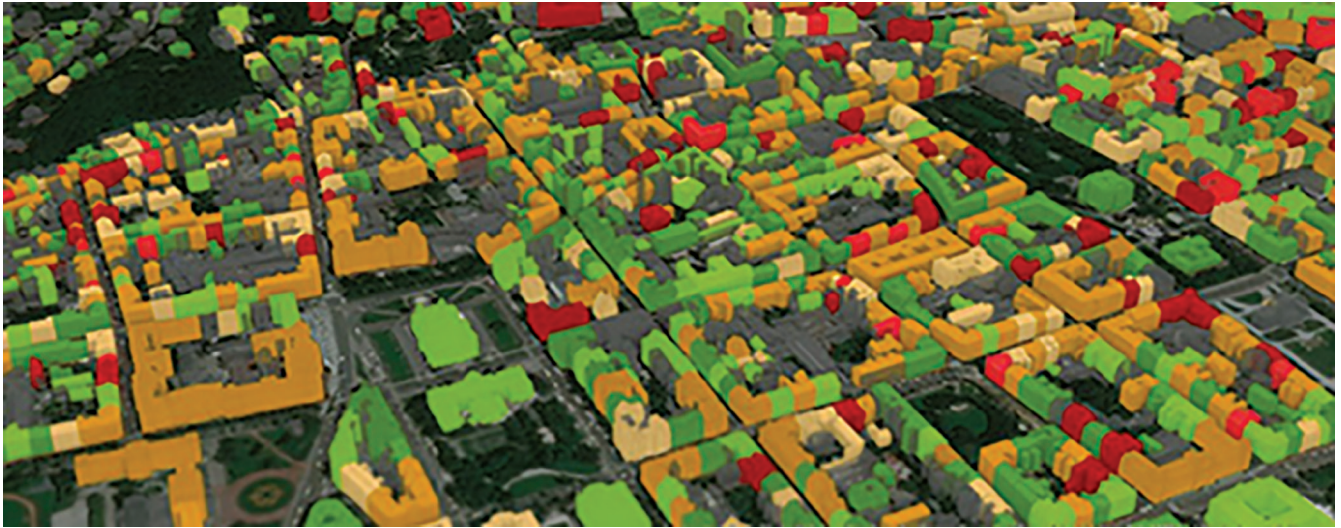


Figure 2c
Coastal flooding in South Florida



Key: Level (severity) of building damage

Usable

- no damage
(entry allowed) (8,879 buildings)
- no visible damage
(10,309 buildings)

Temporarily unusable

- minor structural damage
(inspection required) (2,585 buildings)
- some structural damage
(repairs required before usable) (2,413 buildings)

Unusable

- severe structural damage
(unsafe to enter) (178 buildings)
- building collapse
(1,164 buildings)

Figure 3a

Remote sensing/GIS 3D model of building damage by an earthquake in Zagreb, Croatia 2020

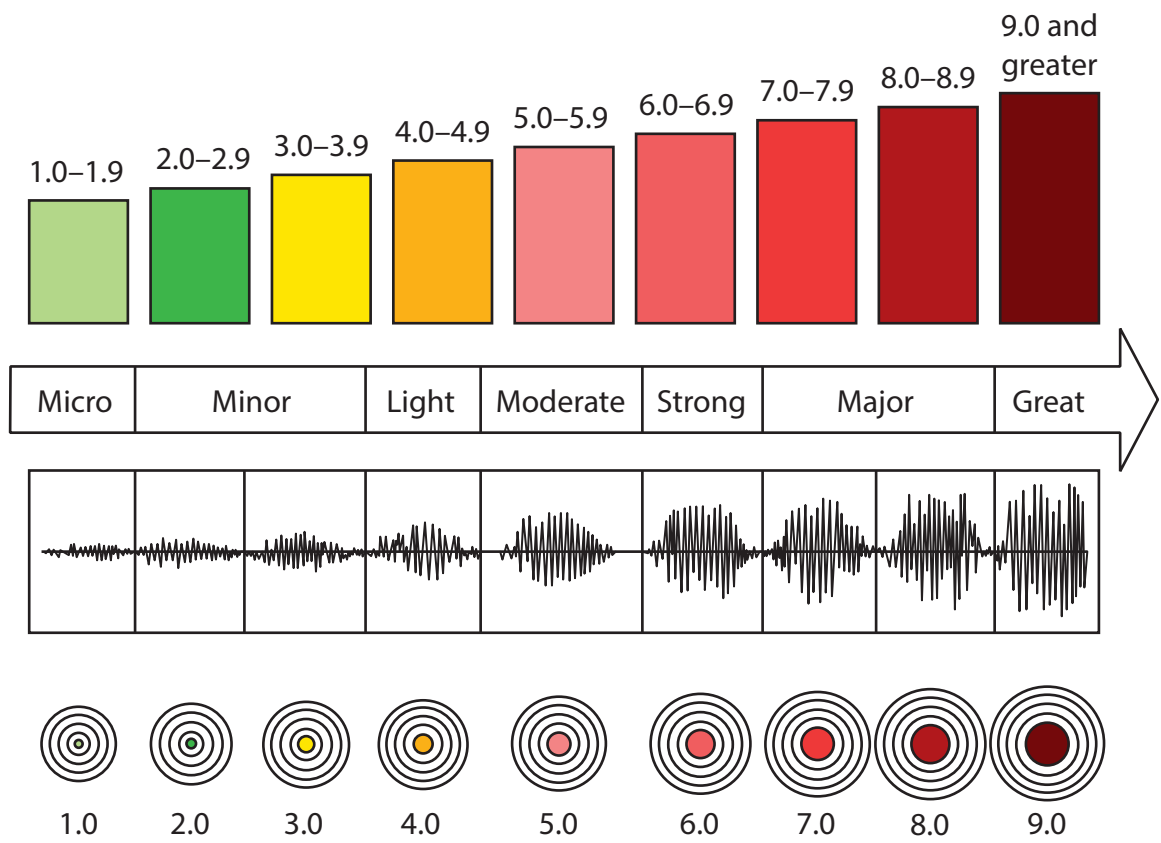
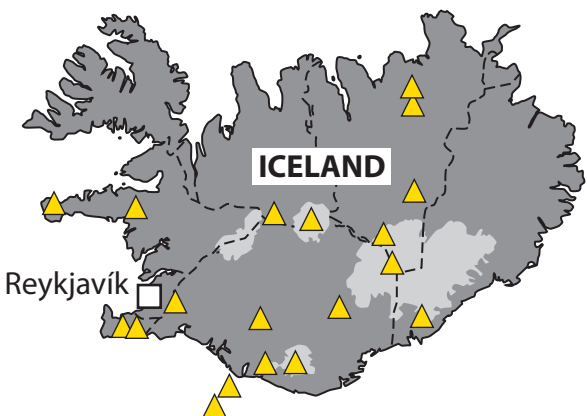


Figure 3b

Diagram of a scale to measure the magnitude of a hazard

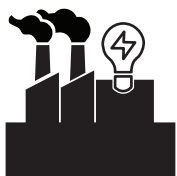


Tourism accounts for 33% of Iceland's gross domestic product (GDP). In 2024, tourism contributed US\$6.9 billion, making Iceland one of the most tourism dependent countries in the world. This sector employs 34,000 people.



There have been 7 volcanic eruptions in Iceland since the year 2000.

- Key**
- Capital city
 - ▲ volcano
 - ice cover



Volcanoes provide geothermal energy, 30% of Iceland's electricity is generated from this renewable energy source. Over 90% of houses are heated by geothermal energy.

Year	Volcano/fissure in Iceland	VEI score
2023–2024	Sundhnúkur	1
2023	Litli-Hrútur	0
2022	Fagradalsfjall	0
2021	Fagradalsfjall	0
2014–2015	Bárðarbunga	0
2011	Grímsvötn	4
2010	Eyjafjallajökull	4

Figure 3c
Volcanic explosivity Index (VEI) of 21st century Icelandic eruptions and selected facts



Sample of data at Site 4	River channel depth (cm)	
1	3	
2	5	Lower quartile = 8.5
3	12	
4	22	
5	26	Median = 26
6	31	
7	32	
8	47	
9	59	

Figure 4a
River depth data at Site 4

Site	River width (m)
1	0.2
2	0.3
3	0.6
4	0.8
5	0.9
6	0.9
7	1.0
8	1.2

Figure 4b
River width

Sample of data at Site 4	Pebble size (mm)	
1	3	
2	5	Lower quartile = 8.5
3	12	
4	22	
5	26	Median = 26
6	31	
7	32	
8	47	
9	59	

Figure 5a
Pebble size data at Site 4

Site 4 pebble shape	Number of pebbles in each shape category
Very angular	22
Angular	16
Slightly angular	8
Slightly rounded	10
Rounded	6
Well rounded	4

Figure 5b
Pebble shape for site 4

Sample of data at Site 4	Temperature (°C)	
1	22	
2	23	Lower quartile = 24.5
3	26	
4	25	
5	27	Median = 27
6	31	
7	33	
8	36	
9	38	

Figure 6a
Temperature data at Site 4

Site	Amount of rainfall (mm)
1	2.1
2	3.0
3	6.0
4	8.1
5	9.0
6	9.2
7	7.1
8	4.0

Figure 6b
Amount of rainfall



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Acknowledgements

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Figure 1b: adapted from www.nzherald.co.nz and www.qld.gov.au

Figure 2a: adapted from www.livingoceansfoundation.org

Figure 3a: © University of Zagreb Faculty of Civil Engineering

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