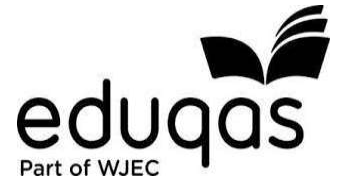




GCSE

C112U10-1



WEDNESDAY, 14 MAY 2025 — MORNING

GEOGRAPHY B — Component 1
Investigating Geographical Issues

**1 hour 45 minutes plus your additional
time allowance**

Surname

First name(s)

Centre Number

Candidate Number

0

ADDITIONAL MATERIALS

A calculator and a ruler if required.

INSTRUCTIONS TO CANDIDATES

Use black ink, black ball-point pen or your usual method.

You may use a pencil for graphs and diagrams only.

Write your name, centre number and candidate number in the spaces on the previous page.

Answer ALL questions.

Write your answers in the spaces provided in this booklet.

Additional space is provided for some questions within the booklet (if required).

(Turn over)

If further space is required for any question, you should use the additional page(s) at the end of this booklet. The question number(s) should be clearly shown.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [] at the end of each question or part-question.

You are reminded that assessment will take into account your ability to spell, punctuate and use grammar and specialist terminology accurately in your answer to Question 1(d).

(Turn over)

THEME 1:**CHANGING PLACES - CHANGING ECONOMIES**

Answer ALL questions.

1 (a)(i) Study FIGURE 1.1.

**FIGURE 1.1: DEFINITIONS OF SOME TERMS
TO DO WITH PEOPLE WHO WORK**

LETTER	DEFINITION
A	People who come from another country to work
B	People who work in television and media
C	People who do seasonal work
D	People who work from home using phones and computers
E	People who move from one country to another to work
F	People who travel to work each day

(Turn over)

Complete the table below by adding the correct letter from FIGURE 1.1 on the previous page to give the correct definition of the terms.

[2 marks]

TERM	LETTER
Commuter	
Teleworker	

1 (a)(ii) Commuting and teleworking influence where people live. Give ONE advantage and ONE disadvantage of working from home. [2 marks]

Advantage: _____

(Turn over)

Disadvantage: _____

1 (a)(iii) Explain why numbers of commuters in the UK have changed over time.

[4 marks]

(Turn over)

(Turn over)

1 (a)(iv) Describe some of the issues in UK villages that have become commuter settlements. [4 marks]

(Turn over)

1 (b) Study FIGURE 1.2 on the two pages opposite.

1 (b)(i) Tick (✓) the TWO correct statements about commuting using FIGURE 1.2.

[2 marks]

STATEMENT	TICK (✓)
London has the longest average commuting time.	
North West has the shortest average commuting time.	
North East has the longest average commuting distance.	
East of England has the shortest average commuting distance.	
Scotland has the lowest % of workers who travel by car.	
Wales has the highest % of workers who travel by car.	

(Turn over)

1 (b)(ii) What is the MEDIAN value for the average commuting DISTANCE shown in FIGURE 1.2? [1 mark]

(Turn over)

- 1 (b)(iii) Calculate the RANGE of the data for the average commuting TIME shown in FIGURE 1.2.**

Show your working in the box below. [2 marks]

Range = _____ minutes

(Turn over)

1 (c) Study FIGURE 1.3 opposite.

(i) Give THREE pieces of map evidence from FIGURE 1.3 (other than named caverns) to suggest why Castleton is a honeypot site. Use the OS map key on the back page. [3 marks]

Map Evidence 1: _____

Map Evidence 2: _____

(Turn over)

Map Evidence 3: _____

(Turn over)

1 (c)(ii) Give TWO reasons why too many visitors can cause damage to honeypot sites. [4 marks]

Reason 1: _____

Reason 2: _____

(Turn over)

(Turn over)

1 (d) Study FIGURE 1.4 below and opposite.

FIGURE 1.4

FACT BOX

- **The Liverpool Waters project plans to redevelop derelict docks on the River Mersey.**
- **The project will cost approximately £5 billion.**
- **There will be coffee shops, restaurants, shops and offices.**
- **Leisure facilities will include a health club, canoe club, fitness centre and hotels.**
- **A new stadium for Everton Football Club is being constructed.**
- **A central park will provide open space.**
- **There will be 600 new homes including apartments and some affordable housing.**

(Turn over)

Evaluate the advantages and disadvantages of developing multi-purpose zones like the Liverpool Waters project. [8 marks]

Your ability to spell, punctuate and use grammar and specialist terminology accurately will be assessed in your answer to this question. [4 marks]

(Turn over)

(Turn over)

(Turn over)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(Turn over)

Additional space for Question 1(d) only:

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

END OF QUESTION 1

(Turn over)

THEME 2: CHANGING ENVIRONMENTS

Answer ALL questions.

2 (a) River landscapes are the result of many different processes.

(i) Match the process with the correct definition on the following page by drawing lines to link them.

One has been done for you. [4 marks]

(Turn over)

PROCESS**DEFINITION****Abrasion**

The movement
of rocks and
material down a
slope

**Mass
movement**

Rocks carried by
the river smash
against the river
bank

Weathering

The breaking
down of rock in
place

Attrition

The dissolving of
minerals in river
water

Solution

Rocks carried by
the river smash
against each
other

(Turn over)

2 (a)(ii) Within a river basin, there are flows, stores and outputs.

Circle the correct answer in each of the sentences shown opposite.
[3 marks]

(b)(i) Explain why creating a reservoir affects natural river processes.
[4 marks]

(Turn over)

(Turn over)

2 (b)(ii) Give ONE ECONOMIC impact of managing a river by hard engineering methods. [1 mark]

(Turn over)

2 (c)(i) One consequence of climate change is rising sea levels.

Study FIGURE 2.1 opposite.

Describe the trend for global sea level change between 1990 and 2100 shown in FIGURE 2.1.

Use figures in your answer.

[3 marks]

(Turn over)

(Turn over)

2 (c)(ii) Give TWO reasons why a line graph is the most appropriate technique to show the data in FIGURE 2.1.

[2 marks]

Reason 1: _____

Reason 2: _____

(Turn over)

2 (c)(iii) Explain the consequences of changes in sea level for people living in coastal communities.

[4 marks]

(Turn over)

(Turn over)

2 (c)(iv) One cause of global warming is greenhouse gas emissions.

Study FIGURE 2.2 opposite.

Complete the graph in FIGURE 2.2 by adding the following data. Use the correct shading from the key.

[2 marks]

Electricity	28%	Industry	30%
--------------------	------------	-----------------	------------

(Turn over)

2 (c)(v) Choose ONE other appropriate graphical technique which could be used to show the data in FIGURE 2.2.

[1 mark]

	TICK (✓)
Kite diagram	
Line graph	
Scatter graph	
Pie chart	
Triangular graph	

(Turn over)

2 (d) Study FIGURE 2.3 opposite.

‘It is only actions by governments and not actions by individuals that will reduce the global impacts of climate change.’

How far do you agree? [8 marks]

(Turn over)

(Turn over)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(Turn over)

(Turn over)

(Turn over)

THEME 3: ENVIRONMENTAL CHALLENGES

Answer ALL questions.

3 (a) There are many processes that occur in an ecosystem.

(i) Complete the sentences on the following page using words from the box below.

[3 marks]

secondary consumers

rocks

primary producers

decomposition

soil

sun

photosynthesis

herbivores

recycling

(Turn over)

Plants are an example of _____
_____.

They use energy from the _____
_____ to produce food by
the process of _____
_____.

(Turn over)

3 (a)(ii) Describe the nutrient cycle in an ecosystem. You may draw a labelled diagram on the following page if you wish. [3 marks]

(Turn over)

**3 (a)(iii) Name a small-scale ecosystem
IN THE UK you have studied.**

Name of ecosystem _____

**Explain why managing this
ecosystem can be challenging.**

[4 marks]

(Turn over)

[illegible]

(Turn over)

3 (b)(i) Study FIGURE 3.1 opposite.

Use FIGURE 3.1. Tick (✓) the THREE correct statements in the table below.

[3 marks]

STATEMENT	TICK (✓)
Africa has lost more forest than South America.	
Asia has had the greatest gain in forest.	
South America has had the greatest loss of forest.	
Africa has lost less forest than North and Central America.	
Europe has gained less forest than Asia.	
North and Central America gained more forest than Europe.	

(Turn over)

3 (b)(ii) Calculate the % loss of forest in South America between 1990 and 2020.

Show your working in the box below. [2 marks]

Answer: _____ %

(Turn over)

3 (c)(i) Global water supply and demand is constantly changing.

What is meant by the term 'water footprint'? [1 mark]

(Turn over)

3 (c)(ii) Tick (✓) the correct definition of the term 'over-abstraction' of water.

[1 mark]

DEFINITION	TICK (✓)
Where water soaks into the ground to replace water lost	
Where sediment is taken out of a reservoir	
Where water is taken out of a source at a faster rate than it is recharged	
Where water is taken from one area and transferred to another	

(Turn over)

3 (c)(iii) Water stress is when demand is greater than supply.

Study FIGURE 3.2 opposite.

Describe the pattern of water stress in England, as shown in FIGURE 3.2.

[3 marks]

(Turn over)

3 (c)(iv) Explain TWO ways that individuals could help to reduce pressure on water supply. [4 marks]

Way 1: _____

(Turn over)

Way 2: _____

(Turn over)

3 (d) Study FIGURE 3.3 opposite.

Analyse the environmental and economic reasons why water supply and demand vary in different parts of the world. [8 marks]

(Turn over)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(Turn over)

(Turn over)

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(Turn over)

END OF QUESTION 3

END OF PAPER

(Turn over)

Question Number	Additional page, if required. Write the question number(s) in the left-hand margin.

(Turn over)

Question Number	Additional page, if required. Write the question number(s) in the left-hand margin.

(Turn over)

Question Number	Additional page, if required. Write the question number(s) in the left-hand margin.

(Turn over)

Question Number	Additional page, if required. Write the question number(s) in the left-hand margin.

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1	32	
SPaG	4	
2	32	
3	32	
Total	100	

FIGURE 1.2

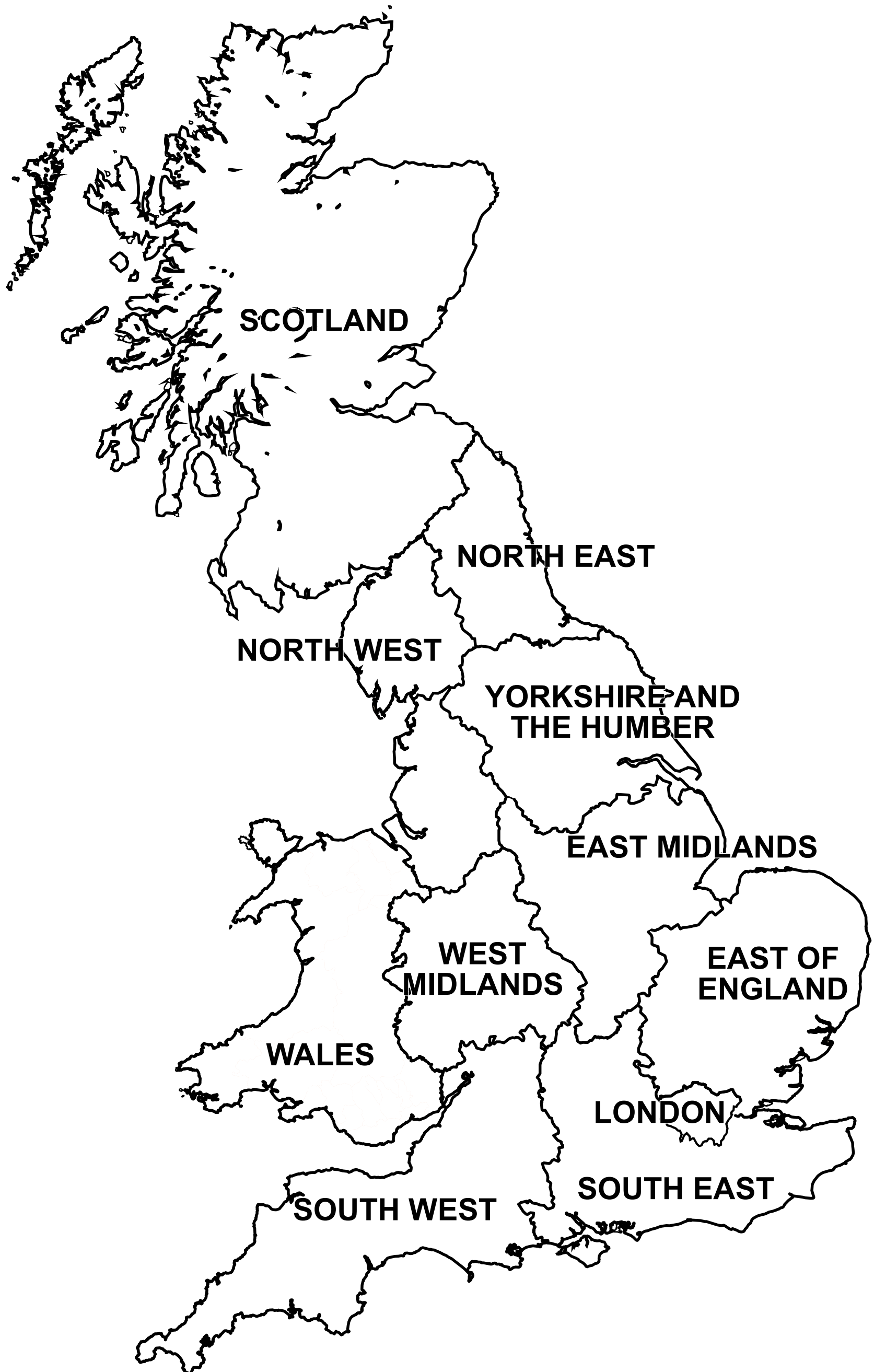


**FIGURE 1.2: DATA SHOWING THE AVERAGE COMMUTING
TIME, DISTANCE AND USE OF CARS IN UK REGIONS**

REGION	AVERAGE COMMUTING DISTANCE (MILES)	AVERAGE COMMUTING TIME (MINUTES)	% WHO TRAVEL TO WORK BY CAR
London	20	85	27
South East	28	67	75
North West	21	58	73
North East	21	61	76
West Midlands	22	56	79
East Midlands	25	54	80
Yorkshire & the Humber	22	57	75
South West	21	49	75
East of England	31	65	76
Wales	19	48	81
Scotland	25	62	68

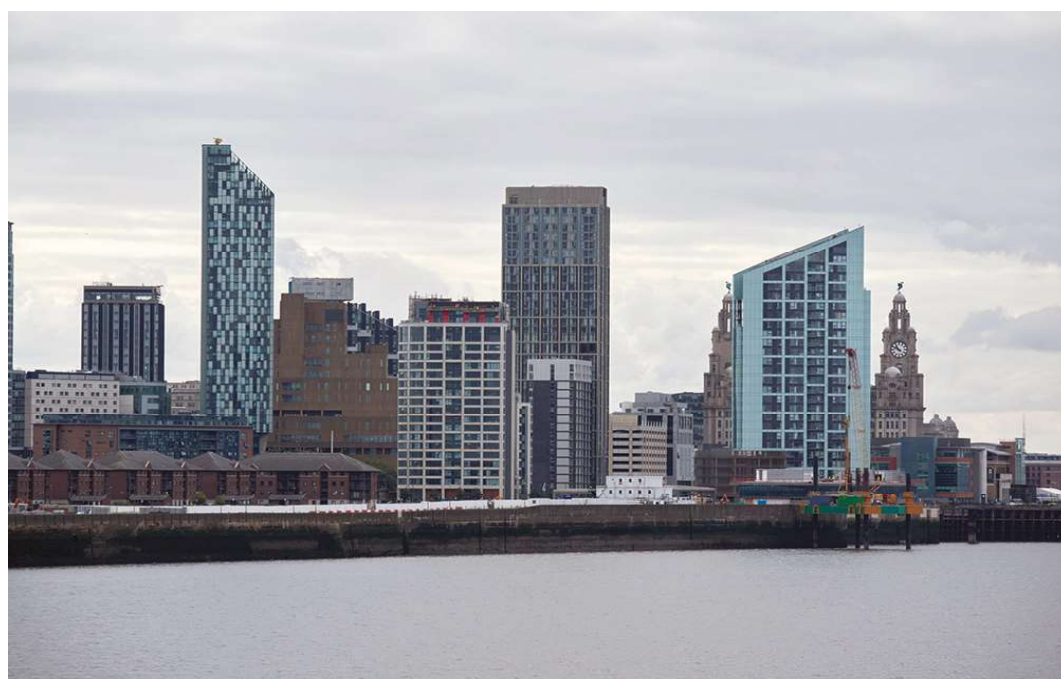
FIGURE 1.3: OS MAP EXTRACT OF CASTLETON, A HONEYPOT AREA OF THE PEAK DISTRICT NATIONAL PARK IN THE UK. THERE ARE MANY CAVERNS (CAVES) AND OTHER FEATURES IN THIS AREA.



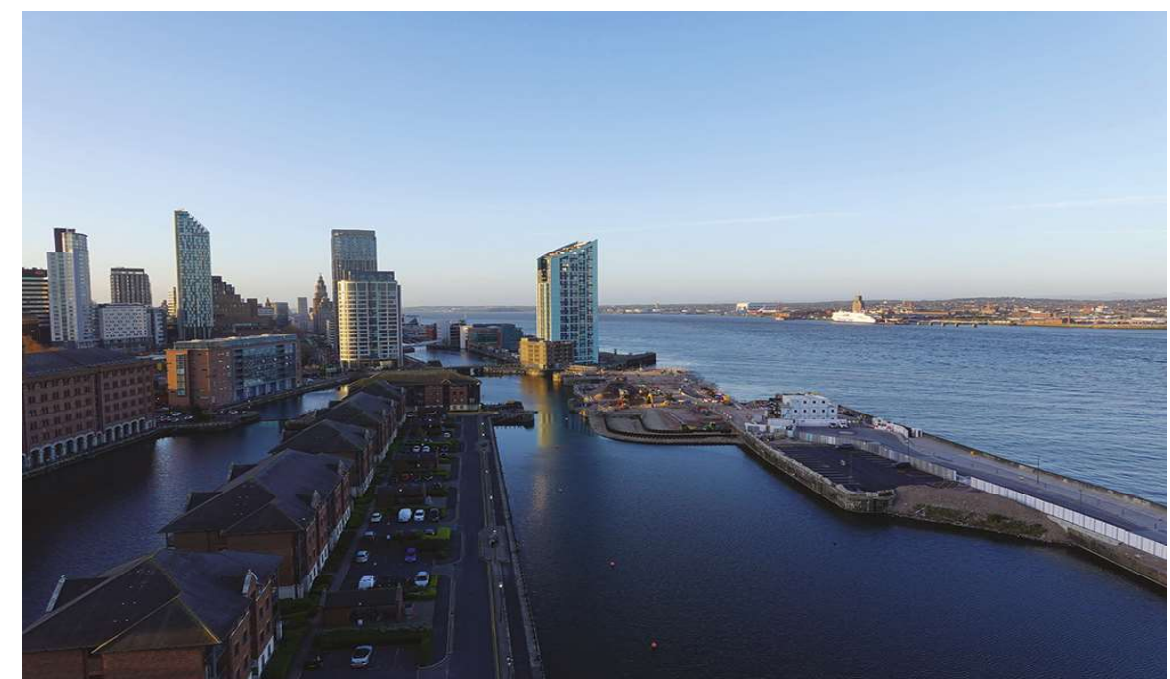
FIGURE 1.4: THE LIVERPOOL WATERS PROJECT, AN EXAMPLE OF A MULTI-PURPOSE ZONE



Building the new Everton Football Club Stadium



New apartments and offices along the River Mersey



New ferry/cruise ship terminal

TERM

CIRCLE THE CORRECT ANSWER

Vegetation is

(A FLOW / A STORE / AN OUTPUT).

Infiltration is

(A FLOW / A STORE / AN OUTPUT).

Transpiration is

(A FLOW / A STORE / AN OUTPUT).

FIGURE 2.1:GRAPH OF PREDICTED GLOBAL SEA LEVEL CHANGE 1990-2100

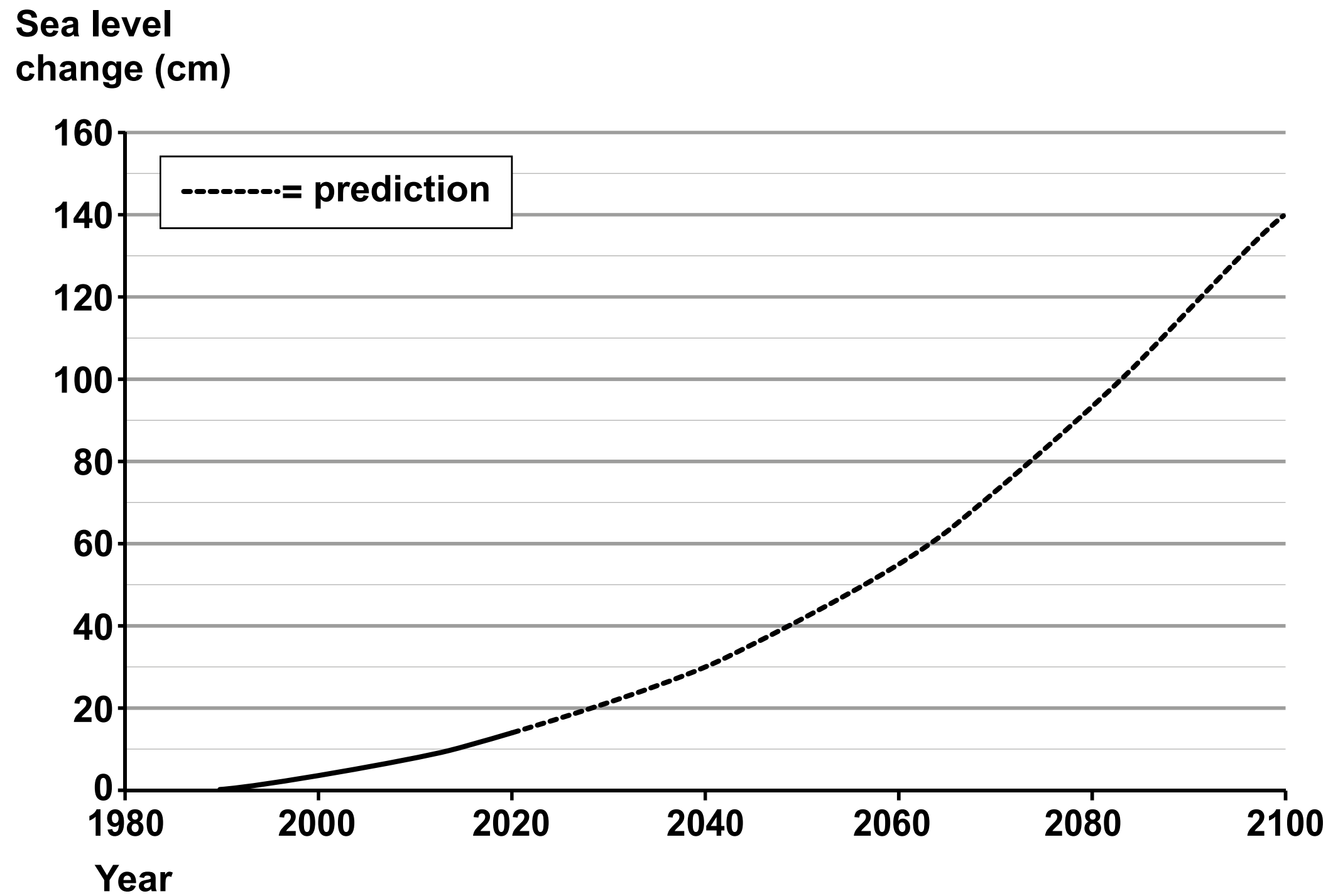


FIGURE 2.2: SOURCE OF GLOBAL GREENHOUSE GAS EMISSIONS

% Source of emissions

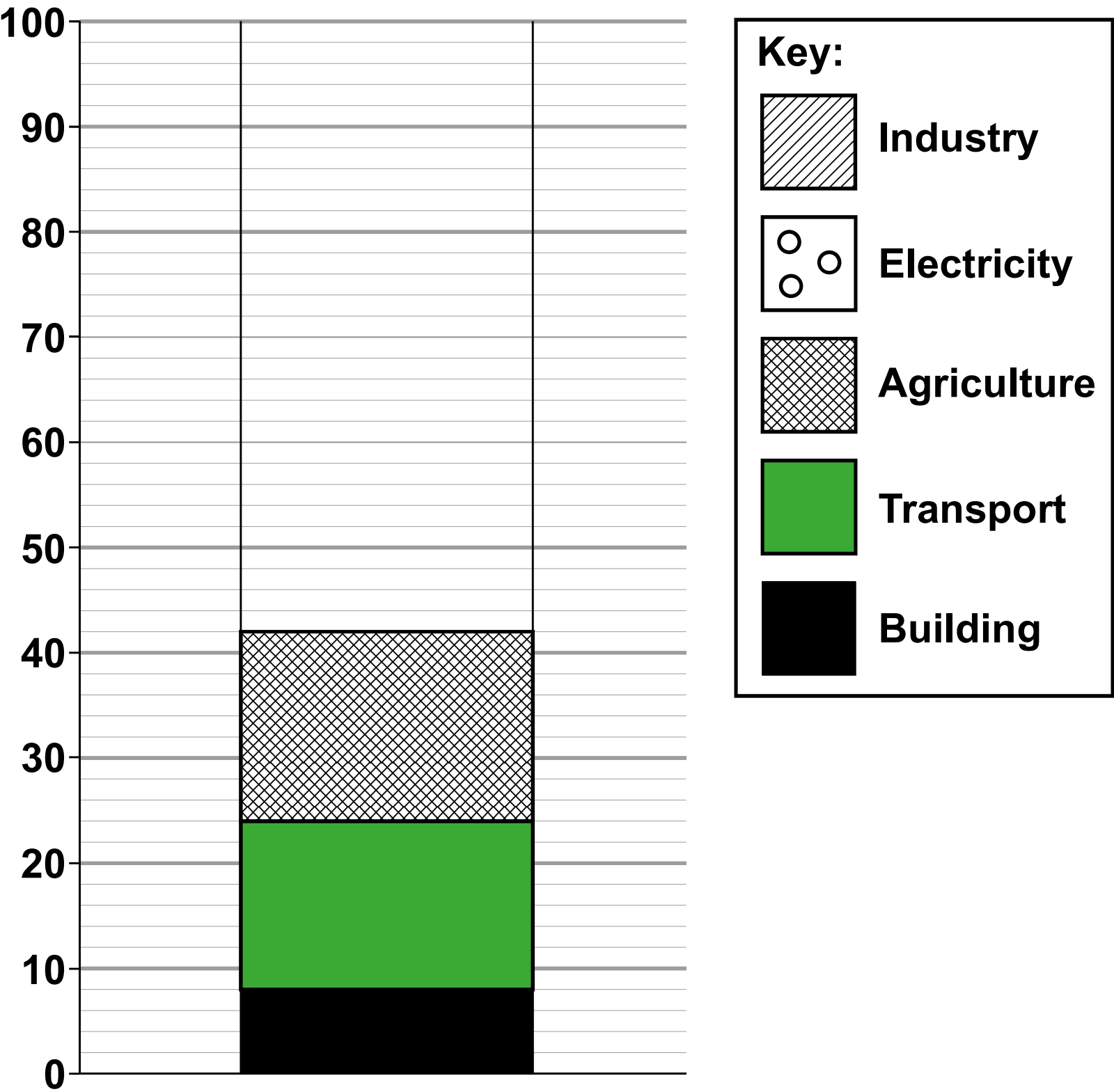


FIGURE 2.3: SOME CLIMATE CHANGE INITIATIVES



FIGURE 3.1: CHANGES IN GLOBAL FOREST AREA 1990-2020 (HECTARES)

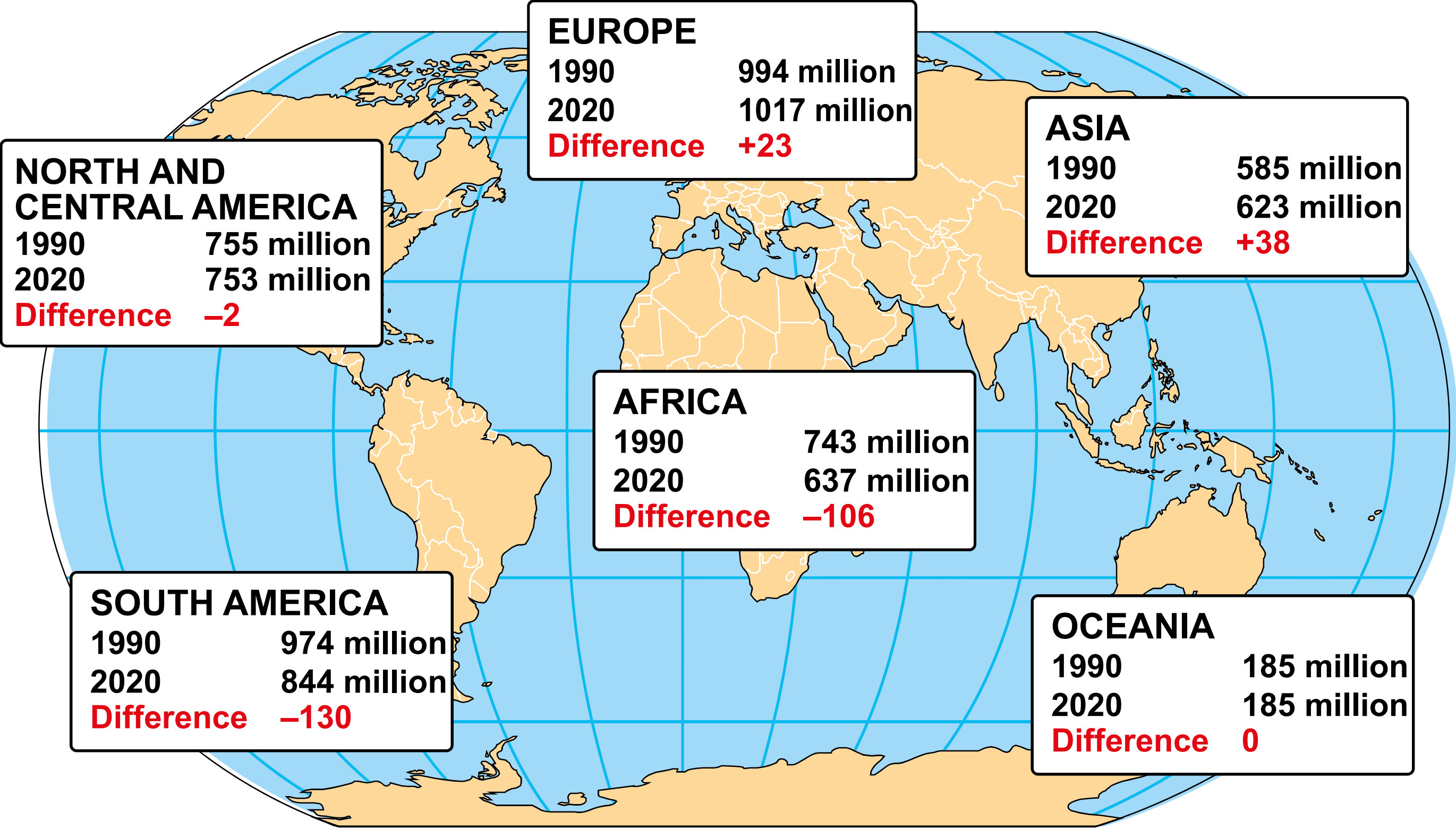


FIGURE 3.2: WATER STRESS IN ENGLAND

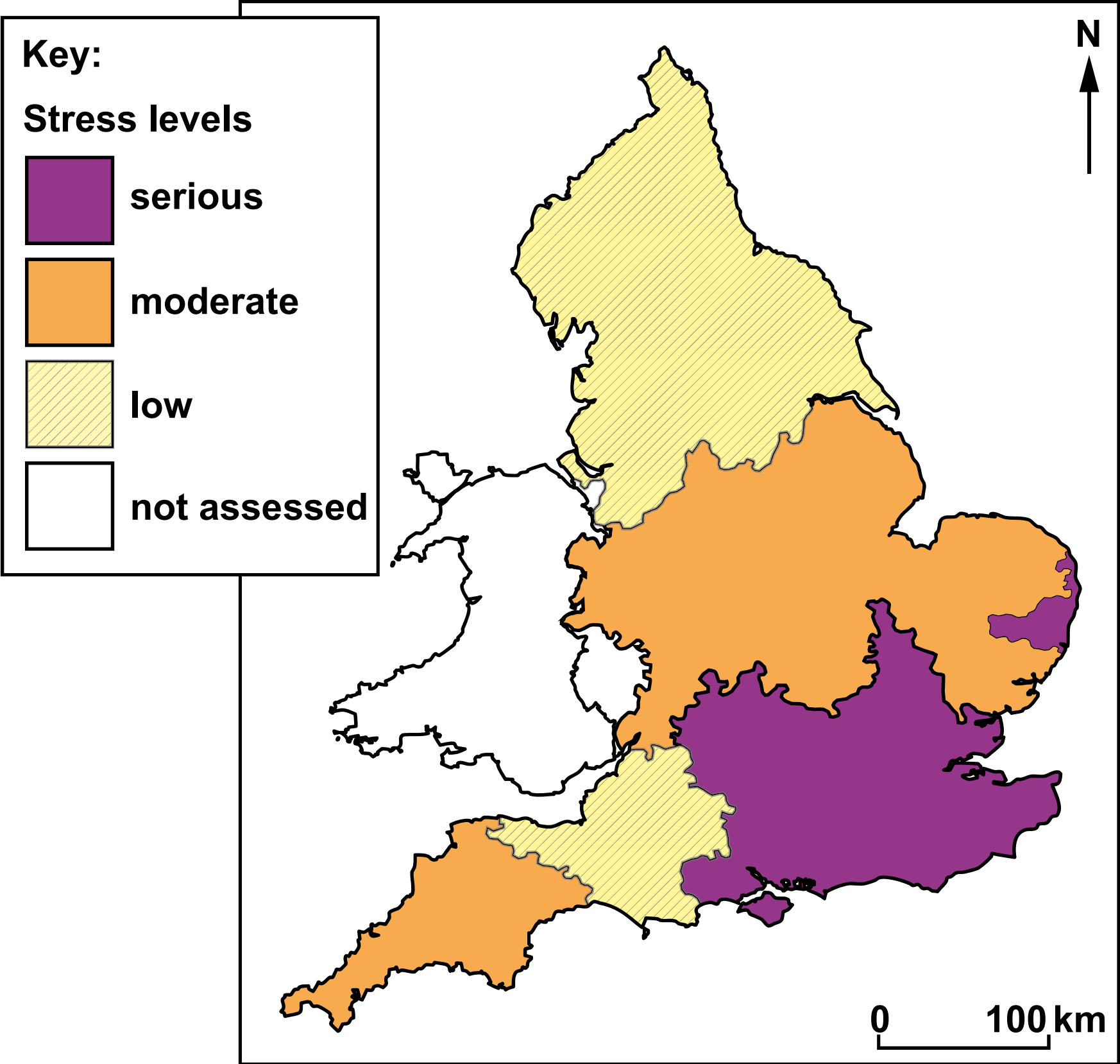


FIGURE 3.3: GLOBAL WATER ISSUES



CHILDREN COLLECTING WATER IN AN AFRICAN VILLAGE



AERIAL VIEW OF HOUSES WITH POOLS IN THE USA



DRIED UP RIVER BED IN SPAIN



RESERVOIR AND DAM IN WALES

Landranger series (1:50 000 scale)

LANDRANGER MAP SYMBOLS



ROADS AND PATHS

Not necessarily rights of way

Service area

M1

Elevated

1 Junction number

Unfenced

Dual carriageway

A 470

Footbridge

A 493

Road under construction

B 4518

Secondary road

A 855

Narrow road with passing places

B 885

Bridge

Road generally more than 4m wide

Road generally less than 4m wide

Other road, drive or track

Path

Gradient: steeper than 20% (1 in 5)/
14% to 20% (1 in 7 to 1 in 5)

Gates / Road tunnel

Ferry P

Ferry V

Ferry (passenger) / Ferry (vehicle)

LAND FEATURES

Cutting, embankment

Electricity transmission line
(pylons shown at standard spacing)

Pipe line
(arrow indicates direction of flow)

Buildings

Important building (selected)

Bus or coach station

Glass structure

Heliport

Current or former place of worship;
with tower
with spire, minaret or dome

Place of worship

Triangulation pillar

Mast

Wind pump

Wind turbine

Windmill with or without sails

Graticule intersection at 5' intervals

Landfill site or slag/spoil heap

Coniferous wood

Non-coniferous wood

Mixed wood

Orchard

Park or ornamental ground

Access land (symbols indicate
owner or agency - see below)

Forestry Commission

Natural Resources Wales

National Trust; always open,
limited access - observe local signs

National Trust for Scotland;
always open, limited access -
observe local signs

RAILWAYS

Track multiple or single

Track under construction

Light rail system,
narrow gauge or tramway

Bridges, footbridge

Tunnel, cutting

Station, (a) principal

Siding

Light rail system station

Level crossing

Viaduct, embankment

PUBLIC RIGHTS OF WAY

Not shown on maps of Scotland

Footpath

Bridleway

Restricted byway (not for use by
mechanically propelled vehicles)

Byway open to all traffic

Public rights of way shown on this map have been taken from local authority definitive maps and later amendments.

The symbols show the defined route so far as the scale of the mapping will allow.

Rights of way are liable to change and may not be clearly defined on the ground. Please check with the relevant local authority for the latest information. Rights of way are not shown on maps in Scotland.

OTHER PUBLIC ACCESS

National Trail, Scotland's Great Trails,
European Long Distance Path and
selected Recreational Routes

On-road cycle route

Traffic-free cycle route

4 8 Cycle Network number;
National / Regional

Other route with public access
(not normally shown in urban areas)

The exact nature of the rights on these routes and the existence of any restrictions may be checked with the local highway authority. Alignments are based on the best information available. These routes are not shown on maps of Scotland

Danger Area Firing and Test Ranges in the area. Danger! Observe warning notices.

BOUNDARIES

National

County, Unitary Authority, Metropolitan District
or London Borough

District

National Park

WATER FEATURES

ABBREVIATIONS

See website for full list

Br	Bridge	MS	Milestone
Cemy	Cemetery	Mus	Museum
CG	Cattle grid	P	Post office
CH	Clubhouse	P C	Public convenience (in rural areas)
Coll	College	P H	Public house
Fm	Farm	Sta	Station
Ho	House	Sch	School
Hospl	Hospital	T H	Town Hall, Guildhall or equivalent
MP	Milepost	Univ	University

ARCHAEOLOGICAL AND HISTORICAL INFORMATION

+	Site of antiquity	VILLA	Roman	1066	Site of battle (with date)
✱	Visible earthwork	Castle	Non-Roman		

HEIGHTS

Contours are at 10 metres vertical interval

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.

ROCK FEATURES

TOURIST INFORMATION

Viewpoint 180°

Viewpoint 360°

Visitor centre

Walks / trails

Nature reserve

Picnic site

Youth hostel

Golf course or links

Garden / arboretum

Camp site / Caravan site

Camping and caravan site

Selected places of tourist interest

Information centre, all year / seasonal

Parking

Park & Ride, all year / seasonal

Phone, public / emergency / roadside assistance

Recreation / leisure / sports centre

World Heritage site or area