

G E O G R A P H Y
in the
National Curriculum
(Wales)

D A E A R Y D D I A E T H
yn y
Cwricwlwm Cenedlaethol
(Cymru)



Welsh Office
Y Swyddfa Gymreig

HMSO
GWASG EI MAWRHYDI



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Foreword

This document contains provisions relating to attainment targets and programmes of study in geography for pupils in Key Stages 1 to 4 and is prepared by the Secretary of State for Wales in anticipation of an Order being made by him under Section 4 of the Education Reform Act 1988 referring to such a Document and directing that its provisions have effect in accordance with the Order. A separate document prepared by the Secretary of State for Education and Science applies to provision in England.

The examples printed in italics serve only to illustrate the attainment targets and programmes of study and are non-statutory.

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1991 No.
EDUCATION, ENGLAND AND WALES

The Education (National Curriculum)
(Attainment Targets and Programmes of Study in Geography)
(Wales) Order 1991

Made	March 1991
Laid before Parliament	March 1991
Coming into force in accordance with articles 2 to 5	

Whereas the Secretary of State has given notice of the proposal to make this Order to the Curriculum Council for Wales and to all other persons with whom consultation appeared to him desirable, in accordance with section 21(2) of the Education Reform Act 1988(a);

And whereas the Secretary of State, in accordance with subsection (3) of the said section 21, duly published a draft of this Order and the other documents mentioned in that subsection and sent copies of them to the said Council and to each of the persons consulted by him, and allowed a period of not less than one month for the submission of evidence and representations;

And whereas that period has now expired:

Now therefore in exercise of the powers conferred on him by sections 4(2)(a) and (b) and (4) and 232(5) and (6) of the Education Reform Act 1988 the Secretary of State for Wales hereby makes the following Order in the terms of the said draft:

Citation, commencement, application and interpretation

1.- (1) This Order may be cited as the Education (National Curriculum) (Attainment Targets and Programmes of Study in Geography) (Wales) Order 1991 and shall come into force in accordance with articles 2 to 5.

(2) In this Order –

“the Document” means the document published by Her Majesty’s Stationery Office entitled “Geography in the National Curriculum (Wales)”(b);

references to the first, second, third and fourth key stages are references to the periods set out in paragraphs (a) to (d) respectively of section 3(3) of the Education Reform Act 1988;

references to levels of attainment are references to the levels set out in the Document in relation to each attainment target; and

references to ranges of levels of attainment are references to the range of levels of attainment specified for pupils of different abilities and maturities in respect of the key stage in question.

(3) This Order applies only to maintained schools in Wales.

- 2.- The provisions of this Order relating to the first key stage shall come into force –
 - (a) on 1st August 1991 in respect of pupils in the first year of that key stage; and
 - (b) on 1st August 1992 in respect of all other pupils.
- 3.- The provisions of this Order relating to the second key stage shall come into force –
 - (a) on 1st August 1991 in respect of pupils in the first year of that key stage;
 - (b) on 1st August 1992 in respect of pupils in the second year of that key stage;
 - (c) on 1st August 1993 in respect of pupils in the third year of that key stage; and
 - (d) on 1st August 1994 in respect of all other pupils.
- 4.- The provisions of this Order relating to the third key stage shall come into force –
 - (a) on 1st August 1991 in respect of pupils in the first year of that key stage;
 - (b) on 1st August 1992 in respect of pupils in the second year of that key stage; and
 - (c) on 1st August 1993 in respect of all other pupils.
- 5.- The provisions of this Order relating to the fourth key stage shall come into force –
 - (a) on 1st August 1994 in respect of pupils in the first year of that key stage; and
 - (b) on 1st August 1995 in respect of all other pupils.

Specification of attainment targets and programmes of study

- 6.- It is hereby directed that the provisions relating to attainment targets and programmes of study set out in the Document shall have effect as provided in Articles 7 to 9 hereof for the purpose of specifying in relation to Geography –
 - (a) attainment targets; and
 - (b) programmes of study.
- 7.- (1) Schedule 1 has effect in accordance with paragraph (2) for specifying the attainment targets (including the range of levels of attainment) for each key stage.
(2) The attainment targets described in the Document and set out in column 2 of Schedule 1 to this Order are specified in relation to the key stages set out beside them in column 1 of that Schedule, the levels applicable being those appropriate to the different abilities and maturities of the pupils being taught.
- 8.- (1) Schedule 2 has effect in accordance with paragraph (2) for specifying the programmes of study for each key stage.
(2) The programmes of study described in the Document and set out in column 2 of Schedule 2 to this Order are specified in relation to the key stages set out beside them in column 1 of that Schedule.
- 9.- The examples printed in italics in the Document only serve to illustrate and do not form part of the provision made by this Order.

SCHEDULE 1

Article 7

SPECIFICATION OF ATTAINMENT TARGETS

(1) <i>Key Stages</i>	(2) <i>Attainment targets</i>
First key stage	Attainment targets 1-5, levels 1-3, where specified in the Document.
Second key stage	Attainment targets 1-5, levels 2-5, where specified in the Document.
Third key stage	Attainment targets 1-5, levels 3-7, where specified in the Document.
Fourth key stage	Attainment targets 1-5, levels 4-10, where specified in the Document.

SCHEDULE 2

Article 8

SPECIFICATION OF PROGRAMMES OF STUDY

(1) <i>Key Stages</i>	(2) <i>Programmes of study</i>
First key stage	Levels 1-3 as described in the Document.
Second key stage	Levels 2-5 as described in the Document.
Third key stage	Levels 3-7 as described in the Document.
Fourth key stage	Levels 4-10 as described in the Document.

EXPLANATORY NOTE

(This note is not part of the Order)

Section 4(2) of the Education Reform Act 1988 places a duty on the Secretary of State to establish the National Curriculum by specifying appropriate attainment targets, programmes of study and assessment arrangements for each of the foundation subjects.

Section 4(4) allows for such an Order, instead of containing the provisions to be made, to refer to provisions in a Document published by Her Majesty's Stationery Office and to direct that those provisions shall have effect according to the Order.

This Order refers to "Geography in the National Curriculum (Wales)" and provides for the attainment targets and programmes of study set out in it to have effect for the four key stages of a pupil's compulsory schooling.

The Document sets out up to ten levels in respect of attainment targets to cover the full range of abilities and maturities of pupils of compulsory school age; the Order specifies as part of each attainment target the appropriate range of attainment levels.

The Order further provides that any examples printed in italics in the Document are for illustrative purposes only, and do not form part of the Order.

STATUTORY INSTRUMENTS

1991 No.
EDUCATION, ENGLAND AND WALES

The Education (National Curriculum)
(Attainment Targets and Programmes of Study in Geography)
(Wales) Order 1991

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Attainment targets and statements of attainment: Key Stages 1 to 4

The examples serve to illustrate the attainment targets and are non-statutory

Attainment target 1: Geographical skills

Pupils should demonstrate their ability to use skills to support work for the other attainment targets in geography, and in particular:

- i) the use of maps; and
- ii) fieldwork techniques.

LEVEL	STATEMENTS OF ATTAINMENT	EXAMPLES
1	<p>Pupils should be able to:</p> <ol style="list-style-type: none">1a) follow directions.1b) observe and talk about a familiar place.	<p><i>follow directions round the classroom, the school and school site; follow directions using a programmable toy.</i></p> <p><i>talk about home or school.</i></p>
2	<ol style="list-style-type: none">2a) use geographical vocabulary to talk about places.2b) make a representation of a real or an imaginary place.2c) follow a route using a plan.2d) record weather observations made over a short period.2e) identify familiar features on photographs and pictures.	<p><i>discuss pictorial and tourist maps, using terms such as slope, river, hill, wood, park, home.</i></p> <p><i>draw a pictorial map of a farm, a drawing showing the layout of a familiar room or a treasure island.</i></p> <p><i>follow a route or trail round the school site or a nearby open space.</i></p> <p><i>use pupils' own observations to construct weather charts to record wet, dry, hot, cold, windy and calm periods over a day, week or month, using pupils' own symbols.</i></p> <p><i>pick out selected features, e.g. rivers, woods, fields, streets, motorways on pictures of local and distant places shown on postcards or in books.</i></p>
3	<ol style="list-style-type: none">3a) use letter/number co-ordinates to locate features on a map.3b) use a large-scale map to locate their own position and features outside the classroom.3c) make a map of a short route, showing features in the correct order.3d) identify features on aerial photographs.	<p><i>use a street map to locate their home, the school and other familiar landmarks; on a treasure island map displayed by a computer, use coordinates to plot a trail to the treasure.</i></p> <p><i>use a map outside the classroom to identify features such as trees, play areas, buildings.</i></p> <p><i>make a map of the route to school or a trail round the school site.</i></p> <p><i>identify buildings, railway lines, roads, on an oblique aerial photograph.</i></p>

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

4

- 4a) use four-figure coordinates to locate features on a map.
- 4b) measure the straight line distance between two points on a plan.
- 4c) identify features on both a large-scale map and on a vertical air photograph of the same place.
- 4d) measure and record the weather using direct observation and simple equipment.
- 4e) use the index and contents pages to find information in an atlas.
- 4f) draw a sketch map using symbols and a key

record the coordinates of a wood, a lake or a motorway junction on a 1:50,000 Ordnance Survey (OS) map.

measure the distance between home and school, home and park, and home and shops, using a simple linear scale.

compare a vertical air photograph and map of a section of coastline or of a built up area with distinctive features.

take temperature readings, make cloud cover estimates, assess wind strengths using the Beaufort scale; use a data-handling package to analyse and display the information.

use an atlas to find out about places in the news.

use information gathered outside the classroom to draw a sketch map showing the broad layout of the school and grounds, or the main features of a nearby park or local shopping centre; devise symbols to represent features.

5

- 5a) use six-figure grid references to locate features on Ordnance Survey maps.
- 5b) interpret relief maps.
- 5c) follow a route on a 1:50,000 or 1:25,000 Ordnance Survey map and describe the features which would be seen.
- 5d) extract information from thematic maps which show distribution patterns.
- 5e) demonstrate an awareness that a globe can be represented as a flat surface.

locate specific details on OS maps.

read heights and identify slopes, hilltops and valley bottoms from contour maps.

follow a route along a river or road shown on an OS map and describe the features which would be seen by interpreting the map; write a description for a tourist to the area.

describe the distribution of selected geographical patterns on a map, e.g. population or mean annual rainfall in the United Kingdom.

experiment with ways of depicting, on a flat surface, the shapes produced by the peel of an orange.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

6

- 6a) use maps of appropriate scales to plan routes and measure their distances.
- 6b) use maps as an aid to making a decision about locations.
- 6c) draw an accurate cross-section from measurements taken outside the classroom.
- 6d) draw an annotated sketch outside the classroom to record and interpret a landscape.
- 6e) measure and record weather using scientific instruments and procedures.
- 6f) use a map and compass to follow a route.

plan journeys using OS maps, atlases, bus, rail and road maps.

select criteria which are important in making a decision about the location of an enterprise, e.g. transport links, proximity to customers and suppliers; use maps to show suitable locations taking these criteria into account.

draw to scale a cross-section of a stream channel, a beach profile or a short slope using pupils' own measurements.

draw a field sketch of a river valley; or urban features seen from a high point.

use equipment, e.g. maximum and minimum thermometer, rain gauge, anemometer, wind vane and barograph, to measure the weather with a data logging device or manually; record the information in a database for interrogation and display.

follow a route round a park or an orienteering course using compass bearings.

7

- 7a) draw, from a 1:50,000 or a 1:25,000 Ordnance Survey map, an annotated sketch map showing relationships between human and physical features.
- 7b) interpret synoptic charts and images of cloud patterns obtained from weather satellites.
- 7c) use satellite images to identify patterns in physical and human geography.
- 7d) interpret topologically transformed maps.
- 7e) interpret and identify geographical relationships between variables.

draw an annotated sketch map to show the site and location of a town in relation to its physical setting – a dry site, a defensive site, a bridging point, a junction of valleys.

use a sequence of satellite images taken during the passage of a depression, and relate them to synoptic charts to describe and interpret changes in the weather.

use false colour or other imagery from an earth resources satellite (SPOT or LANDSAT) to identify major vegetation types or the form of a coastal town.

interpret maps based on travel times; maps with territories drawn to scales that reflect socio-economic criteria or sizes of populations.

give an account of the relationship between, e.g. Gross Domestic Product (GDP) per capita and numbers employed in agriculture, precipitation and run-off, the various factors influencing streamflow, use scatter graphs, flood hydrographs and system diagrams to illustrate and explain such relationships.

LEVEL	STATEMENTS OF ATTAINMENT	EXAMPLES
8	<p>8a) interpret relief, land-use, settlement and transport patterns from topographical maps.</p> <p>8b) explain the factors which influence the choice of map projections for specific purposes.</p> <p>8c) use indicators to identify variations in quality of life between places and discuss the suitability of the indicators</p>	<p><i>use topographical maps to identify and interpret broad patterns of relief settlement and communications.</i></p> <p><i>explain the factors which influence map projections, e.g. equal area to show population distribution, polar centred to show air routes, Pacific centred to show ocean currents.</i></p> <p><i>draw development profiles to compare the quality of life in selected countries, as indicated by GDP per head, infant mortality rates, life expectancy, literacy levels, food consumption, energy consumption; use a database package, containing information as above, to compare graphically, and explore indicators of, the quality of life in selected countries.</i></p>
9	<p>9a) synthesise information from different map sources to produce a sketch map which identifies important geographical features and reveals spatial patterns and associations within an area.</p>	<p><i>bring together information from OS, land-use, soil and conservation maps, to highlight significant relationships in a rural area.</i></p>
10	<p>10a) evaluate the effectiveness of a composite thematic map as a Geographical Information System.</p>	<p><i>use transparent overlays or information technology (IT) to combine data and show inter-relationships, e.g. use information about relief, geology, soils, land-use, settlements and road systems to select a location for a new local authority rubbish dump; evaluate the resulting composite thematic map as a way of providing spatial information.</i></p>

Note: Pupils unable to communicate by speech, writing or drawing may use other means including the use of technology, signing systems or symbols as alternatives.

Attainment target 2: Knowledge and Understanding of Places

Pupils should demonstrate their increasing knowledge and understanding of places in local, regional, national, international and global contexts, particularly:

- i) a knowledge of places;
- ii) an understanding of the distinctive features that give a place its identity;
- iii) an understanding of the similarities and differences between places; and
- iv) an understanding of the relationships between themes and issues in particular locations.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

1

Pupils should be able to:

- 1a) name familiar features of the local area.
- 1b) identify activities carried out by people in the local area.
- 1c) state where they live.
- 1d) demonstrate an awareness of the world beyond their local area.
- 1e) name the country in which they live.

name local landmarks, e.g. roads, postboxes, shops, parks, woods, rivers, hills.

identify activities carried out by parents and people who work in the school, or who visit the school; people who provide a service in the community.

state the number of dwelling, name of street and name of the town, district or village.

talk about and paint pictures of places they have visited or seen photographs of.

know that they live in Wales.

2

- 2a) name the countries of the United Kingdom.
- 2b) describe uses of land and buildings in the local area.
- 2c) identify features of a locality outside the local area and suggest how these might affect the lives of the people who live there.
- 2d) describe similarities and differences between the local area and another locality specified in the programme of study.

name England, Scotland, Wales and Northern Ireland.

talk about the use of land for homes, shops, farms, transport, recreation and industry and the uses of different buildings.

identify the features of a locality and how people live, dress and eat.

give a simple description of similar and different types of farming, weather conditions, plants, animals, scenery, buildings, transport and people's lives.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

3

- 3a) name the features marked on Maps A and C at the end of the programmes of study.
- 3b) demonstrate that they know the location of their local area within Wales.
- 3c) use correct geographical vocabulary to identify types of landscape features and activities with which they are familiar in the local area.
- 3d) compare features and occupations of the local area with the other localities specified in the programme of study.
- 3e) explain the relationships between types of land-use, buildings and human activities in the local area.
- 3f) explain why some activities in the local area are located where they are.

locate their local area on a suitable map.

use appropriate vocabulary to identify landscape features, e.g. hills, cliffs and valleys; land-use; types of houses and other buildings; transport; and types of work and leisure facilities, e.g. factories and shops, sports facilities and places of entertainment.

identify similarities and differences between the local area and other localities in relief, land-use, types of settlement and work and leisure activities.

identify and give reasons for the relationships between different types of land-use and human activity in the local area.

explain why the postal sorting office is close to the railway station; why an industrial activity is located on a particular site.

4

- 4a) name the features marked on Maps B and D at the end of the programmes of study, and the following features shown on Map G: Cardiff, Swansea, Bangor; the rivers Severn, Tywi, Clwyd; Snowdonia, Brecon Beacons; Snowdon.
- 4b) describe how the landscape of a locality outside the local area has been changed by human actions.
- 4c) give an account of a recent or proposed change in a locality.
- 4d) describe the geographical features of Wales.
- 4e) describe how the daily life of a locality in an economically developing country is affected by its landscape, weather and wealth.

describe major landscape changes associated with economic activities, e.g. farming, industry, quarrying, tourism, and with the development of settlements and communications.

summarise a redevelopment proposal, e.g. the construction of a by-pass or other land-use development, the construction of a housing estate or supermarket, the destruction of part of a rainforest, the flooding of land caused by the construction of a dam.

describe the main features including landscape, distribution of population and patterns of settlement.

describe how family life, housing, clothing and diet in a locality are affected by landscape, weather and wealth.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

5

- 5a) name the features marked on Maps E, F and G at the end of the programmes of study.
- 5b) describe how the characteristic features of Wales are inter-related.
- 5c) explain how the occupations, land-use and settlement patterns of a locality outside the United Kingdom are related to environment and location.

show the links between physical features, route networks, economy, distribution of population and patterns of settlement.

explain the influence of the physical environment and improved communications on farming, forestry and tourism in a mountain valley in the French Alps.

6

- 6a) explain the effect of recent changes on Wales.
- 6b) describe the general geographical features of a European Community country specified in the programme of study; identify its main regions and compare two contrasting regions.
- 6c) explain the variety of geographical conditions in an economically developing country specified in the programme of study, and the influence of these conditions on the distribution of population.
- 6d) compare the general features of the USA, USSR and Japan.
- 6e) describe the sources of energy in the USA, USSR or Japan.

show how environmental, technological, economic, social or political changes have affected land-use and employment.

give a brief account of the regions and the geographical features of the country studied; describe similarities and differences in the two regions studied, e.g. climate, landscape, land-use, types of work and peoples' ways of life.

give an account of variations in the distribution of population, and the variety of geographical conditions in the country.

give a brief account, with the aid of tables of similarities and differences in the area, location, population, economic output and activities, physical features and trade of the three countries.

describe the origin of coal, oil and natural gas used in one of the countries.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

7

7a) explain the processes that have contributed to stability or change in Wales.

7b) evaluate the extent to which an economically developing country specified in the programme of study displays the characteristics of development.

7c) explain the geographical patterns associated with one theme specified in the programme of study, in relation to the European Community as a whole.

7d) explain how developments associated with the theme selected for 7c) have affected particular areas and regions.

7e) review the environmental problems arising from the development of industry in the USA, USSR or Japan.

7f) explain how the sources of energy in the USA, USSR or Japan have influenced the location and development of manufacturing.

7g) describe and analyse the patterns of trade between countries.

identify the factors and decisions which have resulted in change, or have preserved the features and character of Wales.

identify the characteristics of development by reference to GDP, value by type of exports and imports, birth rate, death rate, infant mortality, illiteracy, doctors per 1000.

review the patterns of agricultural or industrial output, and regional development programmes, at the European Community level; discuss the role of physical, economic, technological and political factors in explaining the patterns.

explain how developments associated with agriculture have affected particular areas in the UK, Denmark and Spain.

analyse environmental problems, e.g. loss of land from agriculture, removal of vegetation and destruction of natural habitats, atmospheric and water pollution.

explain the relationship between sources of energy and the location of manufacturing industry.

describe the types of exports and imports that are traded among developed countries, and between developed and economically developing countries; review the value placed upon their commodities and services and analyse the problems caused by imbalances in value.

8

8a) identify geographical patterns, relationships and processes in Wales.

8b) analyse factors that have affected the economic growth of an economically developing country specified in the programme of study.

8c) explain variations in economic prosperity between different regions within the USA, USSR or Japan.

8d) explain the extent to which local or regional initiatives, or decisions made at national or European Community level, have influenced changes taking place in the theme selected for 7c).

8e) explain the effects of international trade on countries and on levels of inter-dependence between countries.

analyse geographical patterns, relationships and processes which are characteristic of Wales.

review the nature of, and the value placed upon, natural resources within an economically developing country and consider how the resources act to provide opportunities or create constraints upon development; analyse the effect of political and historical factors and trade.

explain the causes and consequences of, or disparities between, wealthy and poor regions, e.g. by use of the core-periphery model.

explain the role of local, regional and national initiatives in improving tourist facilities and amenities, and competition between neighbouring resorts.

explain the extent to which shifts in the terms or balance of trade may benefit some countries and disadvantage others.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

9

9a) evaluate the effects of a theme specified in the programme of study on selected areas of the European Community.

9b) analyse the influence of inward investment on the economic development of an economically developing country specified in the programme of study.

9c) evaluate the importance of government policies for geographical patterns of international trade.

review the relative importance of the consequences of population shifts within the European Community, the advantages and disadvantages of development policies, the consequences of agricultural policies in particular places.

examine what forms of inward investment have occurred and describe the relative effect that such investment has had on employment, trade and other aspects of the economic development of the country.

review the effects on trade patterns of the establishment of trading blocs; preferential trading arrangements; the use of tariffs and quotas; international cartels.

10

10a) synthesise patterns, processes and relationships in Wales.

10b) evaluate alternative government policies and strategies relevant to the theme selected for 9a)

10c) evaluate the significance of foreign investment, loans and development assistance programmes in the economic development of an economically developing country specified in the programme of study.

10d) analyse recent trends in patterns of international trade and suggest likely future trends.

give a balanced and detailed geographical account of Wales, which explains how the characteristic geographical features, patterns and processes in the region are inter-related and the extent to which these relationships give coherence to the region.

evaluate alternative strategies which are intended to influence agriculture, population movement and tourism, by assessing their likely consequences.

appraise the overall effect of foreign investments, loans and development assistance programmes on the economic development of a country, and the effects on different sectors of the economy.

explain the growing importance of trade between countries of the Pacific Rim, the significance of trade between countries of the European Community, and between the European Community and other parts of the world; suggest which of these developments are likely to continue to be significant, and why.

Note: Pupils unable to communicate by speech, writing or drawing may use other means including the use of technology, signing systems or symbols as alternatives.

Attainment target 3: Physical Geography

Pupils should demonstrate their increasing knowledge and understanding of:

- i) weather and climate (the atmosphere);
- ii) rivers, river basins, seas and oceans (the hydrosphere);
- iii) landforms (the lithosphere); and
- iv) animals, plants and soils (the biosphere).

LEVEL	STATEMENTS OF ATTAINMENT	EXAMPLES
1	<p>Pupils should be able to:</p> <p>1a) recognise rocks, soil and water and understand that they are part of the environment.</p>	<p><i>recognise soil, water and rocks, (including sand), in the natural environment and describe some of their characteristics.</i></p>
2	<p>2a) recognise seasonal weather patterns.</p> <p>2b) identify the forms in which water occurs in the environment.</p>	<p><i>use words and pictures to describe their observations and experiences of the weather and seasons.</i></p> <p><i>know that water occurs as liquid in rain, fog, clouds, ponds, rivers and seas; and as ice in hail, frost and snow.</i></p>
3	<p>3a) describe contrasting weather conditions in parts of the world.</p> <p>3b) describe what happens to rainwater when it reaches the ground.</p> <p>3c) identify and describe a familiar landscape feature.</p>	<p><i>describe cold conditions in polar regions, hot and dry conditions in tropical deserts, and hot and wet conditions in tropical forests.</i></p> <p><i>study the effects of rainfall on different slopes and surfaces, e.g. on steep and gentle slopes; on tarmac, grass, soil and sand surfaces, and in drains.</i></p> <p><i>identify and describe features such as hills, valleys, lakes, beaches and rivers, through direct experience.</i></p>



LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

4

4a) explain how site conditions can influence surface temperatures and local wind speed and direction.

4b) describe evidence that materials are eroded, transported and deposited.

4c) identify parts of a river system including sources, channel, tributaries and mouth.

4d) describe how some earth movements are violent and explain, in simple terms, how volcanic craters, cones and lava flows are formed.

4e) compare characteristics of different types of soil.

identify temperature contrasts in sunny and shaded areas, and on different surfaces, e.g. tarmac and grass, and the effects on winds of buildings and walls; explain local differences in temperature and wind measurements, e.g. using a database linked to an overlay keyboard which shows a plan of the school and its surroundings.

collect evidence from investigations outside the classroom or the laboratory, from a video or from relevant information technology (IT) software.

identify – from maps, investigations outside the classroom or from use of a physical model, e.g. a sand tray and watering can – river sources, channel, tributaries and mouth; know that rivers receive water from a wide area, and that most eventually flow into a sea or lake.

describe from textbooks, newspaper reports, videos and pictures, the damaging effects of earthquakes and volcanic eruptions; with the help of books, photographs, diagrams, and relevant computer software, describe how volcanic eruptions produce craters, cones and lava flows.

compare the characteristics of the soil at a small number of selected sites, e.g. depth, colour, texture and visual evidence of organic content.



5

5a) describe differences in the mean seasonal distribution of temperatures and rainfall over the British Isles.

5b) distinguish between weather and climate.

5c) explain the causes and effects of river floods, and methods used to reduce flood risk.

5d) give evidence of different types of weathering and distinguish between weathering and erosion.

5e) relate the distribution of earthquakes and volcanoes to the boundaries of plates in the earth's crust.

produce and compare graphs showing the mean monthly rainfall and temperature for selected weather stations around the British Isles, using a database to store and retrieve information, and relate these to maps showing annual and seasonal distribution patterns.

compare weather conditions over a short period of time with the generalised description of the climate of a location.

give an account of the reasons why rivers flood; using maps, diagrams and case studies, describe the effects of river floods, and how flood risk is reduced, e.g. by attempts to control river flow and by land-use management.

examine the effects of frost action, chemical and biological weathering, on the school, local buildings or gravestones; investigate the effects of weathering on a limestone landscape; compare weathering with the removal of material by rivers, waves, wind and glaciers.

compare the distribution of the main concentrations of earthquakes and volcanic activity with the boundaries of the crustal plates by, e.g. marking them on a world map; describe the proportion of volcanic eruptions and large earthquakes which occur near crustal boundaries.



LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

6

6a) explain that rainfall is caused by air rising and cooling, and relate the uplift of air to relief, convection and fronts.

6b) describe characteristics and distribution of types of climate, and explain how these are related to latitude, the distribution of land and sea, major relief features, and prevailing winds.

6c) explain the main components and links in the hydrological cycle.

6d) describe the features of a river basin.

6e) describe the features associated with one type of landform specified in the programme of study.

6f) describe characteristics of one type of vegetation and relate those characteristics to environmental conditions and processes, including climate and human actions.

6g) describe some of the physical processes which can give rise to one type of natural hazard and how people respond to that hazard.

explain the relationship between rainfall and prevailing winds, and the distribution of upland areas; relate rainfall associated with thunderstorms to convectional activity, and frontal rainfall to the meeting of air masses with different densities.

describe the main characteristics of three types of climate and their distribution in the world; refer to climate graphs of climatic types; examine the differences in relation to the location and the seasonal movements of wind and pressure belts; compare climate graphs with the same latitude but different altitudes.

use a system diagram or a simple computer model to identify and explain the flows, stores and transfers of water.

describe a river basin using an OS map.

outline the characteristic features of the landform studied, shown on maps and photographs, e.g. cliffs, stacks, wave-cut platforms, beaches, spits, bars, headlands, bays, rias, fiords on coasts; glacial troughs, hanging valleys, ribbon lakes, corries, arêtes, pyramidal peaks, terminal and recessional moraines, erratics in highland areas formed by glaciation.

explain how Mediterranean woodland and scrub are adapted to the seasonal climatic pattern of dry, hot summers and mild, wet winters and how such vegetation has been affected by human activities, e.g. felling and burning forests, grazing animals.

consider the conditions that produce river and coastal flooding, the circumstances leading to a particular case of serious flooding and the consequences of the event.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

7

7a) explain, with the use of weather maps, how the weather of the British Isles is influenced by anticyclones and depressions; and relate the weather conditions at a particular time to a synoptic pattern.

7b) analyse the factors in a river basin that influence stream flow.

7c) explain the processes involved in the development of the features associated with one type of landform specified in the programme of study.

7d) describe the causes and effects of soil erosion, and explain why some places are especially vulnerable.

explain the weather sequence over a period, using information from newspapers, TV and radio weather bulletins, observations carried out at school and relevant software packages.

analyse the influence of weather events, the physical characteristics and land-use of the catchment area, and river management, to explain the stream flow shown on a flood hydrograph.

explain how marine erosion and deposition, longshore drift and changes of sea level affect coastal landforms; how freeze-thaw action, glacial erosion and deposition, and post-glacial processes affect the development of areas formed by glaciation, using evidence collected in the field.

locate, with the use of an atlas and satellite images, areas of the world which are seriously affected by soil erosion, and relate these to climatic and other conditions including relief; explain how and why some locations have been more adversely affected by human activity than others.

8

8a) explain how the world pattern of climatic types is influenced by the general circulation of the atmosphere.

8b) analyse the hydrological processes operating in a drainage basin system in terms of inputs, stores, flows and outputs.

8c) explain how human activities can significantly affect the rate of geomorphic processes.

8d) analyse attempts to prevent or reduce soil erosion.

give an account of the relationship between movements of air masses and climatic patterns.

use a computer model or a system diagram of a drainage basin to analyse the variables that affect flows within the system.

explain how human activities can accelerate coastal erosion along different parts of a shoreline, by removing material from beaches and offshore banks; how human activities can accelerate soil erosion on slopes.

examine the effectiveness of methods chosen to tackle soil erosion from the evidence available in a small number of case studies, at different scales.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

9

9a) explain the global distribution of areas which have markedly unreliable rainfall.

9b) explain the global pattern of ocean currents, and their influence on the climates of adjacent coastal areas.

9c) explain how the landforms in an area are a consequence of the varying resistance and structure of the rocks in that area, and of processes operating over a long period.

explain the relationships between the unreliability of rainfall and the distribution of types of climates and the general pattern of atmospheric circulation.

relate the global pattern of ocean currents to the prevailing wind systems and the shape of the ocean basins; explain the influence on the climates of adjacent coastal areas of a cold ocean current, e.g. the Californian Current, and a warm ocean current, e.g. the North Atlantic Drift.

explain how the resistance and structure of different types of rocks and different geomorphic processes acting over a long period have contributed to the formation of the landforms of a particular place, e.g. the ridge and vale topography and the coastal features of the Isle of Purbeck, or the glacial landforms, the radial drainage pattern and the different character of the relief in the northern, central and southern parts of the Lake District.

10

10a) explain how the landforms in an area are likely to change in the future and identify the processes likely to produce these changes.

10b) explain how desertification in semi-arid lands may result from physical processes and human activities.

explain which geomorphic processes were significant in the development of an area's landforms; which are still operating; and suggest, with reasoned arguments, the likely effect of those processes in the future.

give a detailed account of how physical and human processes combine to cause desertification.

Note: Pupils unable to communicate by speech, writing or drawing may use other means including the use of technology, signing systems or symbols as alternatives.

Attainment target 4: Human Geography

Pupils should demonstrate their increasing knowledge and understanding of:

- i) population;
- ii) settlements;
- iii) communications and movements; and
- iv) economic activities – primary, secondary and tertiary.

LEVEL	STATEMENTS OF ATTAINMENT	EXAMPLES
1	<p>Pupils should be able to:</p> <ul style="list-style-type: none"> 1a) recognise that buildings are used for different purposes. 1b) describe ways in which people make journeys. 1c) recognise that adults do different kinds of work. 	<p><i>talk about the uses of home, shops, offices, factories, schools, places of worship.</i></p> <p><i>describe journeys made to school, by car, bus, bicycle, taxi, on foot; how people travel to work, to the shops or to see friends.</i></p> <p><i>talk about people that they have seen working and what they do.</i></p>
2	<ul style="list-style-type: none"> 2a) demonstrate an understanding that most homes are part of a settlement, and that settlements vary in size. 2b) give reasons why people make journeys of different lengths. 2c) identify how goods and services needed in the local community are provided. 	<p><i>look at and talk about pictures, maps and photographs of homes in villages, towns and cities in different parts of the world.</i></p> <p><i>ask questions and talk about short and long journeys, e.g. for shopping, visiting relatives, taking holidays.</i></p> <p><i>know that food is obtained from local shops, stamps from post offices and newsagents, health care from doctors' surgeries and from hospitals; and that some goods and services are delivered to homes.</i></p>
3	<ul style="list-style-type: none"> 3a) give reasons why people change their homes. 3b) identify features of settlements which reveal their functions or origins. 3c) explain why different forms of transport are used. 3d) distinguish between those uses of land which require large sites and those which occupy small sites. 	<p><i>explain why people move homes, e.g. to find a bigger or smaller home or a more attractive location, changing jobs, retirement, avoiding famine, war or persecution.</i></p> <p><i>identify, from work outside the classroom, maps, photographs or historic documents, features, e.g. harbours in ports; beaches, hotels and leisure facilities in holiday resorts; factories in manufacturing towns; market squares and commercial buildings in market towns.</i></p> <p><i>explain why road, rail, sea and air transport are suitable to carry different cargoes over different routes.</i></p> <p><i>describe the large amounts of land required for some types of farming, forestry, residential areas and industrial sites; the concentration on smaller sites of some shops, offices, factories and hospitals.</i></p>

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

4

- 4a) explain why few people live in some areas and many people live in others.
- 4b) describe the layout and function of a small settlement or part of a large settlement.
- 4c) explain the impact of recent or current changes in the place studied for 4b)
- 4d) explain why roads and railways may not always take the shortest route between the places they link.
- 4e) give reasons for the ways in which land is used, how conflict can arise because of competition over the use of land, and for the location of different types of economic activity.

investigate urban and rural areas in the United Kingdom; populations in desert areas and cities.

describe a village, with an old nucleus, a 1930s ribbon development, and newer housing, or a suburban area with homes and a shopping centre.

describe the possible effects on the settlement studied of proposals for a new housing estate in a village, or out of town office or a supermarket in a suburban area.

describe a road or rail link from their own settlement to a neighbouring town or city; give reasons, with reference to examples, why routes often follow valleys, avoid steep slopes and waterlogged flood plains; and make detours to link intermediate settlements.

describe the influence on farming of relief, soils, and weather; the size of the farm; the technology that the farmer can use; the distance of the farm from markets for its produce; consider the reasons for different views being held about proposals for a new road which would cut through an urban housing estate; or whether a particular rural area should be used for farming, forestry or as open space for recreational use; give reasons for the location of a particular factory e.g. the suitability of its site, communications and access to necessary materials, power, workers and markets for its products.

5

- 5a) explain the factors which lead to changes in the population size of regions and countries.
- 5b) analyse factors that influence the location and growth of individual settlements, and identify the effects of such growth.
- 5c) explain the reasons for the growth of economic activities in particular locations.
- 5d) compare road and rail networks, and explain the effects of changes to these networks.
- 5e) compare land-use and distribution patterns in selected types of economic activities.

describe how population migration, and changes in birth rates and death rates affect populations.

analyse the location of individual settlements in relation to site and situation, available resources, communications and the overall settlement pattern; the effect of the extension of suburbs upon agricultural land-use and rural communities.

give reasons for the development of large suburban out-of-town shopping and business districts; or major industrial sites.

describe similarities and differences between road and rail networks in a region or in a country; examine the effects on people's lives resulting from the construction of bypasses, the introduction of one-way road systems, the closure of railway lines.

compare the land-use and distribution patterns of market gardening, arable, dairy and hill farming; different types of manufacturing industry; and corner shops, shopping streets, shopping malls and out-of-town hypermarkets.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

6

- 6a) analyse the global distribution of population.
- 6b) analyse the patterns of land-use in a town, and identify issues that arise as settlements age and requirements change.
- 6c) analyse the distribution pattern of shopping centres in an area.
- 6d) analyse the advantages and disadvantages of forms of transport, and how these change as a result of technological and other developments.
- 6e) review the advantages and disadvantages of locating similar economic activities in the same places.
- 6f) compare levels of economic development and welfare in different parts of the world using appropriate indicators.

analyse the relationships between the global distribution of population and national territories, physical features, natural resources, and levels of industrialisation and urbanisation.

analyse the distribution of functional zones and their relationship to the pattern of land values, accessibility and sequence of urban development.

analyse the goods and services provided in shopping centres of different sizes in a region; and how this pattern is related to economic activities, transport and shopping behaviour.

analyse the advantages and disadvantages of road and rail transport for moving goods and people; consider the effects of constructing a new motorway link or electrifying a railway line.

review the advantages and disadvantages of science parks, industrial estates; shopping centres; regional specialisation in a particular type of farming or a particular industry.

compare per capita GDP, literacy rate, people per doctor, secondary school enrolments.

7

- 7a) analyse the causes and effects of a recent large-scale migration of population.
- 7b) analyse the processes which lead to changes in towns and cities, and their effects.
- 7c) explain the effects on selected economic activities of developments in communication and transport systems, and the issues that arise from these developments.
- 7d) analyse changes in the distribution of selected economic activities, and describe the effects of these changes.
- 7e) analyse differences between countries in the proportions of the working populations engaged in primary, secondary and tertiary activities, and explain how these have changed.

review the causes and consequences of the post-1945 migration from Mexico and the Caribbean into the USA; the migration of Jews to Israel; migrant workers in South Africa.

analyse the processes leading to the decline and redevelopment of inner-city areas; population shifts in urban areas, and from urban to rural settlements; and the effects of such changes.

explain the impact of information technology (IT) on where people work; the development of bulk carriers and the effects on ports and port industries; the effects of rapid air freight services on market garden production.

analyse the changing distribution pattern of the iron and steel industry, and the effects on people and settlements; the expansion of oilseed rape production, and the effects on farming and on rural landscapes.

interpret graphs and statistics to show the changing structure of employment; use a spreadsheet to calculate location quotients for employment; explore differences between countries and regions, and how they have changed.

LEVEL

STATEMENTS OF ATTAINMENT

EXAMPLES

8

8a) describe and account for differences in the demographic structure in different places and the consequences of such differences.

8b) analyse the roles of decision makers in processes affecting urban and regional development.

8c) analyse the causes of uneven economic development in and between countries and make an appraisal of actions and policies intended to redress such imbalances.

8d) apply general concepts to the interpretation of patterns and processes in human geography.

explain differences in age and sex structures between towns, between regions and between countries and describe the effects of these differences, e.g. demands on particular services in a town or region with a high proportion of older people, compared with a town or region with a high proportion of young families.

analyse the respective roles of entrepreneurs, property owners, international organisations, economic and land-use planners, community groups, and local and central government.

analyse the causes and consequences of disparities between wealthy and poor regions, e.g. by use of the core-periphery model; explain contrasts in economic development on a global scale and different approaches to economic development in specific countries.

apply general concepts, e.g. accessibility, distance decay, urbanisation, core-periphery environmental perception.

9

9a) analyse the causes, and geographical consequences, of the distribution of ethnic, religious or linguistic groups in selected areas.

9b) explain how changes in transport, including the increase in numbers of motor cars and heavy road vehicles, are affecting settlements; appraise actions to limit any damaging effects.

9c) use conceptual frameworks to analyse patterns and processes in human geography.

analyse the causes and consequences of ethnic, religious or linguistic differences in a city, region or country.

describe the impact on specific settlements of the increase in the number of motor cars and heavy road vehicles; the effects on commuting of improvements to transport networks and services; the likely consequences of the construction of the Channel Tunnel; use a spreadsheet to analyse the impact of changes in traffic flow on the transport network; give evidence as to the success of strategies adopted to limit damaging effects.

use a spatial model to analyse urban land-use patterns; use a structural framework which draws together different ideas to analyse and explain complex relationships between, e.g. natural hazards and the varying ways in which humans adjust to such hazards.

10

10a) evaluate alternative explanations for international disparities in levels of economic development.

10b) examine international strategies for improving the quality of life in economically developing countries.

review theories of economic growth; cumulative causation, "take off", advantages and disadvantages of specific geographical locations in terms of resource base, situation, environmental potential.

discuss criteria for defining quality of life; describe the constraints which act as barriers to improvement; examine the contributions made by international strategies.

Note: Pupils unable to communicate by speech, writing or drawing may use other means including the use of technology, signing systems or symbols as alternatives.

Attainment target 5: Environmental Geography

Pupils should demonstrate their increasing knowledge and understanding of:

- i) the use and misuse of natural resources;
- ii) the quality and vulnerability of different environments and
- iii) the possibilities of protecting and managing environments.

LEVEL	STATEMENTS OF ATTAINMENT	EXAMPLES
1	<p>Pupils should be able to:</p> <ol style="list-style-type: none"> 1a) identify and name materials obtained from natural resources. 1b) express personal likes and dislikes about features of their local area. 	<p><i>identify that wood is obtained from trees, coal from the ground, wool from sheep, food from plants and animals.</i></p> <p><i>draw a picture or talk about what is good and bad about the local area, e.g. noisy, quiet, dull, interesting, smelly, smoky, ugly, beautiful.</i></p>
2	<ol style="list-style-type: none"> 2a) identify how people obtain materials from the environment. 2b) describe ways in which people have changed the environment. 2c) suggest how they could improve the quality of their own environment. 	<p><i>describe how materials are obtained through quarrying, mining, fishing, lumbering.</i></p> <p><i>be aware of changes in the environment, e.g. buildings, roads, the uses made of land for farming and leisure, water and air pollution.</i></p> <p><i>plan and take part in the development of a school garden or nature area; organise a scheme to collect waste paper for recycling.</i></p>
3	<ol style="list-style-type: none"> 3a) describe effects on environments of extracting natural resources. 3b) describe an activity designed to improve the local environment, or a place they have visited. 	<p><i>describe some of the effects on landscape, people and wildlife caused by the excavation of quarries and gravel pits; formation of spoil tips; construction of buildings and roads.</i></p> <p><i>describe improvements to the school's grounds, by answering questions: 'Why was it done?', 'How was it done?', 'Has it improved the local environment?'.</i></p>

LEVEL	STATEMENTS OF ATTAINMENT	EXAMPLES
4	<p>4a) identify the main sources of fresh water, and describe ways of ensuring a reliable supply.</p> <p>4b) discuss whether some types of environment need special protection.</p> <p>4c) describe ways in which damaged landscapes can be restored.</p>	<p><i>explain that water is obtained from rivers, lakes and underground sources; stored using tanks, dams and reservoirs transferred by pipelines between catchment areas; describe the action taken by water companies, the National Rivers Authority to maintain supply and control pollution.</i></p> <p><i>discuss the problems of protecting the habitats of rare species of wildlife or protecting a historic house.</i></p> <p><i>describe the restoration of derelict land, new uses for gravel pits, the landscaping of spoil tips, afforestation.</i></p>
5	<p>5a) explain why rivers, lakes, seas and oceans are vulnerable to pollution, and describe ways in which water pollution problems have been addressed.</p> <p>5b) distinguish between renewable and non-renewable resources.</p>	<p><i>identify the sources of water pollution, e.g. industrial discharge, agricultural run-off, sewage disposal; how pollutants reach rivers, lakes and seas; and the accumulation of pollutants in lakes and along coasts; describe ways in which these problems are addressed.</i></p> <p><i>categorise resources as renewable or non-renewable using criteria.</i></p>
6	<p>6a) analyse the effects on the environment of the development of two energy sources.</p> <p>6b) explain how conflicting demands can arise in areas of great scenic attraction.</p> <p>6c) explain how attempts to plan and manage environments can have unintended effects.</p>	<p><i>review the effects of the exploitation of coal or oil; the environmental effects of electricity generation from thermal, nuclear and hydroelectric power stations.</i></p> <p><i>analyse the conflicting demands in a National Park or on areas of protected coastline or countryside, e.g. for farming, forestry, quarrying, military use, reservoirs, and recreational purposes.</i></p> <p><i>explain unintended effects of environmental planning and management, e.g. pressures on the environment of increased access caused by the construction of the Trans-Amazonian Highway; earthquakes induced by reservoirs such as Lake Mead in the USA; increased salinisation caused by irrigation schemes in the Indus Valley of Pakistan; loss of wildlife and increase in soil erosion caused by hedgerow removal in the United Kingdom.</i></p>
7	<p>7a) analyse the effects of technological developments on the exploitation of natural resources and the management of environments.</p> <p>7b) explain how some leisure activities can harm the very environments that are the source of attraction.</p> <p>7c) identify possible causes of global environmental change, and explain the potential effects on parts of the world.</p>	<p><i>outline the effects on the oil industry of developments in refining, in bulk transport (including pipelines and large oil tankers), and in the technology required for offshore drilling; the effects of new refining processes on the working of low-grade mineral ores.</i></p> <p><i>give evidence of the impact of the tourist industry, e.g. ski lifts in mountainous areas; the effects of tourists on historic buildings.</i></p> <p><i>explain how climatic changes as a result of an increase in levels of carbon dioxide in the atmosphere could affect sea levels and how this would affect different parts of the world.</i></p>

LEVEL	STATEMENTS OF ATTAINMENT	EXAMPLES
8	<p>8a) analyse how the growth of both populations and economies increases the pressure on natural resources.</p> <p>8b) analyse, with particular attention to one example, why some environmental systems are fragile.</p>	<p><i>analyse the impact on regions, e.g. pressure on open spaces, demand for water, and on specific countries, e.g. the effects of population growth and economic development, on the exploitation of and attempts to conserve natural resources.</i></p> <p><i>review the relationships between human actions and physical processes in tropical rain forests, tundra, semi-arid</i></p>
9	<p>9a) explain the implications for international co-operation of resource and environmental management.</p>	<p><i>describe problems caused by water and atmospheric circulation crossing political boundaries; deforestation; global warming; acid rain; and the need for international co-operation to solve them.</i></p>
10	<p>10a) examine critically the concepts of sustainable development, stewardship and conservation.</p>	<p><i>analyse in detail the relevance and applicability of the concepts of sustainable development, stewardship and conservation, and the tension between those concepts in respect of, e.g. the use of Brazilian rainforest areas; tourism in the Alps; the encroachment of farming on wildlife habitats in East Africa.</i></p>

Note: Pupils unable to communicate by speech, writing or drawing may use other means including the use of technology, signing systems or symbols as alternatives.



Programmes of study for Key Stages 1 to 4

The examples printed in italics serve to illustrate the programmes of study and are non-statutory

Yours to
2 of 1 copy

10/1/19

PROGRAMME OF STUDY FOR KEY STAGE 1 – LEVELS 1 TO 3

Geographical skills

- 1 Enquiry should form an important part of pupils' work in geography in Key Stage 1. Work should be linked to pupils' own interests, experience and capabilities and lead to investigations based on both fieldwork and classroom activities. Much of pupils' learning in Key Stage 1 should be based on direct experience, practical activities and exploration of the local area.
- 2 Pupils should be encouraged to ask geographical questions, *for example*, "Why is this place like it is?", and to search for answers with the guidance of their teachers. Pupils should be given opportunities to use information technology (IT). They should be taught to:
 - observe their surroundings and examine pictures and pictorial maps of distant places and use an increasing range of geographical terms, *for example*, hill, slope, river, road, house, shop, in describing what they see;
 - identify similarities and differences between place, *for example*, in the ways land and buildings are used and in the life and work of people;
 - select information that is relevant to a geographical study from material provided by the teacher, *for example*, select pictures of lakes, rivers and seas for a study of water.
- 3 Pupils should be taught to:
 - follow directions, including the terms forwards and backwards, up and down, left and right, north, south, east and west;
 - extract information from, and add it to, pictorial maps;
 - draw around objects to make a plan, *for example*, mathematical shapes and household objects;
 - make representations of actual or imaginary places, *for example*, their own bedroom, a treasure island;
 - identify land and sea on maps and globes;
 - follow a route on a map, *for example*, a map of the local area of the school produced by a teacher, another adult or a pupil;
 - use pictures and photographs to identify features, *for example*, homes, railways, rivers, hills, and to find out about places;
 - observe, describe and record the weather over a short period.
- 4 Pupils working towards level 3 of attainment target 1 should be taught to:
 - use the eight points of the compass;
 - make a map of a short route, showing main features in the correct order, *for example*, from home to the park;
 - use letter and number co-ordinates to locate features on maps;
 - locate their own position and identify features using a large-scale map;
 - identify features on oblique aerial photographs.
- 5 Pupils should increase their awareness of localities in and beyond their own country. *Where possible such teaching should build on pupils' experience from visits, but should also use secondary sources, for example, photographs, objects, stories, videos and accounts by teachers and other adults.*

A locality should be a small area with distinctive features and in the case of the local area is the immediate vicinity of the school or of where the pupil lives.

Knowledge and Understanding of Places

PROGRAMME OF STUDY FOR KEY STAGE 1 – LEVELS 1 TO 3

- 6 Pupils should be taught:
- to name where they live;
 - to name the country in which they live;
 - that their own country is part of the United Kingdom, which is made up of England, Wales, Scotland and Northern Ireland.
- 7 Pupils working towards level 3 of attainment target 2 should be taught to:
- identify on globes or maps the points of reference specified on Maps A and C at the end of the programmes of study;
 - locate on a map the constituent countries of the United Kingdom;
 - mark on maps of Wales and the British Isles approximately where they live.
- 8 Pupils should study:
- the local area;
 - another locality in Wales or elsewhere in the United Kingdom which offers a contrast to the local area;
 - a locality beyond the United Kingdom.
- These localities should also be used as appropriate for work towards levels 1 and 2 of attainment targets 3, 4 and 5.
- 9 Pupils should be taught to:
- identify and name familiar features on the local area, *for example, buildings, parks, places of worship*;
 - investigate the use of land and buildings in the local area;
 - talk about work and leisure activities, *for example, investigate where people go to enjoy themselves and to work*;
 - investigate features of localities outside the local area, *for example, through looking at holiday postcards and photographs*; identify the features of, and talk about, places outside the local area; and investigate how these features might affect people's lives;
 - identify and describe similarities and differences between their local area and other localities.
- 10 Pupils working towards level 3 of attainment target 2 should be taught to:
- use correct geographical vocabulary to identify types of landscape features and industrial and leisure activities which they have observed in the local area;
 - explain where economic activities are located in the local area and offer reasons for the location of specified activities in their local area;
 - describe the features and occupations of other localities studied and compare them with those of the local area;
 - observe and suggest reasons for the relationships between land-use, buildings and human activities in the local area, *for example, the siting of shops, farms and factories*.

PROGRAMME OF STUDY FOR KEY STAGE 1 – LEVELS 1 TO 3

Physical Geography

- 11 Pupils should be taught to:
- investigate soil, water and rocks, including sand, and recognise that these materials are part of the natural environment; identify water in different forms;
 - identify familiar landscape features, including rivers, hills, ponds and woods and explore different gradients of slope;
 - investigate the effects of weather on themselves and their surroundings and recognise seasonal weather patterns.
- 12 Pupils working towards level 3 of attainment target 3 should be taught:
- to identify and describe landscape features, *for example a river, hill, valley, lake and beach* with which they are familiar;
 - the effect of different surfaces and slopes on rainwater when it reaches the ground;
 - about weather conditions in different parts of the world, *for example, in polar, temperate, tropical desert and tropical forest regions.*

Human Geography

- 13 Pupils should be taught:
- to investigate the uses made of buildings in the local area and further afield;
 - to investigate how people make journeys, why different means of transport are needed and why people make journeys of different lengths;
 - that most homes are part of a settlement and that settlements vary in size;
 - how goods and services needed by the community are provided;
 - that adults do different work, *for example, a teacher, bricklayer, bus driver, nurse, voluntary worker, a person looking after a housebound relative.*
- 14 Pupils working towards level 3 of attainment target 4 should be taught:
- how land is used in different ways, *for example, farming, buildings, leisure, manufacturing industry*, and why different amounts of land are required for different purposes;
 - why different means of transport may be used for different purposes and how people and goods transfer from one means of transport to another;
 - why people move homes, *for example, change of employment, retirement, marriage, to find a bigger or smaller home or a more attractive location, emigration, famine, war;*
 - how the functions and origins of settlements maybe revealed by their current features.

Environmental Geography

- 15 Pupils should be taught:
- where common materials are obtained, *for example, wool from sheep, rock from quarries, fish from the sea* and how they are extracted;
 - to discuss and explain their likes and dislikes about features of their environment, *for example, "What is good about where we live", "What spoils it?"*;
 - to identify activities which have changed the environment and to consider ways in which they can improve their own environment.

PROGRAMME OF STUDY FOR KEY STAGE 1 – LEVELS 1 TO 3

- 16 Pupils working towards level 3 of attainment target 5 should be taught:
- how the extraction of natural resources affect environments, *for example, quarries, mining*;
 - the differences between manufactured goods and natural resources;
 - about activities intended to improve the environment in the local area or in a place they have visited.
-

PROGRAMME OF STUDY FOR KEY STAGE 2 – LEVELS 2 TO 5

Geographical skills

- 1 Enquiry should form an important part of pupils' work in Key Stage 2. It should take account of pupils' interests, experience and capabilities, and lead to investigations based on fieldwork and classroom activities. Pupils should develop their geographical skills through studying places and geographical themes. They should be given opportunities to use information technology (IT).
- 2 Pupils should be taught to:
 - observe geographical features and conditions using simple instruments, *for example, tape measures, callipers, stopwatches, compasses, clinometers, thermometers, rain gauges, wind speed gauges, and weather vanes*, to make measurements;
 - select relevant information from a variety of sources, *for example, visitors, photographs, maps, charts, documents, atlases, globes, videos, TV and radio programmes, computer databases, books, newspapers*.
- 3 Pupils should be taught to:
 - use pictures and photographs to identify features, *for example, homes, railways, rivers, hills*, and to find out about places; describe what they see using geographical terms;
 - interpret symbols, measure direction and distance, follow routes and describe the location of places using maps;
 - make representations of real or imaginary places; make and use maps of routes, and sketch maps of small areas showing the main features and using symbols with keys;
 - use the eight points of the compass;
 - determine the straight line distance between two points on a map;
 - use letter and number co-ordinates and four-figure grid references to locate features on a map;
 - locate their position and identify features outside the classroom using a large-scale map;
 - identify features on vertical aerial photographs, *for example, railway lines, rivers and roads* and match them to a map;
 - use maps to find out where features are located and where activities take place;
 - find information in an atlas using the index and contents pages;
 - measure and record the weather using direct observation and simple equipment.
- 4 Pupils working towards level 5 of attainment target 1 should be taught to:
 - use conventional 1:50,000 or 1:25,000 Ordnance Survey map symbols with the aid of a key;
 - follow a route on an Ordnance Survey map and describe what would be seen;
 - use six-figure grid references to locate features on a map;
 - interpret relief maps;
 - extract information from distribution patterns shown on maps;
 - use a map to identify features they have seen;
 - use latitude and longitude to locate places on atlas maps;
 - recognise that a globe can be represented as a flat surface.

PROGRAMME OF STUDY FOR KEY STAGE 2 – LEVELS 2 TO 5

Knowledge and Understanding of Places

- 5 Pupils should develop their knowledge and understanding about places and themes. Pupils should be taught how to acquire information and develop skills that enable them to interpret and make sense of the knowledge gained.
- 6 Pupils should learn to identify, on globes and maps, local places, places that are frequently in the news, and places they are studying. They should be taught to:
 - identify on globes or maps the points of reference specified on Maps A and C and on Maps B and D at the end of the programmes of study, together with the following features shown on Map G: Cardiff, Swansea, Bangor; Severn, Tywi, Clwyd; Snowdonia, Brecon Beacons; Snowdon.
 - name and locate on a map the constituent countries of the United Kingdom and mark on maps of Wales and the British Isles approximately where they live.
- 7 Pupils working towards level 5 of attainment target 2 should be taught to:
 - identify on globes or maps the points of reference specified on Maps E, F and G at the end of the programmes of study.
- 8 During Key Stage 2 pupils working towards levels 2 to 5 of attainment target 2 should study:

Localities	Levels			
	2	3	4	5
the local area (Y Fro)	•	•	•	
a contrasting locality in Wales or elsewhere in the UK	•	•	•	
a locality in an economically developing country	•	•	•	•
a locality in a European Community country outside the UK				•
Wales			•	•

Local Area

- 9 Pupils should study their local area. They should be taught to:
 - investigate the use of land and buildings in the local area, and use correct geographical vocabulary to identify types of landscape features and industrial and leisure activities which they have observed in the local area;
 - observe and suggest reasons for the relationships between land-use, buildings and human activities in the local area;
 - suggest reasons for the location of economic activities in the local area and offer reasons for the location of specified activities in the area.

Wales

- 10 Pupils should be taught:
 - that their own locality can be considered as part of a district and a county within Wales;
 - about features contributing to the identity and diversity of Wales, such as landscape, distribution of population and patterns of settlement.
- 11 Pupils working towards level 5 of attainment target 2 should be taught:
 - how the main features of Wales, *for example, its physical environment and patterns of economic activity, population, language and settlement*, are inter-related.

PROGRAMME OF STUDY FOR KEY STAGE 2 – LEVELS 2 TO 5

Other Localities

- 12** Pupils should study a contrasting locality in Wales or elsewhere in the United Kingdom and a locality in an economically developing country. They should be taught:
- to investigate features of other localities, *for example, through looking at holiday postcards and photographs*, and how these features might affect people's lives;
 - to describe the features and occupations of the other localities studied and compare them with those of the local area;
 - to identify and describe similarities and differences between their local area and other localities;
 - how the localities studied have changed as a result of human actions;
 - to investigate recent or proposed changes in a locality;
 - to examine the impact of landscape, weather and wealth on the lives of people in a locality of an economically developing country.
- 13** Pupils working towards level 5 of attainment target 2 should be taught:
- how the occupations, land-use and settlement patterns of **both** a locality in an economically developing country **and** a locality in a European Community country outside the United Kingdom are related to the area's environment and location.

Physical Geography

- 14** Pupils should be taught:
- to identify and describe landscape features, *for example a river, hill, valley, lake, beach* with which they are familiar, and know that these may be described in Welsh topographic terms and/or place names, *for example llyn, cwm, mynydd*;
 - how site conditions can influence surface temperatures and affect wind speed and direction; and the effect of different surfaces and slopes on rainwater when it reaches the ground;
 - the nature and effects of earthquakes and volcanic eruptions, and how the latter produce craters, cones and lava flows;
 - to identify water in different forms;
 - that rivers have sources, channels, tributaries, and mouths, that they receive water from a wide area, and that most eventually flow into a lake or the sea;
 - that rivers, waves, winds and glaciers erode, transport and deposit materials;
 - to recognise seasonal weather patterns;
 - about weather conditions in different parts of the world, *for example, in polar, temperate, tropical desert and tropical forest regions*;
 - to investigate and compare the colour, texture and organic content of different types of soil.
- 15** Pupils working towards level 5 of attainment target 3 should be taught:
- the effects of frost action, chemical and biological weathering, *for example, on roads and buildings*, and the distinction between weathering and erosion;
 - to examine the global distribution of earthquakes and volcanoes and how this relates to the boundaries of the crustal plates;
 - the causes and effects of river floods and methods used to reduce flood risks;
 - the difference between weather and climate;
 - seasonal patterns of temperature and rainfall over the British Isles.

PROGRAMME OF STUDY FOR KEY STAGE 2 – LEVELS 2 TO 5

Human Geography

- 16** Pupils should be taught:
- why some areas contain very few people while other parts are densely populated, *for example, Mynydd Epynt, South Wales industrial valleys*;
 - to investigate why people make journeys of different lengths, why different means of transport may be used for different purposes and how people and goods transfer from one means of transport to another;
 - why people move homes, for example, change of employment, retirement, marriage, to find a bigger or smaller home, or a more attractive location, emigration, famine, war;
 - to study a route linking two places and understand why roads and railways do not always take the shortest route between the places they link, *for example, road and/or rail routes from West Wales to England, or from North to South Wales*;
 - that most homes are part of a settlement and that settlements vary in size; how the functions and origins of settlements may be revealed by their current features;
 - to study the layout and function of a small settlement, or part of a larger settlement, and evaluate the impact of any recent or current changes;
 - how goods and services needed by the community are provided;
 - how land is used in different ways, *for example, farming, buildings, leisure, manufacturing industry, forestry*; why different amounts of land are required for different purposes; and to study a particular issue which demonstrates how conflicts can arise due to competition over the use of land;
 - the reasons for different uses of land and for the location of different types of economic activities, *for example, sources of power, labour, raw materials, the transport network, the location of the purchaser or the services or goods*;
 - to compare an example of lowland or upland farming in one area of Wales with a contrasting example drawn from elsewhere in the UK, giving attention to such influences as relief, climate, accessibility and economic factors.
- 17** Pupils working towards level 5 of attainment target 4 should be taught:
- to examine and seek reasons for changes in the population size of regions and countries;
 - to compare different transport networks and the effects of changes in these networks;
 - reasons for the location and growth of individual settlements and the benefits and problems accompanying growth;
 - why economic activities may develop in particular locations;
 - to investigate types and patterns of land-use in farming, manufacturing industry and the retail industry.

Environmental Geography

- 18** Pupils should be taught:
- ways of extracting materials from the environment and how the extraction of natural resources affects environments, *for example, quarrying in North Wales, coal mining in South Wales*;
 - the differences between manufactured goods and natural resources;
 - about fresh water sources and means of ensuring a reliable supply, and of the significance of Wales in this context;
 - to identify activities which have changed the environment; to consider ways in which they can improve their own environment; and about activities intended to improve the local environment or a place they have visited;

PROGRAMME OF STUDY FOR KEY STAGE 2 – LEVELS 2 TO 5

- ways in which people look after and improve the environment; some of the ways in which damaged environments can be restored and damage prevented; and to consider whether some types of environment need special protection, *for example, national parks.*

19 Pupils working towards level 5 of attainment target 5 should be taught:

- the difference between renewable and non-renewable resources;
 - why rivers, lakes and seas are vulnerable to pollution and to investigate ways in which pollution problems have been addressed.
-

PROGRAMME OF STUDY FOR KEY STAGE 3 – LEVELS 3 TO 7

Geographical skills

- 1 An enquiry approach should be adopted for classroom activities, and work outside the classroom should be undertaken when appropriate. Enquiry should be supported by the use of secondary sources. Pupils should develop skills in interpreting data from statistics, diagrams and maps. Pupils should be given opportunities to use information technology (IT).
- 2 Pupils should be taught to:
 - make accurate measurements of geographical features and conditions;
 - select relevant information from sources, *for example, maps, diagrams and statistical tables*;
 - identify and describe geographical patterns and explore geographical relationships.
- 3 Pupils should be taught to:
 - measure and record the weather using direct observation and scientific instruments and procedures, *for example, maximum and minimum thermometer, rain gauge, anemometer, wind vane and barograph*;
 - use letter and number co-ordinates and four-figure and six-figure grid references; use conventional 1:50,000 or 1:25,000 Ordnance Survey map symbols with the aid of a key;
 - find information in an atlas using the index and contents pages; and use longitude and latitude to locate places on atlas maps;
 - follow a route on an Ordnance Survey map and describe what would be seen;
 - determine the straight line distance between two points on a map; and plan routes and measure their distances using maps of appropriate scales;
 - use maps as an aid to selecting suitable locations for an enterprise, *for example, with the assistance of a computer model to match locations to criteria specified in advance*;
 - use and interpret relief maps and extract information from maps showing distribution patterns;
 - compare the appearance of maps drawn using different ways of projecting the globe onto a flat surface;
 - compare a vertical aerial photograph with a map of the same area, identifying features that are evident on both;
 - make and use maps of short routes and small areas using symbols with keys to show features;
 - draw, to scale, cross-sections of small-scale features using their own measurements taken outside the classroom;
 - draw annotated field sketches to record and interpret landscapes;
 - locate their position and features outside the classroom using a large-scale map;
 - use a map and compass bearings to follow a route.
- 4 Pupils working towards level 7 of attainment target 1 should be taught to:
 - draw from a 1:50,000 or 1:25,000 Ordnance Survey map an annotated sketch map showing relationships between human and physical features;
 - interpret synoptic charts and images of cloud patterns obtained from weather satellites;
 - use satellite images to identify and interpret patterns in physical and human geography;
 - interpret topologically transformed maps, *for example, maps based on travel time distances, maps with territories drawn to scales that reflect population sizes*;
 - interpret and identify geographical relationships between patterns, using appropriate diagrams.

PROGRAMME OF STUDY FOR KEY STAGE 3 – LEVELS 3 TO 7

Knowledge and Understanding of Places

- 5 Pupils should acquire knowledge and gain understanding about places and themes, as required for attainment targets 2, 3, 4 and 5. Pupils should learn to obtain relevant information, and how to develop forms of thinking and reasoning that enable them to interpret and make sense of that information and acquire understanding.

The major focus of attainment target 2 at Key Stage 3 is on regional and country studies. The choice of places studied should provide contexts in which to develop the thematic studies required for attainment targets 3, 4 and 5 but the choice should not be limited to these. A balance should be struck between examples drawn from the United Kingdom including Wales and from other parts of the world. Topicality should be a factor in selection.

- 6 Pupils should learn to identify, on globes and maps, local places, places that are frequently in the news, and places they are studying. They should be taught to :
- identify on globes or maps the points of reference specified on the Maps at the end of the programmes of study;
 - name and locate on a map the constituent countries of the United Kingdom and mark on maps of Wales and the British Isles approximately where they live.
- 7 During Key Stage 3 pupils working towards levels 3 to 7 of attainment target 2 should study:

	Levels						
Localities	3	4	5	6	7	8	9
the local area (Y Fro)	•	•					
a locality in an economically developing country	•	•	•				
a locality in a European Community country outside the UK				•			
Wales		•	•	•	•		
Countries							
European Community country and theme				•	•		
economically developing country				•	•		
USA, Japan and USSR				•	•		

The Local Area and Wales

- 8 Pupils should be taught:
- that their own locality is part of Wales;
 - to identify the main features of Wales, *for example, its physical environment and patterns of economic activity, population, language and settlement* and describe how they are inter-related;
 - to use correct geographical vocabulary to identify types of features and activities in the local area;

PROGRAMME OF STUDY FOR KEY STAGE 3 – LEVELS 3 TO 7

- to explain where economic activities are located and offer reasons for these locations; and to explain the relationships between land-use, buildings and human activities in the local area;
- to consider the importance of historical factors in accounting for the major patterns of population, settlement and economic activity in Wales;
- to examine changes taking place in Wales in these patterns and some of the main factors, *for example, environmental, economic, technological, social and political*, which are influencing the decisions underlying such changes.

9 Pupils working towards level 7 of attainment target 2 should be taught:

- the processes leading to stability and change in Wales including those resulting from decisions taken at local, county, national, UK or international levels, *for example, the roles played by those concerned with the Cardiff Bay development*;
- the criteria which can be used when defining the extent of a region, *for example, linguistic, commercial, functional, administrative*;
- to consider the extent to which Wales forms an administrative region for many purposes, *for example, Welsh Office, Wales Gas*; but forms part of England/Wales regions for some others, *for example, Manweb, British Rail*.

European Community

10 Pupils should be taught:

- to investigate the physical and human features of **one** country in the European Community selected from **France, Germany, Italy or Spain**, which give rise to the country's distinctive characteristics, regional variety and sense of identity;
- how the occupations, land-use and settlement patterns of a locality in the country selected are related to the area's environment and location;
- to identify the regions within the country selected and to compare and contrast two of those regions.

11 Pupils working towards level 7 should be taught:

- to undertake a study of **one** of the following themes in relation to the European Community as a whole;
 - a) changing patterns of agriculture;
 - b) patterns of population migration in and between European Community countries;
 - c) patterns of regional development; or
 - d) tourism;
- the effect of developments associated with the theme selected on three areas in different parts of the European Community.

Economically Developing Country

12 Pupils should be taught:

- the geographical features and conditions of an economically developing country selected from **Bangladesh, Brazil, China, Egypt, Ghana, India, Mexico, Nigeria, Pakistan, Peru, or Venezuela**;
- to describe the features and occupations of a locality in the country selected and compare them with those of the local area; how the locality has changed as a result of human actions; and to investigate recent or proposed changes in the locality;

PROGRAMME OF STUDY FOR KEY STAGE 3 – LEVELS 3 TO 7

- to examine the impact of landscape, weather and wealth on the lives of people in a locality of the country selected;
- how the occupations, land-use and settlement patterns of a locality in the country selected are related to the locality's environment and location;
- to outline the distribution of population in the country selected, and how this is influenced by the features of and conditions in the country.

13 Pupils working towards level 7 should be taught to:

- evaluate the extent to which the country displays the characteristics of development.

USA, Japan and USSR

14 Pupils should be taught to:

- undertake a comparative study of the USA, Japan and USSR at a general level, as regards their comparative area, location, population, economic activities and output, physical features and trade,
- for **one** of these countries, investigate
 - a) the location and development of manufacturing industry; and
 - b) the development of energy resources and trade in fuels.

15 Pupils working towards level 7 should be taught:

- about environmental problems associated with the development of industry in the country selected;
- how sources of energy have influenced the location and development of manufacturing industry in the country selected.

International Trade

16 Pupils working towards level 7 should be taught to:

- analyse the patterns of trade between individual countries, including the types of commodities traded.

Physical Geography

17 Pupils should be taught:

- to identify and describe landscape features, *for example, a river, hill, valley, lake, beach* with which they are familiar;
- how site conditions can influence surface temperatures and affect wind speed and direction and the effect of different surfaces and slopes on rainwater when it reaches the ground;
- the nature and effects of earthquakes and volcanic eruptions, and how the latter produce craters, cones and lava flows; and to investigate the global distribution of earthquakes and volcanoes and how this relates to the boundaries of crustal plates;
- the landforms associated with either i) river channels and river valleys or ii) coasts, *for example, valley slopes, spurs, flood plains, channel features, meanders, waterfalls and gorges; or cliffs, wave-cut platforms, stacks, beaches and spits;*
- physical processes which can give rise to one type of natural hazard and how people respond to that hazard;

PROGRAMME OF STUDY FOR KEY STAGE 3 – LEVELS 3 TO 7

- the main features of river systems and river basins; the causes and effects of river floods and methods used to reduce flood risk; and to examine evidence that rivers, waves, winds and glaciers erode, transport and deposit materials;
- the main components and links in the hydrological cycle;
- the difference between weather and climate;
- the effects of relief, convection and fronts on rainfall, and the consequences of these factors on rainfall patterns in Wales;
- seasonal patterns of temperature and rainfall over in the British Isles;
- about weather conditions in different parts of the world;
- to compare the main characteristics and distribution patterns of the British climate with three other types of climates and investigate how these are influenced by latitude, the distribution of land and sea, major relief features and prevailing winds;
- the effects of frost action, chemical and biological weathering, *for example, on roads and buildings*, and the distinction between weathering and erosion;
- to investigate and compare the colour, texture and organic content of different types of soil;
- the characteristics and distribution patterns of three types of vegetation, *for example, coniferous forest, Mediterranean woodland and scrub, tropical desert, savanna grassland or tropical rainforest*, and how one of these types relates to environmental conditions and processes, including climate and human actions.

18 Pupils working towards level 7 of attainment target 3 should be taught:

- with references to Welsh and other examples the processes which form the features associated with either:
 - i) river channels and river valleys; or
 - ii) coasts;
- the factors that influence stream flow in a river basin, *for example, the Upper Severn*;
- how the weather of the British Isles is influenced by anticyclones and depressions, using their own observations and simple weather maps; and how weather conditions at a particular time relate to a synoptic pattern;
- the causes and effects of soil erosion and why some places are especially vulnerable.

Human Geography

19 Pupils should be taught:

- to examine and seek reasons for changes in the population size of regions and countries; to examine the global distribution of population, and to give reasons why some regions have high population density whilst others have low population density;
- why people move homes, *for example, change of employment, retirement, marriage, to find a bigger or smaller home or more attractive location, emigration, famine, war*;
- why different means of transport may be used for different purposes and how people and goods transfer from one means of transport to another;
- to study a route linking two places and understand why roads and railways do not always take the shortest route between the places they link, *for example, road and/or rail routes from West Wales to England, or from North to South Wales*;
- to compare different transport networks and the effects of changes in these networks in a particular place, *for example, compare the rail and major road networks of Wales and the factors accounting for similarities, differences and current changes*;

PROGRAMME OF STUDY FOR KEY STAGE 3 – LEVELS 3 TO 7

- to consider the advantages and disadvantages of forms of transport, and how these change as a result of technological and other developments;
- to study the layout and functions of a small settlement, or part of a larger settlement, and evaluate the impact of any recent or current changes; reasons for the location and growth of individual settlements and the benefits and problems accompanying growth; and how the functions and origins of settlements may be revealed by their features;
- the concept of a settlement hierarchy and to apply this concept to an analysis of the distribution of shopping centres of different sizes in specific places;
- to compare how goods and services are provided in settlements of different sizes, and to show how this relates to the distribution of settlements in specific areas, *for example, Anglesey, South East Wales, United Kingdom*;
- to investigate types and patterns of land-use in farming, manufacturing industry and the retail industry;
- patterns of urban land-use and the issues that arise as people's requirements change and settlements age; the reasons for different uses of land and for the location of different types of economic activities; and why economic activities may develop in particular locations and to consider the advantages and disadvantages of locating similar economic activities in the same places;
- how land is used in different ways and why different amounts of land are required for different purposes; to study a particular issue which demonstrates how conflicts can arise over the use of land;
- to compare differences in economic development and welfare in different parts of the world.

20 Pupils working towards level 7 of attainment target 4 should be taught:

- to analyse the causes and effects of a recent large-scale migration of population;
- the economic and social consequences of developments in communications and transport systems;
- the processes leading to changes in the layout and functions of towns and cities, and their effects on different groups of people;
- to analyse the proportions of the populations employed in primary, secondary and tertiary industries in different countries and how these proportions change over time;
- to analyse changes in the distribution of two types of economic activity; and the effects of such changes.

Environmental Geography

21 Pupils should be taught:

- how the extraction of natural resources affects environments, *for example, quarries, mining*;
- about fresh water sources and means of ensuring a reliable supply, and of the significance of Wales in this context; why rivers, lakes and seas are vulnerable to pollution; and to investigate ways in which pollution can be prevented;
- the differences between manufactured goods and natural resources;
- the differences between renewable and non-renewable resources;
- the effect on the environment of the development of at least two energy sources, *for example, power generation in Wales*;
- ways in which people look after and improve the environment; some of the ways in which damaged environments can be restored and damage prevented; and to consider whether some types of environment need special protection;

PROGRAMME OF STUDY FOR KEY STAGE 3 – LEVELS 3 TO 7

- how attempts to plan and manage environments can have unintended effects, using case studies;
- how areas of great scenic attraction can give rise to conflicting demands on them, and the issues which arise as a result.

22 Pupils working towards level 7 of attainment target 5 should be taught:

- the effects of developments in technology on the exploitation of natural resources and the management of environments;
 - how some leisure activities can harm areas of great environmental value, and to analyse solutions to this problem;
 - about possible causes and potential effects of global environmental change, by reference to particular places.
-

PROGRAMME OF STUDY FOR KEY STAGE 4 – LEVELS 4 TO 10

Geographical skills

- 1 Pupils should undertake an individual or small group investigation into a geographical topic in the form of a problem solving exercise. They should support their enquiry with fieldwork and the use of secondary sources. Pupils should develop the skills specified for attainment target 1. They should become competent in fieldwork techniques and develop skills in interpreting and analysing data from statistics, diagrams, maps and satellite images. Pupils should be given opportunities to use information technology (IT).
- 2 Pupils should be taught to:
 - make precise measurements of geographical features and conditions, using scientific instruments;
 - select and evaluate relevant information from a wide range of sources, including a census database, interest group publicity, newspapers, interviews, computer simulations, models, maps, atlas;
 - analyse geographical patterns and relationships.
- 3 Pupils should be taught to:
 - measure and record the weather accurately, *for example, using maximum and minimum thermometer, rain gauge, anemometer, wind vane and barograph;*
 - use grid references;
 - find information in an atlas using index and contents pages and use latitude and longitude to find places on atlas maps;
 - follow a route on an Ordnance Survey map and describe what would be seen;
 - plan routes and measure route and straight line distances using maps of appropriate scales;
 - use maps as an aid to selecting suitable locations for an enterprise;
 - extract information from thematic maps; identify and interpret relief, settlement and communication patterns using topographical maps;
 - interpret topologically transformed maps, *for example, maps based on travel time distances;*
 - use satellite images to identify patterns in physical and human geography;
 - interpret and identify geographical patterns and relationships between variables using appropriate diagrams;
 - interpret synoptic charts and images of cloud patterns as obtained from weather satellites;
 - identify variations in quality of life between places using a range of indicators and discuss the suitability of the indicators used;
 - compare maps using different projections; and identify the factors that influence the choice of map projection for specific purposes, *for example, the need to retain accuracy in shape or size of areas;*
 - compare a vertical aerial photograph with a map of the same area, identifying features that are evident on both;
 - draw, to scale, cross-sections of small-scale features using their own measurements taken outside the classroom;
 - draw annotated field sketches to record and interpret landscapes;
 - use a map and compass bearings to follow routes;
 - draw, from a 1:50,000 or 1:25,000 Ordnance Survey map an annotated sketch map showing the relationships between human and physical features, *for example, the site of a town, the relationships between communication patterns and the relief and drainage of an area and using symbols with a key.*

PROGRAMME OF STUDY FOR KEY STAGE 4 – LEVELS 4 TO 10

Knowledge and Understanding of Places

- 4 Pupils working towards level 9 of attainment target 1 should be taught to:
- synthesise information from different maps to produce a sketch map which identifies important geographical features and reveals spatial associations in an area, *for example, bring together information from general Ordnance Survey maps, land-use maps, soil maps and conservation maps to produce an account of a rural area.*
- 5 Pupils working towards level 10 of attainment target 1 should be taught to:
- construct a composite map for a specified purpose by overlaying separate distributions of thematic data, and evaluate the map's effectiveness as a Geographical Information System.
- 6 Pupils should acquire knowledge and gain understanding across a range of contexts and scales about places and themes as required for attainment targets 2, 3, 4 and 5. All pupils should undertake case studies of smaller localities in the regions and countries specified in paragraphs 7-16. The choice of places studied for attainment target 2 should provide relevant contexts in which to develop attainment targets 3, 4 and 5.
- 7 Pupils working towards level 4 of attainment target 2 should be taught to:
- identify on globes or maps the points of reference as specified on Maps B and D at the end of the programmes of study, and the following features shown on Map G: Cardiff, Swansea, Bangor; Severn, Tywi, Clwyd; Snowdonia, Brecon Beacons; Snowdon.
- Pupils working towards level 5 of attainment target 2 should be taught to:
- identify on globes or maps the points of reference as specified in Maps E, F and G at the end of the programmes of study.
- 8 During Key Stage 4 pupils working towards levels 4 to 10 of attainment target 2 should study:

	Levels						
Localities	4	5	6	7	8	9	10
a locality in an economically developing country	•	•					
a locality in a European Community country outside the UK		•					
Wales	•	•	•	•	•	•	•
Countries							
European Community country and theme			•	•	•	•	•
economically developing country			•	•	•	•	•
USA, Japan and USSR			•	•	•		
International Trade				•	•	•	•

PROGRAMME OF STUDY FOR KEY STAGE 4 – LEVELS 4 TO 10

Wales

- 9 Pupils should be taught:
- that their own locality is part of Wales;
 - to identify the main geographical features of Wales, *for example, its physical environment patterns of economic activity, population, language and settlement* and how they are inter-related;
 - to consider the importance of historical factors in accounting for the major patterns of population, settlement and economic activity in Wales;
 - to examine changes taking place in Wales, and some of the main factors, *for example, environmental, economic, technological, social and political, which are influencing the decisions identifying such changes*;
 - the processes leading to stability and change in Wales including those resulting from decisions taken at local, county, national, United Kingdom or international levels, *for example, the roles played by those concerned with the Cardiff Bay development*;
 - the criteria which can be used when defining the extent of a region, *for example, linguistic, commercial, functional, administrative*;
 - to consider the extent to which Wales forms an administrative region for many purposes, *for example, Welsh Office, Wales Gas*; but forms part of England/Wales regions for some others, *for example, Manweb, British Rail*.
 - to analyse geographical patterns, relationships and processes contributing to the diversity and coherence of Wales as a region.
- 10 Pupils working towards level 10 of attainment target 2 should be taught to:
- understand the complexity of regional study by considering patterns, processes and inter-relationships within Wales and the criteria which best allow a region to be defined and analysed.

European Community

- 11 Pupils should be taught:
- to investigate the physical and human features of **one** country in the European Community selected from **France, Germany, Italy or Spain** which give rise to the country's distinctive characteristics, regional variety and sense of identity;
 - how the occupations, land-use and settlement patterns of a locality in the country selected are related to the area's environment and location;
 - how the locality has changed as a result of human actions; and to investigate recent or proposed changes in the locality, and how the views of those living there influence the outcome;
 - to identify the regions within the country selected and to compare and contrast two of those regions;
 - to undertake a study of **one** of the following themes in relation to the European Community as a whole;
 - a) changing patterns of agriculture;
 - b) patterns of population migration in and between European Community countries;
 - c) patterns of regional development; or
 - d) tourism;
 - the effects of developments associated with the theme selected in three areas in different parts of the European Community;
 - to explain how far changes taking place in the theme selected are influenced by local or regional initiatives and by decisions made at national or international levels;

PROGRAMME OF STUDY FOR KEY STAGE 4 – LEVELS 4 TO 10

- 12 Pupils working towards level 9 of attainment target 2 should be taught to:
- evaluate the effects of the theme selected in specified areas of the European Community.

- 13 Pupils working towards level 10 of attainment target 2 should be taught to:
- evaluate alternative government policies and strategies which address the theme selected.

Economically developing country

- 14 Pupils should be taught:
- the geographical features and conditions of an economically developing country selected from **Bangladesh, Brazil, China, Egypt, Ghana, India, Kenya, Mexico, Nigeria, Pakistan, Peru, or Venezuela**, and identify the extent to which it displays characteristics of development;
 - how the occupation, land-use and settlement patterns of a locality in the country selected are related to the locality's environment and location;
 - how the locality has changed as a result of human actions; and to investigate recent or proposed changes in the locality;
 - to examine the impact of landscape, weather and wealth on the lives of people in the locality;
 - to outline the distribution of population in the country selected, and how this is influenced by the features of and conditions in the country;
 - to analyse the causes and effects of large-scale migration in the country selected;
 - to analyse and account for the processes and factors that have influenced economic development in the country selected.

- 15 Pupils working towards level 9 of attainment target 2 should be taught:
- the role played by inward investment in the economic development of the country selected.

- 16 Pupils working towards level 10 of attainment target 2 should be taught to:
- evaluate ways in which the government of the country selected and other organisations have attempted to stimulate economic development and redress regional imbalances, including the significance of foreign investments, loans and aid programmes.

USA, Japan and USSR

- 17 Pupils should be taught:
- to undertake a comparative study of the USA, Japan and USSR at a general level, as regards their comparative area, location, population, economic activities and output, physical features and trade;
 - for **one** of these countries, to investigate
 - a) the location and development of manufacturing industry; and
 - b) the development of energy resources and trade in fuels;
 - how sources of energy have influenced the location and development of manufacturing industry in the country selected;
 - about environmental problems associated with the development of industry in the country selected;
 - to explain variations in the levels of economic prosperity between different regions within the country selected.

PROGRAMME OF STUDY FOR KEY STAGE 4 – LEVELS 4 TO 10

International Trade

- 18** Pupils should study the broad features of international trade, with particular attention to the growing importance and role of Japan as a trading nation, and to the impact on trade patterns of the newly industrialised countries. They should be taught to:
- analyse the patterns of trade between individual countries, including the types of commodities traded;
 - how the economies of individual countries are interdependent and the effects of international trade on the economic development of individual countries.
- 19** Pupils working towards level 9 of attainment target 2 should be taught to:
- evaluate the significance for industrial countries of government policies affecting the patterns of international trade on individual countries and the changing patterns and nature of trade movements.
- 20** Pupils working towards level 10 of attainment target 2 should be taught to:
- analyse recent trends in patterns of international trade and suggest likely future patterns.

Physical Geography

- 21** Pupils should be taught:
- how site conditions can influence surface temperature and affect wind speed and direction;
 - the nature and effects of earthquakes and volcanic eruptions, and how the latter produce craters, cones and lava flows; and to investigate the global distribution of earthquakes and volcanoes and how this relates to boundaries of the crustal plates;
 - with reference to Welsh and other examples, the features of and the characteristic processes which form the landforms associated with either:
 - a) highland glaciation; or
 - b) limestone areas with karst features;
 - physical processes which can give rise to one type of natural hazard and how people respond to that hazard;
 - how human activities can significantly affect the rate of geomorphic processes, *for example, footpath erosion on Snowdon*;
 - the main features of river systems and river basins; the factors that influence stream flow in a river basin, *for example, the Upper Severn*; and the causes and effects of river floods and methods used to reduce flood risk;
 - and that rivers, waves, winds and glaciers erode, transport and deposit materials;
 - how the hydrological processes operating in a drainage basin can be considered as a system, comprising inputs, stores, flows and outputs;
 - the main components and links in the hydrological cycle;
 - the differences between weather and climate;
 - the effects of relief, convection and fronts on rainfall;
 - seasonal patterns of temperature and rainfall over the British Isles and to analyse how the weather of the British Isles is influenced by anticyclones and depressions using their own observations and simple weather maps; and how weather conditions at a particular time relate to a synoptic pattern;
 - to compare the main characteristics and distribution patterns of the British climate with two other types of climate and investigate how these are influenced by latitude, the distribution of land and sea, major relief features and prevailing winds;

PROGRAMME OF STUDY FOR KEY STAGE 4 – LEVELS 4 TO 10

- how the world pattern of climate is influenced by the general circulation of the atmosphere;
- the effects of frost action, chemical and biological weathering, *for example, on roads and buildings*, and the distinction between weathering and erosion;
- to investigate and compare the colour, texture and organic content of different types of soil; the causes and effects of soil erosion, and why some places are especially vulnerable; and to examine the main methods of control;
- the characteristics and distribution patterns of three types of vegetation, *for example, coniferous forest, Mediterranean woodland and scrub, tropical desert, savanna grassland or tropical rainforest*, and how one of these types relate to environmental conditions and processes including climate and human actions.

22 Pupils working towards level 9 of attainment target 3 should be taught:

- how the global pattern of ocean currents is produced and to examine their influence on the climates of coastal areas;
- to examine the global distribution of areas with particularly unreliable rainfall and the reasons why these areas are affected, including climatic factors;
- how the landforms in a particular place are a consequence of the varying resistance and structure of the rocks in that area, and of processes operating over long periods of time.

23 Pupils working towards level 10 of attainment target 3 should be taught:

- that some of the processes affecting landforms in a particular place are still operating and that others were dependent on conditions which no longer apply, and to draw conclusions about how landforms may change in the future and the processes likely to produce these changes;
- how desertification in semi-arid lands may be the consequence of physical processes and human activities.

Human Geography

24 Pupils should be taught:

- to examine and seek reasons for changes in the population size of regions and countries;
- to examine the global distribution of population, and give reasons why some regions have high population density whilst others have low population density; and to examine, at different geographical scales, some reasons for, and the consequences of, differences in the structure of populations;
- to analyse the causes and effects of a recent large-scale migration of population;
- to study a route linking two places and understand why roads and railways do not always take the shortest route between the places they link, *for example, road and /or rail routes from West Wales to England, or from North to South Wales*;
- to examine different transport networks; and the effects of changes in these networks in particular places, *for example, influence on industrial and urban development of M4 and A55*;
- to consider the advantages and disadvantages of forms of transport, and how these change as a result of technological and other developments;
- to study the layout and functions of a small settlement, or part of a larger settlement, and to evaluate the impact of any recent or current changes; reasons for the location and growth of individual settlements and the benefits and problems accompanying growth;
- the concept of a settlement hierarchy and to apply this to an analysis of the distribution of shopping centres of different sizes in specific places;

PROGRAMME OF STUDY FOR KEY STAGE 4 – LEVELS 4 TO 10

- to compare how goods and services are provided in settlements of different sizes;
- the processes leading to changes in the layout and function of towns and cities, and their effects on different groups of people;
- the roles of decision makers in processes affecting urban and regional development;
- to investigate types and patterns of land-use including patterns of urban land-use and the issues that arise as people's requirements change and settlements age; the reasons for different uses of land and for the location of different types of economic activities; and how conflicts can arise from competition over the use of land;
- why economic activities may develop in particular locations; the advantages and disadvantages of locating similar economic activities in the same places and to analyse the distribution of farming, manufacturing industry and retail industry, and the effects of changes in these distributions;
- the causes of uneven economic development within Wales and the United Kingdom and between the United Kingdom and other countries and to appraise actions intended to redress such imbalances; to compare differences in economic development and welfare in different parts of the world;
- to analyse the proportions of populations employed in primary, secondary and tertiary industries in different countries and how these proportions change over time;
- the effects of developments in communications and transport systems on selected economic activities and the issues which arise from these developments; the effects of developments on patterns of employment;
- to apply general theories to an understanding of patterns and processes in human geography.

25 Pupils working towards level 9 of attainment target 4 should be taught:

- the causes and geographical consequences of the distribution of ethnic, religious or linguistic groups in particular areas;
- how changes in patterns of transport affect settlements, including the increase in the number of motor cars and heavy vehicles and to appraise action to limit any damaging effects;
- to use conceptual frameworks to analyse patterns and processes in human geography.

26 Pupils working towards level 10 of attainment target 4 should be taught to:

- evaluate international differences in levels of economic development and international strategies for improving the quality of life in economically developing countries.

27 Pupils should be taught:

- about fresh water sources and means of ensuring a reliable supply and of the significance of Wales in this context; why rivers, lakes and seas are vulnerable to pollution; and to investigate ways in which pollution problems have been addressed;
- the differences between renewable and non-renewable resources;
- the effects on the environment of the development of at least two energy sources, *for example, power generation in Wales*;
- to analyse the effect of economic and population growth on the demand for natural resources;
- the effects of developments in technology on the exploitation of natural resources and the management of environments; and how attempts to plan and manage environments can have unintended effects using case studies;

Environmental Geography

PROGRAMME OF STUDY FOR KEY STAGE 4 – LEVELS 4 TO 10

- ways in which people look after and improve the environment; and to consider whether some types of environment need special protection and some of the ways in which damaged environments can be restored and damage prevented;
- how areas of great scenic attraction can give rise to conflicting demands on them and the issues which arise as a result; how some leisure activities can harm the very areas which are the source of the attraction; and to analyse solutions to this problem;
- to analyse with particular attention to one system why some major environmental systems are fragile;
- about possible causes and potential effects of global environmental change by reference to particular places.

28 Pupils working towards level 9 of attainment target 5 should be taught to:

- consider the implications of resource and environmental management for international co-operation.

29 Pupils working towards level 10 of attainment target 5 should be taught:

- about sustainable development, stewardship and conservation and to examine critically these concepts in relation to particular examples.
-

MAPS

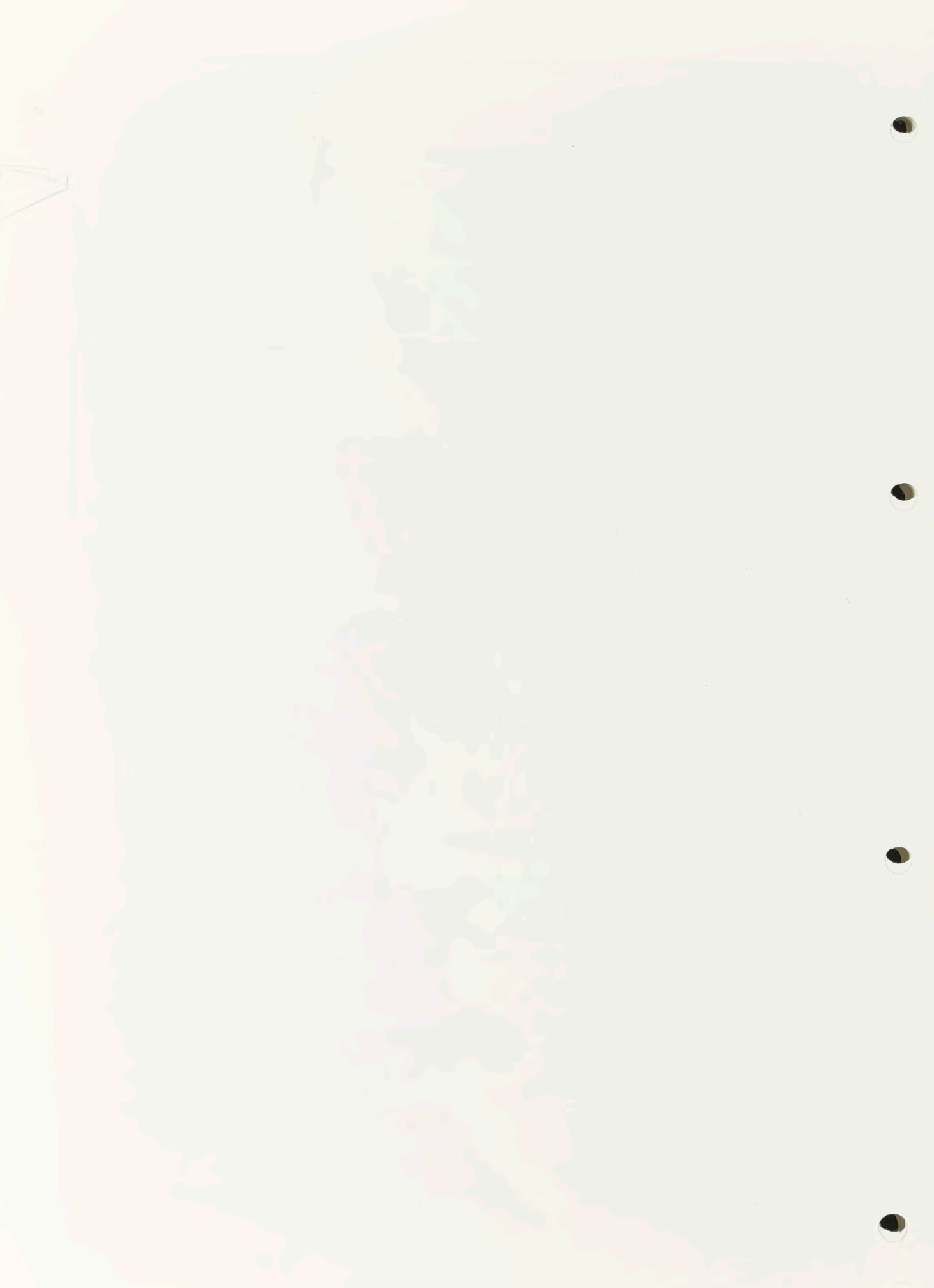
Maps C and F have been prepared using a modification of Gall's Projection. This is an equal area projection and the modification reduces distortion in the northern and southern latitudes. However, as distortions are still evident a linear scale has been omitted from Maps C and F.

Maps D, E and F include information previously displayed on maps A, B and C. The additional information shown is set out below:

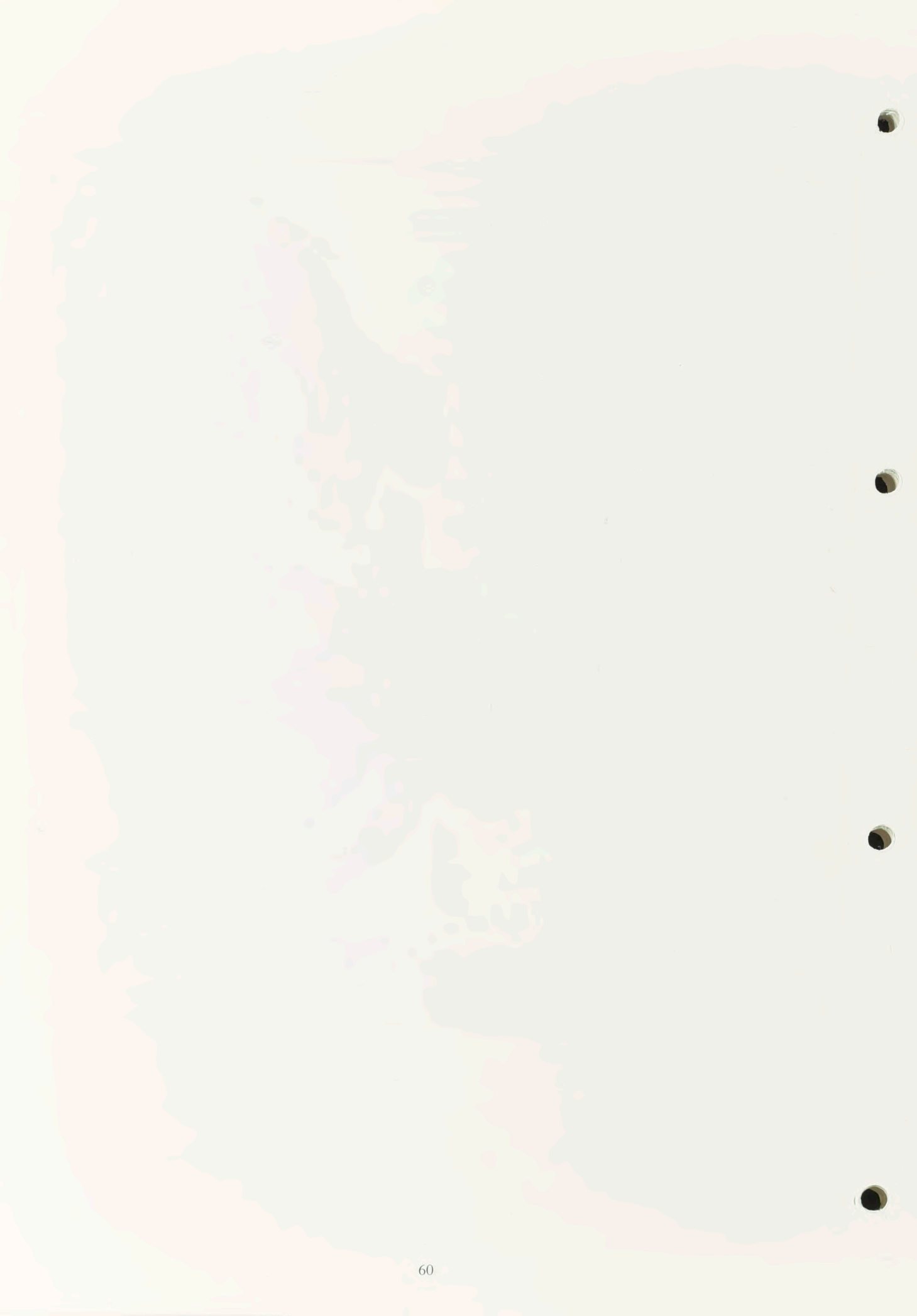
- Map D: North West Highlands, Snowdonia;
Birmingham, Bristol, Glasgow, Leeds, Liverpool,
Manchester, Newcastle-upon-Tyne, Southampton.
- Map E: R. Danube;
Belgium, Denmark, Greece, Luxembourg,
Netherlands, Portugal;
Amsterdam, Athens, Brussels, Copenhagen, Lisbon.
- Map F: Arctic and Antarctic Circles, International dateline,
Prime Meridian;
The Great Lakes;
R. Colorado, R. Congo or Zaire, R. Ganges, R.
Murray-Darling, R. St Lawrence, R. Volga, R.
Yangtze, R. Zambesi;
Argentina, Bangladesh, Brazil, Egypt, Ghana,
Indonesia, Israel, Kenya, Mexico, New Zealand,
Nigeria, Pakistan, Peru, Saudi Arabia, Singapore,
South Africa, Venezuela;
Accra, Beijing, Bombay, Buenos Aires, Cairo,
Calcutta, Caracas, Chicago, Delhi, Jakarta,
Jerusalem, Johannesburg, Lagos, Leningrad, Lima,
Los Angeles, Mexico City, San Francisco, Sao Paulo,
Shanghai, Sydney, Toronto, Washington.

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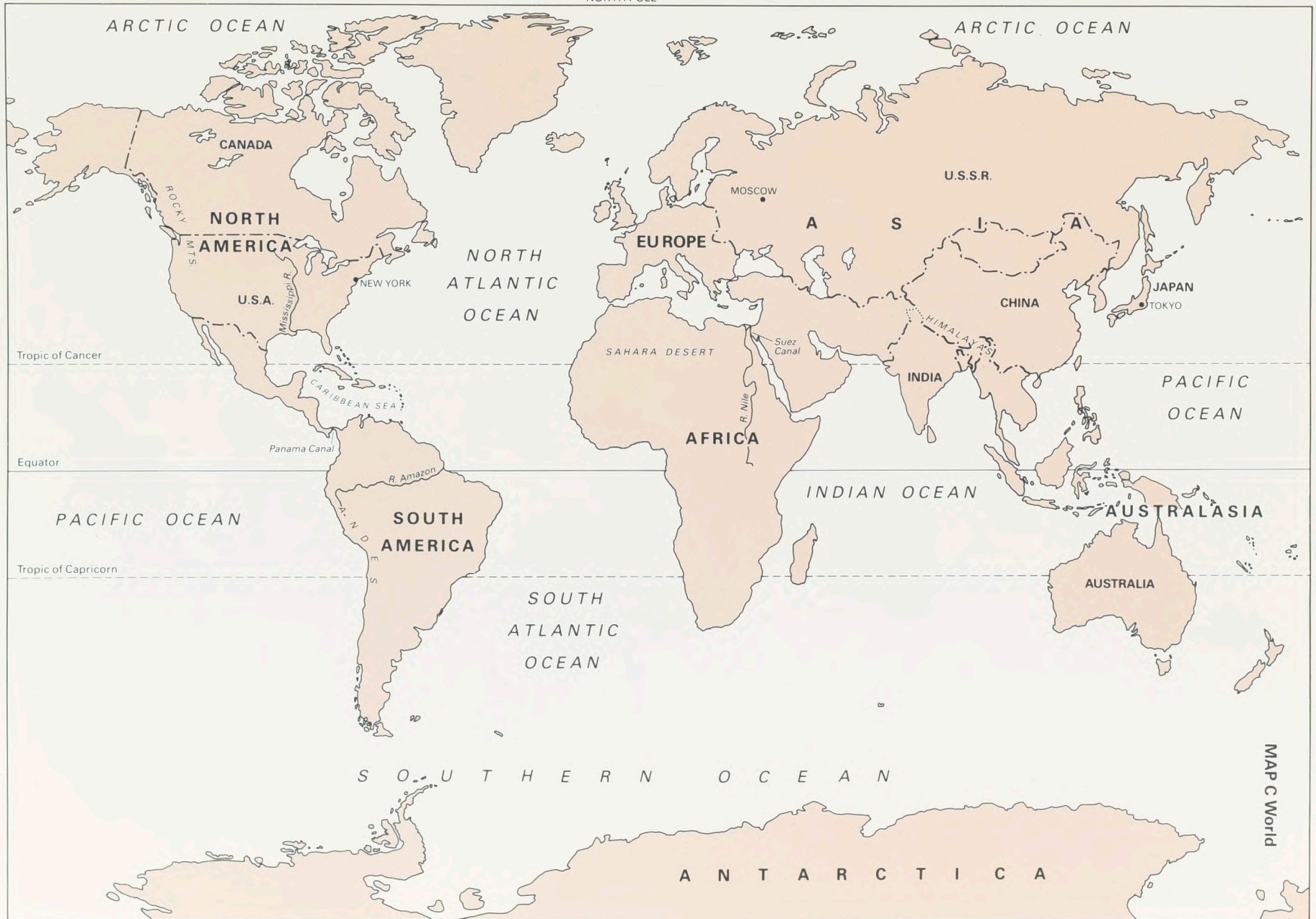
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NORTH POLE



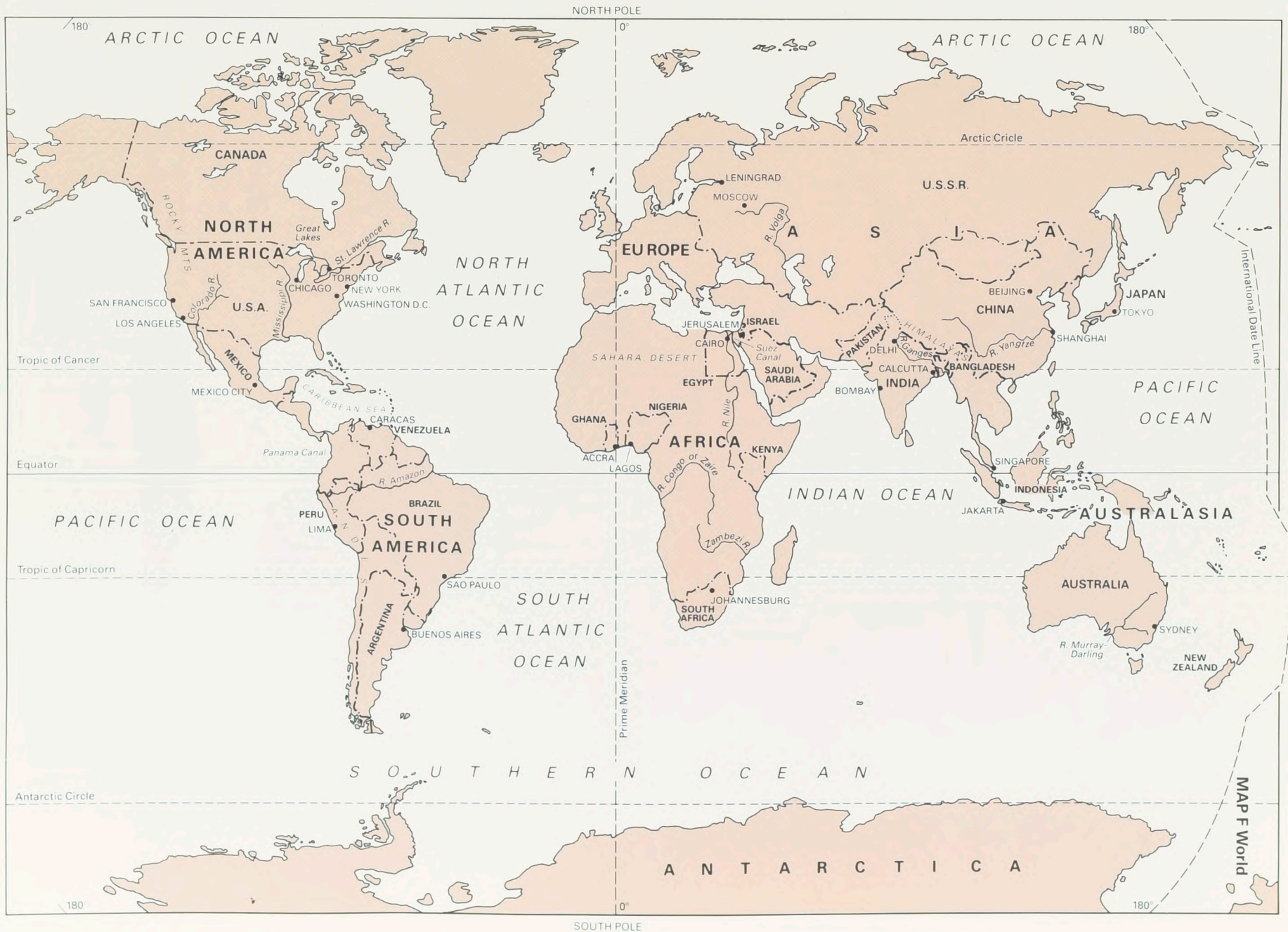
SOUTH POLE

MAP D British Isles



MAP E Europe





MAP G Wales





WELSH OFFICE CIRCULAR 8/91

EDUCATION REFORM ACT 1988

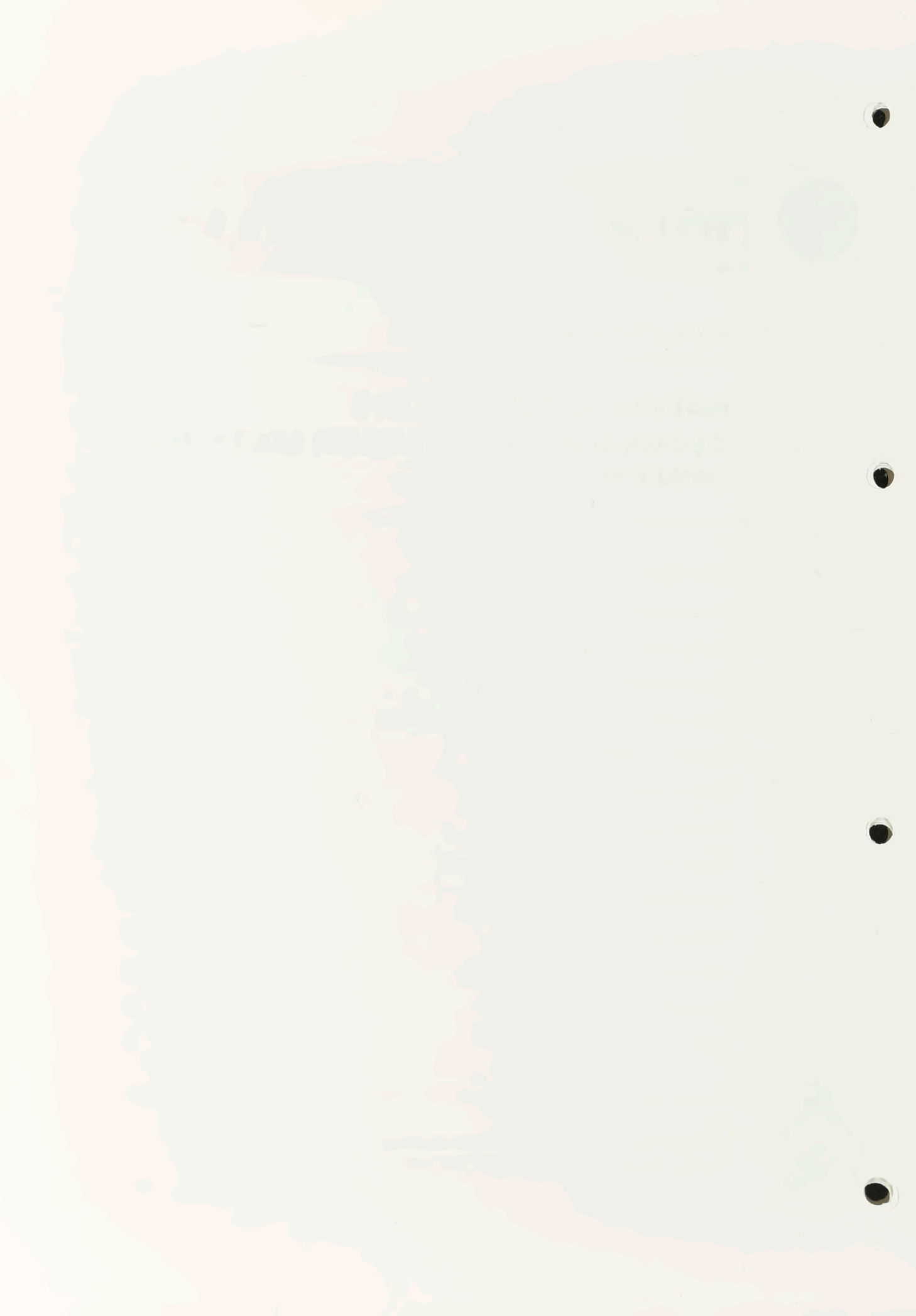
NATIONAL CURRICULUM: GEOGRAPHY ORDER UNDER SECTION 4 (WALES)

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March 1991



INTRODUCTION

1 This Circular provides guidance on the Order¹ for geography in Key Stages 1 to 4. It applies to maintained schools (including grant maintained schools) in Wales, and explains how the attainment targets and programmes of study will be implemented in relation to the four Key Stages of a pupil's compulsory schooling. It also outlines the arrangements which will operate for the assessment of pupils' work. The Order which the Secretary of State laid before Parliament on 21 March 1991 is made under Section 4 of the Education Reform Act 1988. A separate Order made by the Secretary of State for Education and Science applies to maintained schools in England.

2 The guidance contained in this Circular does not constitute an authoritative legal interpretation of the provisions of the Act: that is a matter for the courts.

BACKGROUND

3 In May 1989 the Secretaries of State appointed a working group to advise them on attainment targets and programmes of study for geography. In the light of the group's recommendations the Secretaries of State published proposals which were the subject of statutory consultation. In Wales this was carried out by the Welsh Office who consulted the Curriculum Council for Wales and a wide range of other interests. Copies were sent to all schools. The Secretary of State published on 14 January 1991 for further comment a draft Order and associated Document containing details of the attainment targets and programmes of study for geography in Wales. All proposed or draft versions of the attainment targets and programmes of study are now superseded.

4 The details of the statutory attainment targets and programmes of study are contained in the associated Document published by Her Majesty's Stationery Office (HMSO) entitled "Geography in the National Curriculum (Wales)" [ISBN 0-11-701608-X].

5 The Order and the associated Document both have statutory force, with the exception of the italicised text in the Document which is non-statutory. This is mainly in the form of examples which serve to illustrate the statements of attainment and the programmes of study rather than to suggest what should be taught or how. The Order and the associated Document are being published in translation into Welsh for the benefit of those schools and teachers who work through the medium of Welsh.

6 The Order and the associated Document for geography will start to come into force for each

Key Stage as follows:

Key Stage 1	1 August 1991
Key Stage 2	1 August 1991
Key Stage 3	1 August 1991
Key Stage 4	1 August 1994

Definitions of the four Key Stages are given in Annex 1.

COMMENCEMENT DATES

7 Details of the commencement dates are set out in Annex 2. Paragraphs 8-19 offer an explanatory commentary on Annex 2.

8 The Secretary of State proposes subject to consultation, that all pupils at Key Stage 4 will study a full course of history or a full course of geography leading to GCSE or equivalent or a short course in both of these subjects. Regulations under Section 17 of the Act will be prepared, subject to consultation, to disapply the requirements for geography at Key Stage 4 for pupils taking the full course in history and vice versa. All pupils will be required to study geography and history until age 14.

Key Stage 1

9 For the school year 1991-92, the attainment targets and programmes of study set out in the Order and the associated Document for geography will apply to pupils in reception classes and in Year 1 from the point when they reach compulsory school age. The requirements will not apply to pupils then in the second year of Key Stage 1 – Year 2 – even if that year group includes five year olds working in a teaching group composed mainly of six year olds.

10 For the school year 1992-93 and beyond, the attainment targets and programmes of study will apply to pupils in the first and second years of Key Stage 1.

11 During the summer of 1993, all pupils at the end of the first Key Stage will be assessed against the attainment targets for the first time. Under the Education (Individual Pupils' Achievements) (Information) Regulations 1990, schools are required to report the results of this and subsequent statutory national assessments to parents in respect of their own children. It is not the Government's policy to require schools to publish assessment results in aggregate at Key Stage 1 although the Secretary of State would wish to encourage schools to do so.

Key Stage 2

12 For the school year 1991-92, the attainment targets and programmes of study for geography will apply to pupils entering the first year of Key Stage 2 – Year 3 – ie pupils in a teaching group in which the majority of pupils will reach the age of eight during the school year 1991. Thereafter, the requirements will extend to each successive year of the Key Stage.

¹ The Education (National Curriculum) (Attainment Targets and Programmes of Study in Geography) (Wales) Order 1991

13 During the summer of 1995, all pupils at the end of the second Key Stage will be assessed against the attainment targets for the first time. Under the Education (Individual Pupils' Achievements) (Information) Regulations 1990, schools are required to report the results of this and subsequent statutory national assessments to parents in respect of their own children. It is also the Government's policy to require schools to publish assessment results at Key Stage 2 in aggregate.

Key Stage 3

14 For the school year 1991-92, attainment targets and programmes of study for geography will apply to pupils entering the first year of the Key Stage 3 – Year 7 – ie pupils in a teaching group in which the majority of pupils will reach the age of twelve during the school year 1991. Thereafter, the requirements will extend to each successive year of the Key Stage.

15 Pupils entering the third Key Stage may not have completed all the work in geography which is covered by the attainment targets and programmes of study for the first two Key Stages. Through liaison with primary schools and appropriate internal assessment, teachers will need to make an early review of the levels of attainment which these pupils have reached. Professional judgements can then be made about how the programme of study material prescribed for the third Key Stage can be organised and taught in a manner appropriate to pupils' needs.

16 During the summer of 1994, all pupils at the end of the third Key Stage will be assessed against the attainment targets for the first time. Under the Education (Individual Pupils' Achievements) (Information) Regulations 1990, schools are required to report the results of this and subsequent statutory national assessments to parents in respect of their own children. It is also the Government's policy to require schools to publish assessment results at Key Stage 3 in aggregate.

Key Stage 4

17 The programmes of study and attainment targets for geography at Key Stage 4 have been designed for those studying a full course of geography leading to a GCSE or equivalent qualification. The Government is publishing a supplementary Order covering a short course in geography.

18 Subject to paragraph 17 above and the arrangements set out in paragraph 8, the attainment targets and programmes of study for any geography course selected by a pupil will apply as follows:

- for the school year 1994-95, to pupils entering the first year of the fourth Key Stage – Year 10
- ie pupils in a teaching group in which the

majority of pupils will reach the age of 15 during the school year 1994;

- from autumn 1995, the requirements will extend to pupils in the second year of the Key Stage – Year 11.

19 During the summer of 1996, there will be the first statutory national assessment of pupils at the end of Key Stage 4 on the basis of National Curriculum study in geography. The exact nature of that assessment will depend on the particular course of study which has been followed.

ATTAINMENT TARGETS AND PROGRAMMES OF STUDY

20 The Act defines attainment targets as the knowledge, skills and understanding which pupils of different abilities and maturities are expected to have by the end of each Key Stage. Programmes of study are defined in the Act as the matters, skills and processes which are required to be taught to pupils of different abilities and maturities during each Key Stage. Together they provide the objectives for what is to be learned in each National Curriculum subject course selected during that Key Stage. They set out the essential ground to be covered to enable pupils to meet the attainment targets at the range of levels specified for each Key Stage. The programmes of study for geography are set out by reference to Key Stages but include some material which relates to individual levels of attainment appropriate to the Key Stage in question. Because of overlap in the range of levels for each Key Stage some level related material occurs in more than one Key Stage.

Range of levels of attainment targets for each Key Stage.

21 Ranges of levels of attainment of the ten level scale adopted for the National Curriculum are specified in the Order for the Key Stages for geography as follows:

Key Stage 1	1-3
Key Stage 2	2-5
Key Stage 3	3-7
Key Stage 4	4-10

22 Although it is expected that the attainments of the great majority of pupils at the end of Key Stages will fall within these ranges of levels, the actual attainments of some pupils – as measured by assessment – may fall outside the specified ranges. The Secretary of State accordingly intends that the prospective Order to govern assessment in geography will enable teachers to assess pupils at whatever level is justified by the available evidence of their attainments. However, during the Key Stage, teachers are required to teach with a view to pupils achieving levels of attainment within the ranges specified in paragraph 21 above.

Flexibility for teaching outside the ranges of levels specified

23 There are various ways in which the current provisions allow for a pupil to be taught for part of the time programme of study material specific to levels outside the ranges specified for the Key Stage where it is sensible to do so:

- i. a pupil might be given work at a level beyond the usual range. For example, an 8 year old not ready for work at level 2 (bottom of the range specified for the second Key Stage in geography) might be given work at level 1 in the Key Stage 1 programme of study for part of the time; conversely, a pupil in the third Key Stage who had, in the teacher's view, already achieved a level 7 standard against some attainment targets (top of the range specified for the third Key Stage), might be given work on an individual basis, based on Key Stage 4, at a higher level, while remaining in his or her class of 13 year olds;
- ii. where it makes sense and is practicable, the pupil may be moved up or down a Key Stage by placing him or her in a teaching group in which the majority of pupils are older or younger – see paragraph 2 of Annex 1. There is, however, no requirement or expectation that pupils should be moved up or down in this way, except where the school judges this to be in the best interests of the pupil; and
- iii. a statement of special educational needs may specify disapplication or some modification in the ranges of levels appropriate at different Key Stages for the individual child.

24 It is expected that the flexibility offered by i. and ii. above will deal with very nearly all cases where pupils need to be taught outside the ranges specified for Key Stages. There should be no need, on this account, for a significant increase in the number of statements. However, the Department will keep under review the effect of the new provisions in practice.

SCHEMES OF WORK

25 Under Section 10(2) of the Act the headteacher has a duty to secure the implementation of the National Curriculum. The headteacher will need to consider with his or her staff whether existing schemes of work adequately cover the attainment targets and programmes of study, or whether the schemes of work need modification.

26 Section 10(3) of the Act requires schools to teach the foundation subjects for a reasonable time until the attainment targets and programmes of study are

fully implemented. The requirement is in effect for all the foundation subjects for pupils in Key Stages 1-3, including those with statements of special educational need. The purpose is to ensure that pupils benefit as soon as possible from a broad and balanced curriculum.

CROSS-CURRICULAR THEMES

27 Attainment targets and programmes of study for geography contribute to cross-curricular themes, particularly environmental education, economic and industrial understanding and community studies. The Curriculum Council for Wales has published guidance on economic and industrial understanding and further guidance on other cross-curricular themes will follow.

ASSESSMENT ARRANGEMENTS

28 The achievement of individual pupils in relation to the attainment targets for geography will have to be assessed at or near the end of each Key Stage. The Secretary of State has decided that:

as to Key Stages 1 and 2

- assessment should be based entirely on teachers' own judgements of pupils' classroom work, although informed, as teachers see fit, by the use of non-mandatory tests which the Government has asked the School Examinations and Assessment Council (SEAC) to develop;

as to Key Stage 3

- assessment should combine teachers' own judgements based on ordinary classroom work and the results of standard national tests which will be administered by teachers;

as to Key Stage 4

- assessment will be predominantly through the medium of GCSE, although arrangements will also be made, within the framework of the National Curriculum ten level scale, to assess the attainments of pupils who elect to follow shorter, non-GCSE courses in both geography and history.

29 Within this framework, SEAC has been asked to advise on the detailed arrangements for assessing pupils in geography. In the light of SEAC's advice, the Secretary of State will in due course make Orders, under Section 4 of the Act, to govern assessment in geography at each Key Stage.

30 Meanwhile, schools should take steps to see to it that pupils' classroom work in geography is assessed, and records of their attainments kept well in advance of the first statutory national assessments. This is:

- i. to ensure that individual pupils are acquiring the knowledge and understanding which enable them to work at appropriate levels for any given attainment target and programme of study;
- ii. to inform those with an interest – notably parents, or other teachers with either current or imminent responsibility for the pupil – about individual pupils' progress; and
- iii. to build up a record of relevant evidence about a pupil's attainments, including possibly samples of work, on which to draw in any discussions about the levels which individual pupils have reached at the end of the Key Stage and to promote internal agreement within the school about assessment standards.

31 Regulations have been made under Section 22 of the Act – the Education (Individual Pupils' Achievements) (Information) Regulations 1990 – which prescribe the manner and form in which the results of the assessment of individual pupils are to be made available to parents both at the end of Key Stages and in the interim. Further regulations will be published in due course to govern the manner and form in which school level assessment data is to be made available to parents and more generally.

PUPILS WITH SPECIAL EDUCATIONAL NEEDS

32 Paragraph 22 above has explained that the range of levels specified in the Orders for the four Key Stages should be broad enough to cover the substantial majority of the ability spectrum at each reporting age. The Document for geography describes how the requirements of some of the attainment targets and programmes of study may be modified for pupils with identified special educational needs so as to ensure that they enjoy the fullest possible benefit of the National Curriculum without unnecessary recourse to making or amending a statement of special educational needs under the 1981 Education Act. The Government does not envisage that it will be necessary to prepare Regulations under Section 17 of the Act to modify or disapply the ranges specified in the Orders for pupils with special educational needs.

33 Under Section 18 of the Education Reform Act, a statement made under the 1981 Act may modify or disapply any or all of the requirements of the National Curriculum if they are inappropriate for an individual pupil. The connection with a statement ensures that any departure from the National Curriculum will be decided in the light of educational, medical, psychological and other evidence about the pupil, including the views of

the pupil's parents. That procedure is subject to consultation with parents and to their right of appeal under the 1981 Act as amended by paragraphs 84 and 85 of Schedule 12 to the Education Reform Act.

34 The Education (National Curriculum) (Temporary Exceptions for Individual Pupils) Regulations 1989² allow headteachers to give directions temporarily disapplying or modifying the National Curriculum requirements for individual pupils where they judge that a pupil falls within the cases or circumstances specified. Directions may be one of two kinds. General directions may be given for pupils with short-term problems who are expected to resume full participation in the National Curriculum within 6 months – eg pupils who have had long periods out of school, perhaps because of illness. These directions may be given for pupils with or without special educational needs. Alternatively, special directions may be given, where appropriate, for pupils whose circumstances indicate a need for them to be assessed under Section 5 of the Education Act 1981 with a view to making or amending a statement of special educational needs. Such pupils may need provision made within a statement for longer-term exceptions from the National Curriculum.

35 Schools should bear in mind that the objective of the National Curriculum is to ensure that each pupil should obtain maximum benefit, by stretching the pupil to reach his or her potential, but without making impossible demands. Provisions for modification or disapplication should be applied sensitively and with regard to the need to ensure a broad and balanced curriculum, as provided for in Section 1 of the Education Reform Act 1988.

36 It is the responsibility of the local education authority to ensure that pupils with statements of special educational needs have their statements amended, if this is necessary, to take account of the introduction of the National Curriculum, in time to meet the timetable set out in Annex 2.

IMPLEMENTATION

37 A comprehensive statement of statutory responsibilities in relation to the National Curriculum is set out in WO Circular 15/89, "Education Reform Act 1988: The School Curriculum and Assessment".

38 In preparing to implement the statutory requirements for geography, LEAs and grant maintained schools should make use of funding provided under the Grants for Education Support and Training programme. In 1991-92 relevant elements of the programme include Activity 7: Basic Curriculum and

²SI 1989/1811. For further guidance see WO Circular 46/89 – Education Reform Act 1988; Temporary Exceptions from the National Curriculum.

Activity 8: National Curriculum Books. These categories cover support for expenditure on the purchase of materials and other support and training for the National Curriculum. The main focus of Activity 5 will be on training directed at the first statutory assessments of Welsh and Welsh Second Language at Key Stage 1 and mathematics and science at Key Stage 3 in summer 1992, but also provides for the professional development of teaching and advisory staff in assessment skills relevant to other areas of the curriculum and other Key Stages. In addition Activity 6 is designed to promote the integration of Information Technology across the curriculum.

39 The Curriculum Council for Wales is currently preparing non-statutory guidance to assist teachers implement the statutory requirements of the Order for geography and its associated attainment targets and programmes of study. This will be distributed by the Council in due course.

REVIEW AND UPDATING

40 The Curriculum Council for Wales is responsible for keeping the National Curriculum under review and advising the Secretary of State on requirements for changes in the light of experience. Her Majesty's Inspectorate will also be monitoring schools' experience of the statutory requirements. In addition the Department will be making its own evaluation. The provisions contained in the Order and the associated Document will be updated and revised as necessary in the light of experience.

ALLOCATION OF STATUTORY DOCUMENTS

41 It is important that there is easy access to reference copies of the statutory Documents for all who need to use them ie local education authority personnel, teacher trainers, students, school teachers together with certain other groups. Copies which include a facsimile of the relevant Order and a copy of this Circular, are therefore being distributed initially free to local education authorities, institutions providing initial teacher training, schools and national bodies.

42 In all cases copies of the Documents will remain the property of the local education authority/institution/ school and not of the individuals to whom they are made available. These bodies will therefore need to make sure that they retain the Documents despite staff and student movements.

43 Further priced copies of the Documents are available from HMSO.

44 The Order and Document for geography are being translated into Welsh: these will be similarly presented in loose leaf ring binder format. LEAs have indicated the number of Welsh translations required for teachers in each school, and these are being distributed to LEAs for issue in addition to the English version.

45 The key elements (including attainment targets and programmes of study) of the statutory Document for all National Curriculum foundation subjects are accessible through the National Educational Resources Information Service (NERIS), which is available for use for training purposes or for analysis and devising schemes of work either "on-line" by modem or on CD-ROM. Further details may be obtained from NERIS WALES, c/o WJEC, 245 Western Avenue, Cardiff, CF5 2YX.

46 This Circular is addressed to:

- i. Local Education Authorities
- ii. Governing Bodies and Head Teachers of County, Voluntary, Maintained Special Schools, and Grant Maintained Schools
- iii. Teacher Training Institutions
- iv. Other Bodies

Any enquiries about the Circular should be directed to:
Mr M A Pender
Schools Curriculum Division I
Welsh Office Education Department
Phase II
Government Buildings
Ty Glas Road
Llanishen
CARDIFF CF4 5WE
Tel: (0222) 761456 Ext 5351

THE KEY STAGES

For the purposes of the National Curriculum the Act divides the period of compulsory schooling into four Key Stages:-

Key Stage 1 begins with a pupil becoming of compulsory school age (that is, the start of the term after his or her fifth birthday), and ends at the end of the school year in which the majority of pupils in his or her class or teaching group attain the age of seven.

Key Stage 2 for a pupil is the period beginning at the start of the school year in which the majority of pupils in his or her class attain the age of eight and ends at the end of the school year in which the majority of pupils in his or her class attain the age of eleven.

Key Stage 3 for a pupil is the period beginning at the start of the school year in which the majority of pupils in his or her class attain the age of twelve and ends at the end of the school year in which the majority of pupils in his or her class attain the age of fourteen.

Key Stage 4 for a pupil is the period beginning at the start of the school year in which the majority of pupils in his or her class attain the age of fifteen and ends when the majority of pupils in his or her class cease to be of compulsory school age.

An individual pupil in a teaching group may of course be younger or older than the age of the majority. Section 3(6) of the Act makes clear that it is the teaching group which a pupil is in for each foundation subject, not the registration class, which determines the Key Stage which is applicable to the pupil for that subject. So a pupil could be taught with another age group for one or more subjects where appropriate, eg in order to pursue that subject at a higher or lower level, while being taught with his or her peer group for other subjects. There is nothing, however, in the Act to require pupils to repeat a year, or to move early to a higher year group.

In some cases, for example in small primary schools, pupils may be in classes or teaching groups spanning more than one age group. To deal with this, Section 3(5) of the Act gives headteachers the right to determine the Key Stage appropriate to a pupil according to his or her age, rather than according to the age of the majority of pupils in the class or teaching group.

**GEOGRAPHY – SECTION 4 ORDER –
(ATTAINMENT TARGETS AND PROGRAMMES OF STUDY)**

COMMENCEMENT DATES (a)

	<i>Key Stage 1</i>	<i>Key Stage 2</i>	<i>Key Stage 3</i>	<i>Key Stage 4</i>
1991	1st cohort (Year 1)	1st cohort (Year 3)	1st cohort (Year 7)	
1992	1st and 2nd cohorts (Years 1 & 2)	1st and 2nd cohorts (Years 3 & 4)	1st and 2nd cohorts (Years 7 & 8)	
1993	1st statutory national assessment	1st, 2nd & 3rd cohorts (Years 3, 4 & 5)	1st, 2nd & 3rd cohorts (Years 7, 8 & 9)	
1994		1st, 2nd, 3rd & 4th cohorts (Years 3, 4, 5 & 6)	1st statutory national assessment	1st cohort (Year 10)
1995		1st statutory national assessment		1st and 2nd cohorts (Years 10 & 11)
1996				1st assessment (GCSE or other)

- (a) Commencement dates for attainment targets and programmes of study are 1 August in each year. Assessment will take place in the summer term of the calendar year. Section 4 Orders covering assessment will be laid in due course.

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The Education Reform Act 1988 provides for the establishment of a National Curriculum for all pupils of compulsory school age in maintained schools in England and Wales.

The National Curriculum comprises English, mathematics and science as core subjects and seven other foundation subjects: history, geography, technology, a modern foreign language, music, art and physical education. Additionally, in Wales, Welsh is a core subject in Welsh-speaking schools and an eleventh foundation subject in the remainder.

The Act provides for the Secretary of State to specify in relation to each core and other foundation subject such attainment targets and programmes of study as he considers appropriate. This document contains details of the attainment targets and programmes of study for geography, as specified by Order.

Mae Deddf Diwygio Addysg 1988 yn darparu ar gyfer sefydlu Cwricwlwm Cenedlaethol ar gyfer yr holl ddisgyblion o oedran ysgol gorfodol yn yr ysgolion a gynhelir yng Nghymru a Lloegr.

Mae'r Cwricwlwm Cenedlaethol yn cynnwys Saesneg, mathemateg a gwyddoniaeth yn bynciau craidd a saith pwnc sylfaen arall: hanes, daearyddiaeth, technoleg, iaith dramor fodern, cerddoriaeth, celf ac addysg gorfforol. Yn ogystal, yng Nghymru, mae Cymraeg yn bwnc craidd mewn ysgolion Cymraeg ac yn unfed pwnc sylfaen ar ddeg yn y gweddill.

Mae'r Ddeddf yn darparu i'r Ysgrifennydd Gwladol bennu, mewn perthynas â phob pwnc craidd a phob pwnc sylfaen arall, y targedau cyrhaeddiad a'r rhaglenni astudio a wél ef yn briodol. Yn y ddogfen hon ceir manylion y targedau cyrhaeddiad a'r rhaglenni astudio ar gyfer daearyddiaeth, fel y'u pennwyd gan y Gorchymyn.



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