

GEOGRAPHICAL SKILLS FOR Common Entrance at 13/KS3

Aimed at ages 11- 13.

Atlas skills

Atlas skills should be developed and location knowledge is required

Ordinance Survey map-work skills

4-figure and 6-figure grid references; eastings, northings; spot heights and contours; direction orientation (8 points of the compass); distance; area

follow routes; identify relief and landscape features (slope steepness, plateau, flood plain, valley, headland, bay etc. see glossary); annotate simple sketch sections; use maps in decision-making; understand site, situation and shape of settlements

Fieldwork and enquiry skills

1. Collection and recording

questionnaires: use and design; sampling; surveys, e.g. shopping, traffic and pedestrian counts; environmental quality surveys; land-use mapping; other mapping skills; field sketches

2. Presentation

maps: key, scale, direction; shaded (choropleth) maps; annotated sketch maps; flow maps annotated field sketches and photographs; graphs, bar charts, divided bar charts, pie charts, histograms, pictograms; simple annotated cross-sections; sketch sections; tabular presentation of data; land-use maps

THEMATIC STUDIES

Five areas of study: Earthquakes and Volcanoes, Weather and Climate, Rivers and Coasts, Population and Settlement, Transport and Industry.

1. Earthquakes and Volcanoes (tectonic processes)

Pupils should study:

the basic structure of the Earth
tectonic plates, constructive
and destructive boundaries
and what causes them to
move
the global distribution of
earthquakes and volcanoes

an example of either an
earthquake or a volcanic
eruption to show the nature,
causes, environmental and
human effects, and human
responses

Candidates should demonstrate an
understanding of:

*the four layers of the Earth,
including the difference
between oceanic and
continental crust
how to annotate a diagram
both of a constructive plate
boundary (where oceanic
plates move apart) and a
destructive plate boundary
(where oceanic and
continental plates meet)
one case study of an
earthquake or volcanic
eruption from a developed
country and one case study of
an earthquake or volcanic
eruption from a developing
country*

2. Weather and Climate (meteorological processes)

Pupils should study:

(i) the difference between weather and climate

(ii) microclimates

(iii) the water cycle

(iv) types of rainfall

(v) causes of temperature and rainfall variation from place to place in the British Isles

Candidates should demonstrate an understanding of:

the influence of aspect, shelter, buildings, surface and natural features in relation to microclimates. Evaporation, transpiration, condensation, precipitation, interception, surface run-off, infiltration and throughflow.

relief, convectional, frontal; how to draw or annotate a diagram to explain the formation of different types of rainfall

the main temperature and rainfall patterns in the British Isles

the influence of latitude, altitude, relief, prevailing winds, distance from coast and the basic impact of the North Atlantic Drift and the Jet Stream

3. Rivers and Coasts (geomorphological processes)

Pupils should study:

(i) processes of weathering

(ii) processes of erosion, transportation and deposition in understanding the development of the following landforms: valley, waterfall, gorge, meander, caves, arches, stacks, stumps, beaches, spits

(iii) the causes and effects of and responses to a flood

Candidates should demonstrate an understanding of:

physical (freeze thaw/frost-shattering), chemical and biological weathering

*erosion: hydraulic action, abrasion/ corrasion, solution/corrosion, attrition
transportation: floating, solution, suspension, traction, saltation, swash, backwash, longshore drift*

how to draw annotated diagrams to illustrate the formation of each landform (or a sequence of these landforms)

one case study of a flood (either river or coastal) from anywhere in the world; this should include physical and human causes, the human, economic and environmental impact; reducing the risks

4. Population and Settlement (demographic processes)

Pupils should study:

(i) population numbers and population density for the UK and the world

(ii) the causes of the rise or fall of the population of an individual country

(iii) the reasons for the site, shape, situation, growth and nature of individual settlements

(iv) the relationship between the provision of goods and services and settlement size

(v) the management of urban development

Candidates should demonstrate an understanding of:

why some places are crowded and others relatively empty

the meaning of birth rate, death rate, natural increase and migration

the factors which early settlers considered when choosing sites for new settlements

the reasons why some settlements grew and others did not

settlement hierarchies

a case study of a planned or completed housing/facilities project developed in an environmentally sensitive way, e.g. Queen Elizabeth Olympic Park

5. Transport and Industry (economic processes)

Pupils should study:

(i) the value of transport routes for people and industry

(ii) the principal modes of transport today – road, rail, sea and air – together with their impact on the environment

(iii) the different types (sectors) of economic activity

Candidates should demonstrate an understanding of:

how transport routes link settlements and industries, and can affect quality of life

the advantages and disadvantages of transporting people and goods by road, rail, sea and air

a case study of a planned or completed transport project, e.g. HS2 or Heathrow expansion, where economic costs/benefits are weighed against environmental costs/benefits

primary, secondary, tertiary, quaternary

the relationship between the level of economic development and the percentage of people working in each sector

(iv) how economic activities operate in contrasting locations

a case study of any multi-national company operating both in a developed and developing country/countries or any economic activity in a developed country (or local area) compared to a case study of the same (or similar) economic activity in a developing country reasons for their locations (e.g. natural resources/raw materials, site, labour, power source, market, transport), their inputs, throughputs, outputs and linkages the benefits and problems (including environmental) which economic activities bring to areas the following terms: living standards, exploit, protect, conserve, manage, stewardship, sustainable development

(v) how economic development can be made sustainable

LOCATION KNOWLEDGE

It is expected that those in ***bold italics*** will be known at age 11+.

THE UNITED KINGDOM AND EUROPE

Continents: Europe

Major physical features :

Mountain ranges

Alps, Pyrenees

Oceans

Atlantic, Arctic

Seas

Mediterranean

Rivers

Rhine

Other features

Arctic Circle, North Pole, Prime Meridian

Countries

England, Wales,

British Isles:

Scotland,

Northern

Ireland, Rep. of Ireland

Sea areas

English Channel, Irish Sea, North Sea

Rivers

Severn, Thames, Trent, Clyde, Shannon, Mersey, Tyne

Upland areas
Islands
Major cities

Grampians, Lake District, Pennines, Snowdonia
Anglesey, Jersey, Guernsey, **Isle of Man, Orkneys, Shetlands, Isle of Wight**
Belfast, Birmingham, Bristol, **Cardiff, Dublin, Edinburgh**, Glasgow, Leeds, Liverpool, **London**, Manchester, Newcastle, Plymouth, Southampton

Countries and their capitals: Europe

Belgium (Brussels), Denmark (Copenhagen), France (Paris), Germany (Berlin), Greece (Athens), Iceland (Reykjavik), Italy (Rome), Netherlands (Amsterdam), Norway (Oslo), Poland (Warsaw), Portugal (Lisbon), Russia (Moscow), Spain (Madrid), Switzerland (Bern)

It is expected that those in **bold italics** will be known at age 11+.

THE REST OF THE WORLD

Continents : **Africa, Asia, North America, South America , Oceania, Antarctica**

Major physical features

Mountain ranges
Deserts
Oceans/seas

Andes, **Himalayas**, Rockies
Sahara
Atlantic, Arctic, Indian, Pacific, Southern Oceans, Red Sea

Rivers

Amazon, Mississippi, **Nile**, Yangtze (Chang Jiang), Ganges

Other features

Arctic Circle, Antarctic Circle, Equator, International Dateline, North Pole, South Pole, Prime Meridian, Tropic of Cancer, Tropic of Capricorn

Countries and their capitals

Africa

Egypt (Cairo),
Ethiopia (Addis Ababa),
Ghana (Accra), Kenya
(Nairobi), Nigeria (Abuja),
South Africa (Pretoria)

North America

South America

Asia

Oceania

Canada (Ottawa), Mexico (Mexico City), **USA (Washington DC)**, **Argentina (Buenos Aires)**, **Brazil (Brazilia)**, Chile (Santiago), Colombia (Bogota), Peru (Lima) Afghanistan (Kabul), Bangladesh (Dhaka/Dacca), **China (Beijing)**, **India (New Delhi)**, Indonesia (Jakarta), Iran (Tehran), Iraq (Baghdad), Israel (Jerusalem), **Japan (Tokyo)**, Pakistan (Islamabad), **Russia (see Europe)**, Saudi Arabia (Riyadh), South Korea (Seoul), Thailand (Bangkok), Turkey (Ankara) *(also in Europe)* **Australia (Canberra)**, New Zealand (Wellington) , Papua New Guinea (Port Moresby)

Other major cities and city states:

Dubai, Kolkata, Los Angeles, **New York**, Rio de Janeiro, Sao Paulo, Shanghai, **Sydney**, Vancouver