



Independent Schools
Examinations Board

COMMON ENTRANCE EXAMINATION AT 13+
COMMON ACADEMIC SCHOLARSHIP EXAMINATION AT 13+
GEOGRAPHY SYLLABUS

(Revised June 2012)

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INTRODUCTION

This syllabus aims at encouraging candidates to use a range of geographical enquiry skills to develop their knowledge and understanding of places, patterns, processes, environmental change and sustainable development.

AIMS

A course leading to this examination should:

- (i) stimulate curiosity about the world;
- (ii) introduce candidates to people, places and environments;
- (iii) contribute to environmental awareness and education for sustainable development;
- (iv) develop understanding of physical and human landscapes, and introduce candidates to different societies and cultures, enhancing awareness of global interdependence.

ASSESSMENT OBJECTIVES

Candidates must demonstrate their ability to:

- AO1 use geographical enquiry skills when developing knowledge and understanding of people, places, patterns and processes, environmental awareness and sustainable development;
- AO2 ask geographical questions and undertake enquiries inside and outside the classroom about people, places and environments;
- AO3 analyse evidence, make decisions and evaluate information, ideas and opinions;
- AO4 use skills specific to geography, including those of fieldwork and mapwork;
- AO5 draw on many different sources and resources, such as maps and atlases, photographs and written and visual materials, including the use of ICT.

SYLLABUS CONTENT

GEOGRAPHICAL SKILLS

In developing geographical skills, candidates should be taught to use an extended geographical vocabulary. Candidates should be encouraged to use IT skills, both in class and while preparing their fieldwork enquiries.

Atlas skills

Atlas skills should be developed and location knowledge is required (*see Appendix I*).

Ordnance Survey mapwork skills

Candidates should know and understand:

4-figure and 6-figure grid references

eastings, northings

spot heights and contours

direction

orientation (8 points of the compass)

distance

area

Candidates should be able to:

follow routes

identify relief and landscape features (slope steepness, plateau, flood plain, valley, headland, bay and features included in the glossary: *Appendix II*)

annotate simple sketch sections

use maps in decision making

understand site, situation and shape of settlements

Fieldwork and enquiry skills

1. Collection and recording

may include:

questionnaires: use and design

sampling

surveys, e.g. shopping, traffic and pedestrian counts

environmental quality surveys

land-use mapping

other mapping skills

field sketches

secondary sources, including internet, CD roms etc.

2. Presentation

may include:

maps: key, scale, direction *

shaded 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

** These methods of presentation may be used in the written examination.*

THEMATIC STUDIES

Candidates are required to study five themes. Candidates are expected to study examples which reflect variations in levels of global economic development. Candidates must have detailed knowledge of **one** example from **each** of the following: a flood, an earthquake, a volcano, a local economic activity in the UK, an economic activity in an LEDC and a managed location.

Rivers and coasts

Pupils should be taught:

- (i) processes of weathering
- (ii) processes of weathering, erosion, transportation and deposition in the development of the following landforms:

waterfall, meander, caves, arches, stacks, stumps, spits

Candidates should know and understand:

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

*erosion: hydraulic action
abrasion/corrasion, solution/corrosion, attrition*

transportation: solution, suspension, traction, saltation, swash, backwash, longshore drift

how to draw an annotated diagram to show the formation of each of these landforms (one diagram only is required to show the sequence from cave to stump)

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

a detailed example of either a coastal or a river flood from anywhere in the world; this should include physical and human causes, the impact on people and the impact on the environment

Earthquakes and volcanoes

Pupils should be taught:

- (i) the global distribution of earthquakes and volcanoes
- (ii) an example both of an earthquake and a volcano to show the nature, causes, environmental and human effects, and human responses

Candidates should know and understand:

how to annotate a diagram of a destructive plate boundary (where oceanic and continental plates meet)

one example from an MEDC and one from an LEDC

Weather and climate

Pupils should be taught:

- (i) the differences 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 know and understand:

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 (not depressions); how to draw or annotate a diagram and 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 impact of the North Atlantic Drift

Economic activity

Pupils should be taught:

- (i) the different types (sectors) of economic activity
- (ii) how economic activities operate in contrasting locations

Candidates should know and understand:

primary, secondary, tertiary, quaternary

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

an example of either a local primary or secondary economic activity (e.g. a farm or factory) in the United Kingdom and an example of either a primary or secondary economic activity in an LEDC

reasons for their location (e.g. labour, site, raw materials, market, transport), their inputs, throughputs, outputs and linkages

the potential benefits and problems these industries bring to the area

Environmental issues

Pupils should be taught:

- (i) how conflicting demands on an environment arise (*this topic provides a good opportunity to study a local issue*)
- (ii) how and why attempts are made to plan and manage environments (*this should include ideas of conservation and sustainable development*)
- (iii) the effects of environmental planning and management on people and places

Candidates should know and understand:

how human activities place pressure on environmental resources, e.g. agriculture, recreation, forestry

the following terms: exploit, protect, conserve, manage

one example of a managed location (e.g. a nature reserve, a national park) from anywhere in the world

why and how the area studied is being managed and the effects (both positive and negative) of this management both on people and the environment

FIELDWORK

Any geographical work undertaken outside the classroom constitutes fieldwork. It should involve some data collection. It should be included, where appropriate, in the teaching of the syllabus (*see Appendices IV, V and VI*).

SCHEME OF ASSESSMENT

INDIVIDUAL FIELDWORK ENQUIRY (20 marks)

Marks will be awarded as follows:

- Introduction (4 marks)
- Methods of data presentation (8 marks)
- Results/presentation of data (8 marks)
- Data analysis (12 marks)
- Fieldwork expertise (8 marks)

All mark sheets (*see Appendix VI*) will be sent to senior schools with the coursework which may be submitted electronically, or as a hard copy.

It is recommended that parts of the Year 6 and Year 7 schemes of work include local fieldwork enquiries, e.g. microclimate of school grounds, shopping surveys, local river and coast enquiries.

WRITTEN EXAMINATION (80 marks; 60 minutes)

Each paper will contain an Ordnance Survey map. The format of the paper will be as follows:

Section A: Global location (10-15 marks)

The questions are to be answered with reference to a given map. The questions will be confined to the features and places listed in Appendix I. Outlines of mountain ranges, courses of rivers and dots to represent the locations of cities will be given.

Section B: Ordnance Survey mapwork (10-15 marks)

This section will comprise Ordnance Survey mapwork questions. Ordnance Survey maps to the scale of 1:50,000 and 1:25,000 will be used and a key to conventional symbols will be provided.

Section C: Thematic studies (10-15 marks for each of the five themes)

This section will comprise five questions on the five themes. Candidates will be required to answer all questions. Photographs, maps, diagrams, graphs and data tables may be used as stimulus material. Questions will include a mix of data response, multiple choice, short and more extended answers.

SCHOLARSHIP

The Common Academic Scholarship Examination is based on the Common Entrance syllabus. The 60-minute paper will be divided into two sections; candidates will be required to answer one question from each section. Candidates will also be required to carry out a fieldwork enquiry (see above).

Section A: data-response questions

This section will comprise two questions. One question will be based on physical geography or an environmental topic and the other on a human geography topic.

Section B: essay and structured questions

This section will consist of six questions. Three of these will be essay questions and three will be structured questions, including extended writing.

APPENDIX I

LOCATION KNOWLEDGE

Questions will be set only on locations shown in this appendix.

Major global physical features

Continents	Africa, Antarctica, Asia, Oceania, Europe, North and South America
Mountain ranges	Alps, Andes, Himalayas, Pyrenees, Rockies
Desert	Sahara
Oceans	Arctic, Indian, Atlantic, Pacific
Rivers	Amazon, Mississippi, Nile, Rhine, Yangtze

Other global features

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

British Isles

Countries	The countries of the UK and the Republic of Ireland
Sea areas	English Channel, Irish Sea, North Sea
Rivers	Severn, Thames, Trent, Clyde, Shannon
Hills	Grampians, Lake District, Pennines, Snowdonia
Major cities	Belfast, Birmingham, Cardiff, Dublin, Edinburgh, Glasgow, Liverpool, London, Manchester, Newcastle

Countries

Europe

France, Germany, Greece, Italy, Poland, Spain, Sweden, Switzerland, Ukraine

Africa

Egypt, Ethiopia, Kenya, Nigeria, South Africa

Americas

Brazil, Canada, Mexico, USA

Asia

Afghanistan, Bangladesh, China, India, Indonesia, Iran, Iraq, Japan, Pakistan, Russia, Saudi Arabia

Oceania

Australia, New Zealand

Major cities and city states

Beijing, Berlin, Cairo, Delhi, Los Angeles, Madrid, Mexico City, Moscow, New York, Paris, Rio de Janeiro, Rome, Sydney, Tokyo, Warsaw, Washington DC

APPENDIX II

GLOSSARY OF USEFUL TERMS

A

air mass	a very large body of air with relatively uniform temperature and moisture characteristics
air pressure	the weight of the air above a reference point, measured in millibars
atmosphere	the layer of air round the earth

B

bay	an area of sea between two headlands
beach	material which the sea deposits on the coast
bedding plane	the line dividing successive layers of sedimentary rock
biodiversity	the number and variety of all living things within an ecosystem
brownfield site	disused or derelict urban land which is available for redevelopment
business park	a development of offices and industrial units
bypass	a road built round a town

C

CBD	Central Business District : the commercial and business centre of a town, with highest land values
climate	the average weather over many years
collision boundary	where continental plates collide
compass	an instrument used to identify direction
condense	gas becoming liquid
conservative boundary	where two tectonic plates slide past each other, but where crust is neither formed nor destroyed
constructive boundary	where two tectonic plates move apart from each other and new crust is formed
continent	a large land mass
contour line	a line on an OS map joining all points of the same height
core	the centre of the Earth
crust	the thin outer layer of solid rock round the Earth's surface

D

dam	a wall built to hold back water
decompose	the breakdown of organic material by animals, bacteria and fungi
desert	an area receiving less than 250 mm of precipitation per year
destructive boundary	where an oceanic plate slides underneath a continental plate or another oceanic plate
dispersed	spread out

dormant	inactive
drought	a prolonged period of below average precipitation
E	
easting	a vertical grid line on an OS map
ecosystem	an area displaying a distinctive interaction between plants, animals and the physical environment
eco-tourism	low impact tourism aimed at protecting the natural environment and local cultures
environment	the air, land, water, plants and wildlife
epicentre	the point on the Earth's surface directly above the focus of an earthquake
equator	the imaginary line running round the middle of the Earth
erosion	the wearing away of the land by material carried in rivers, glaciers, waves and wind
ethnic group	people of the same racial origin
evaporate	liquid turning to gas
extinct	no longer in existence (of animals): no longer active (of volcanoes)
F	
fault	a line of weakness in rock
fetch	the maximum distance over which wind can blow to form a wave
fieldwork	an enquiry which takes place outside the classroom
floodplain	the flat area either side of a river which is regularly flooded
focus	the point underground where the energy of an earthquake is released
fog	cloud at ground level (visibility less than 1km)
foreshock	a small earthquake before a large one
front	the boundary between warm and cool air masses
function	the activities of a settlement
G	
geothermal energy	heat and electricity produced from hot, underground water
gorge	a deep, steep-sided valley
graph	a drawing to show data
greenfield site	land which has not been built on before
grid reference	a number which locates an area on a map
globalisation	the ways in which companies, ideas and lifestyles spread round the world and interact with one another
H	
habitat	the area where plants and animals live

headland	a promontory of more resistant rock which juts out into the sea
hemisphere	half of the globe
hierarchy	a ranking of settlements according to their size or importance
high order settlement	a settlement which contains top level shops and services
humidity	the moisture in the air
hydro-electric power	electricity produced by water being released through dam turbines
I	
infiltration	the movement of water from surface into the soil
interception	precipitation landing on plants, trees and buildings
irrigation	the artificial watering of crops
isotherm	a line on a map joining places of equal temperature
J	
joint	a crack in the rock
K	
key	a list giving the meaning of symbols on a map
L	
land use	the way in which land is put to use by humans
landfill	the disposal of waste in natural or man-made holes in the ground
lava	molten rock at the Earth's surface
LEDC	Less Economically Developed Country
levée	an embankment next to a river channel, raised above the flood plain
linear	long and narrow
longshore drift	a movement of sand and pebbles along a beach by wave action
low order settlement	a settlement which contains few basic shops and services
M	
magma	molten rock beneath the Earth's crust
mantle	the semi-solid mass of rock beneath the Earth's crust
market	the place where goods are sold
mass movement	the movement of weathered soil and rock on a slope
meander	a bend in a river
MEDC	More Economically Developed Country
microclimate	the local climate of a small area such as a garden

N

national park

an area of countryside of outstanding beauty which is protected from development

NIC

Newly Industrialised Country

northing

a horizontal grid line on an OS map

nucleated

clustered together

O

OS

Ordnance Survey

P

percentage

the number out of 100

permeable

allowing water to flow through, e.g. joints in rocks

plate boundary

the point where two tectonic plates meet

plate tectonics

the theory explaining how the Earth's crust is able to move

plunge pool

a deep pool which is eroded at the base of a waterfall

pollution

damage to the environment as a result of human activity

porous

able to hold water like a sponge

precipitation

rain, snow, hail or sleet

primary information

geographical data which one has collected oneself

pyroclastic flow

a cloud of superheated gas and ash ejected from a volcano

R

raw material

mineral and agricultural resources which can be processed to make something else

recycling

reusing waste

relief

the height and shape of the land

renewable energy

a sustainable source of power which can be used indefinitely (e.g. wind, solar, tidal)

reservoir

a lake behind a dam

resource

any product of the environment used by people

retail

selling products to the public

river basin

an area of land drained by a river and its tributaries

river cliff

a steep, undercut area on the outside of a river meander

run-off

the movement of water across a surface

rural

relating to the countryside

S

science park

a development of high-tech industries close to a university

scree

piles of broken rock found beneath steep rock faces

secondary information

geographical data collected by somebody else

sedimentary rock

layered rock formed by deposition of sediments

seismic wave

a shock wave produced by earthquakes

seismometer	a sensitive instrument used to measure earthquakes
service industry	work such as retail, administration, education, healthcare or tourism
settlement pattern	the shape and spacing of settlements
settlement	a place where people live
site	the exact location of a settlement
situation	the location of a settlement in relation to the surrounding area
slip-off slope	a gently-sloping area formed on the inside of a river meander
spit	an extended beach which grows by deposition across a bay or river mouth
social	relating to society
source	the beginning of a river
stack	a pillar of rock which stands in the sea
stewardship	looking after resources in a sustainable way for the future
suburb	the residential and commercial development at the edge of a city
sustainable	using resources in a way which prevents them from being exhausted/running out
symbol	something used to represent something else
T	
tectonic plate	a large, rigid section of the Earth's crust
topographical map	a map showing natural features
tourism	travel involving an overnight stay away from home, and associated support industry
transportation	the movement of eroded material
tributary	a river joining a larger river
tsunami	a sea wave caused by earthquakes and volcanic eruptions
U	
urban	relating to a town or city
urbanisation	the increase in the percentage of people living in cities
V	
vegetation	trees, shrubs and plants
volcanic bomb	lava exploded into the air which solidifies as it falls
W	
waste	items which no longer have a use
waterfall	a point on a river where water falls vertically
water table	the upper surface of water in the ground
weathering	the breakdown of rocks in situ by mechanical, chemical or biological means

APPENDIX III

COMMAND WORDS

used in Common Entrance and Common Academic Scholarship papers

annotate	add descriptive explanatory labels
choose	select carefully from a number of alternatives
complete	finish, make whole
define	give an exact description of
describe	write down the nature of the feature
develop	expand upon an idea
explain	write in detail how something has come into being and/or changed
give	show evidence of
identify	find evidence of
list	put a number of examples in sequence
mark and name	show the exact location of and add the name
name	give a precise example of
select	pick out as most suitable or best
shade and name	fill in the area of a feature and add the name
state	express fully and clearly in words
study	look at and/or read carefully
suggest	propose reasons or ideas for something
<i>scholarship only</i>	
discuss	present viewpoints from various aspects of a subject
elaborate	similar to expand and illustrate
expand	develop an argument and/or present greater detail on
illustrate	use examples to develop an argument or a theme

APPENDIX IV

GEOGRAPHY FIELDWORK ENQUIRY (YEAR 8)

1. What constitutes fieldwork for Common Entrance?

Fieldwork for Common Entrance and Common Academic Scholarship Examination candidates consists of investigative geographical studies which are undertaken outside the classroom. It must involve the collection of primary data by the candidate, based on one or more clear key questions (hypotheses) which link with a theme or topic contained in the current syllabus.

Advice on the suitability of specific investigations can always be sought from senior schools or from the setting team leader. The most important element is that pupils connect with the outdoor environment by accurately collecting, measuring and recording data themselves.

2. Must each candidate undertake a separate enquiry?

No. What a candidate does for his or her investigation will depend very much on the time and opportunities available to each school. Investigations may be based on an individual's data collection or on data gathered as a small or large group. The writing up, however, is the responsibility of the individual candidate. As part of the mark scheme, there is a mark allocation for individual initiative displayed both in the field and in the writing up of the enquiry.

3. What are the basic requirements of the enquiry?

Each investigation should show evidence that data has been collected outside the classroom. The enquiry write-up (fieldwork project) must include the prescribed sections (clearly headed by the candidate) as set out in the Fieldwork Enquiry Assessment Form (*see Appendix VI*).

4. What format can the fieldwork project take?

The fieldwork project can be produced either as a word-processed printed document or as an electronic presentation (slide show).

5. What is the limit on length?

One of the skills which the exercise is intended to develop is economy in the presentation and summarising of data. If a paper format for the project is used, it should be approximately 1,000 words in length, excluding titles, diagrams, references etc. and no more than ten A4 pages. If an electronic presentation format for the project is used, it should not exceed ten minutes or twenty slides. Similarly, gimmicky slide presentations must be avoided since they detract from the geographic component of the work. Senior schools reserve the right to reduce the final project mark if this guidance is ignored.

6. How much time should be taken on the enquiry?

At least one day should be set aside for the collection of data. It is recommended that the enquiry write-up is completed within school and should not take longer than half a term to complete.

7. How much help should be given to the candidate?

Whilst teachers need to offer guidance, the enquiry write up must be the candidate's own work. Any additional teacher's help should be declared on the fieldwork assessment form.

Parents must not help with this enquiry.

8. How should the enquiry be submitted?

It is possible to submit the fieldwork project and marks to senior schools in the following ways:

- (i) by post, enclosing a separate Fieldwork Enquiry Assessment Form (*see Appendix VI*) for each candidate. Please use a secure method (e.g. recorded delivery) to ensure that projects do not go astray.
- (ii) saved as word-processed documents or presentation slide shows on a CD Rom which is then posted with an Individual Fieldwork Enquiry Assessment Form (*see Appendix VI*) for each candidate.

It is also possible, with senior school approval, to submit, for each candidate, the Fieldwork Enquiry Assessment Form only.

It is important that junior schools liaise with senior schools as to how marks should be sent. If fieldwork projects are not sent to senior schools, they should be returned to the candidates after the examination period.

APPENDIX V

RECOMMENDED CRITERIA FOR MARKING FIELDWORK ENQUIRY

Mark	Introduction (4 marks)
4	Clearly-stated aims and hypotheses/key questions; a suitable location map showing where the fieldwork was conducted; useful and relevant background information to the particular investigation or fieldwork venue.
2-3	Less clearly-stated aims and/or hypotheses OR lack of background information OR absence of a location map.
0-1	Unclear aims or lack of a clear focus for the investigation.
Mark	Methods of data collection (8 marks)
7-8	Two different well-chosen and clearly-explained methods of data collection, illustrated with photographs and/or diagrams to show apparatus and techniques; justification of the choice of methods.
5-6	Two methods of data collection explained, but lacking detail OR methods unsupported by photographs and/or diagrams to show apparatus and techniques OR too many methods/techniques explained.
3-4	Only one method explained in detail, even though there may be reference to a second method.
0-2	Methods poorly-chosen or explained.
Mark	Results/presentation of data (8 marks)
7-8	Excellent data presentation; accurate use of two different yet appropriate techniques; clear and precise; at least one technique which is sophisticated/innovative.
5-6	Two different and appropriate types of data presentation used and accurately presented/plotted OR too much repetition of similar results.
3-4	Maximum mark where there is any weakness/inaccuracy/inappropriateness OR if there is only one technique, however sophisticated.
0-2	Only one simple technique; alternatively one mark for two techniques, even if both are inaccurate or irrelevant.

Mark	Data analysis (12 marks)
10-12	Clear and thorough explanation of the findings with close reference to, and quotation from, primary data collected; excellent understanding and thorough explanation of the geography involved; accurate use of a wide range of geographical terminology; valid conclusions and link back to hypotheses/key questions; suggestions for improving the project.
7-9	Sound understanding and explanation of the results and of the geography involved; use of geographical terminology; reference to primary data collected; some justification of the choice of methods; only one suggestion for improvement.
4-6	Some interpretation of the results; some attempt to explain the geography involved; a limited or weak suggestion for improving the project.
0-3	Little explanation of findings and/or justification of methods; invalid conclusions; weak evaluation; no suggestions for improving the project.
Mark	Fieldwork expertise (8 marks)
7-8	Candidate has shown excellent initiative/efficiency/reliability/cooperation/leadership in the field; evidence of individual learning and research; candidate has completed the write-up independently and within the time allowed.
5-6	Candidate has completed the data collection accurately and efficiently but without distinction; project write-up has been completed on time and with a minimum of assistance from the teacher.
3-4	Candidate has not shown competence in the field OR has failed to collect and record some data accurately OR has been unable to complete the project write-up on time without the assistance/intervention of the teacher.
0-2	Candidate has shown little or no interest in/regard for the task set OR candidate has been uncooperative in the field OR candidate has failed/struggled to complete the write-up within the set guidelines and/or time.

APPENDIX VI

Extendable Word and pdf versions of this form should be downloaded from the ISEB website.

TO THE HEAD OF GEOGRAPHY

SENIOR SCHOOL



Independent Schools
Examinations Board

FIELDWORK ENQUIRY ASSESSMENT FORM

NAME

PRESENT SCHOOL

This form should be sent (with or without the fieldwork enquiry itself) to the senior school by the published submission dates.

	Max Mark	Mark	Comments (optional)
Introduction to include aims and hypotheses (key questions) and location map	4		
Methods of data collection to include detailed descriptions of two techniques	8		
Results/presentation of data to include two different techniques	8		
Data analysis to include evaluations and final conclusions	12		
Fieldwork expertise to include individual initiative and/or team work plus overall effort in data collection and write-up	8		
Total mark	40		
Examination mark	20		

Declaration

The work of this candidate has been undertaken under regular supervision. Any assistance given to the candidate is recorded below.

Signed Geography Teacher

Date