ISEB
Independent Schools Examinations Board

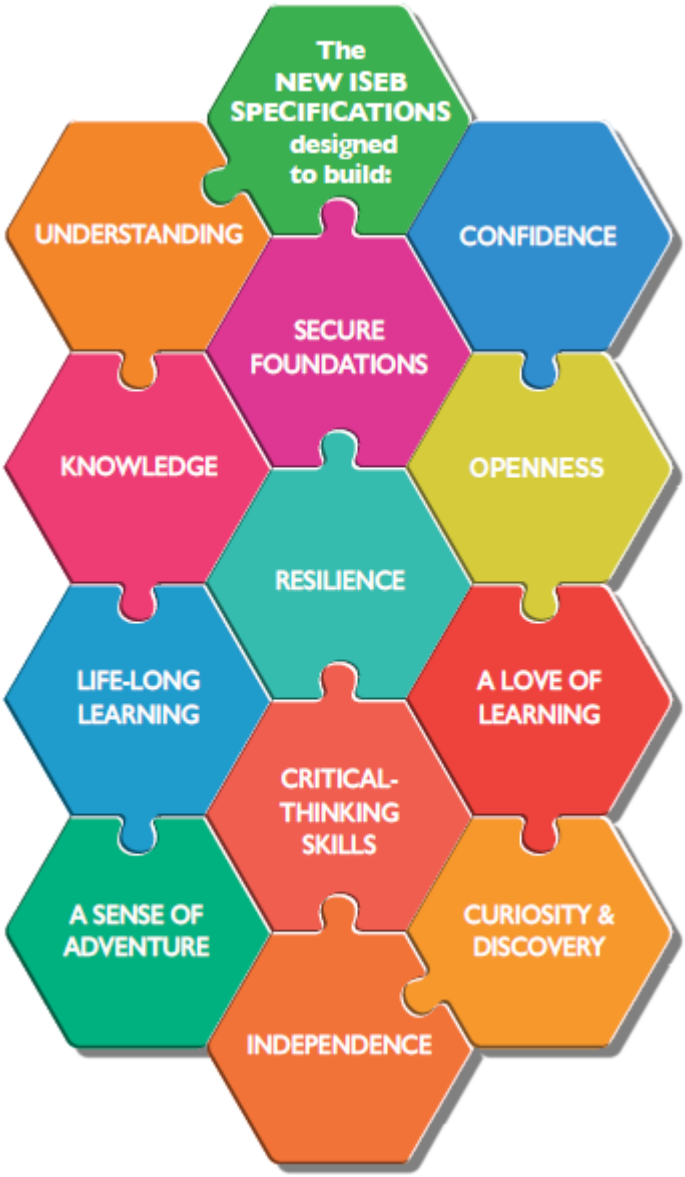
COMMON ENTRANCE AT 13+
COMMON ACADEMIC SCHOLARSHIP AT 13+

GEOGRAPHY

Draft Specification

For teaching from September 2021 onwards

For examinations from November 2022 onwards



ISEB CORE AIMS

Pupils who have pursued a course of study based on CE specifications and assessments will:

- Be equipped not only for the next stage of their education, but for life-long learning based on a secure foundation of subject knowledge, concepts and skills and be able to apply what they know to new situations.
- Be enthusiastic learners who are open to new ideas and experiences, curious, questioning and keen to experiment.

They will:

- Enjoy reading and be able to articulate clearly orally and in writing.
- Have the confidence to think, weigh up evidence and make up their own minds, and the resilience to learn from their mistakes.
- Have the skills to work independently and collaboratively.
- Understand how subjects connect with each other.
- Demonstrate cultural and environmental awareness and empathy, developing an understanding of their place in the world.

INTRODUCTION

The ISEB Geography specification aims to encourage candidates to use a range of geographical skills to develop their knowledge and understanding of the world. This includes; places, their locations and patterns; processes, including environmental change; and the concepts of environmental protection and sustainable development.

This specification gives details of the geographical skills and associated knowledge which will be examined at 13+, following a suitable programme of study, which may be spread over several years. At the end of the course, pupils will be equipped with a secure foundation of subject knowledge, concepts and skills for the next stage of their education.

AIMS

This specification is designed to develop the following learner attributes:

- enjoyment and curiosity;
- independence;
- problem-solving ability;
- a sense of place;
- an understanding of citizenship and stewardship;
- a sense of their place in the world and the choices they can make as an individual;
- a sound basis of geographical knowledge.

ASSESSMENT OBJECTIVES

Candidates should demonstrate their ability to:

Common Entrance at 13+

AO1	use geographical enquiry skills when developing knowledge and understanding of places, people, patterns and processes, environmental awareness and sustainable development;
AO2	ask geographical questions and undertake enquiries inside and outside the classroom about places, people and environments;
AO3	analyse evidence, make decisions and evaluate information, ideas and opinions;
AO4	use skills specific to geography, including those of fieldwork and map work;
AO5	draw on many different sources and resources, such as maps, atlases, photographs graphs including digital and on-line resources, for example, *Digimap & Google Earth*

GEOGRAPHICAL SKILLS

In developing geographical skills, candidates should be taught to use an extended geographical vocabulary – see Glossary *(Appendix II)*.

Location Knowledge

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

Ordnance Survey Map Reading

Candidates should be able to:

- use map symbols
- recognise direction/orientation (8 points of the compass)
- estimate distance (in kms & metres)
- estimate area (in km^2)
- use 4-figure and 6-figure grid references
- use eastings, northings
- recognise spot heights and contours
- follow routes
- identify general relief and landscape features (slope steepness, flood plain, valley, headland, bay and features included in the glossary: see *Appendix II*)
- use maps in decision-making
- recognise site, situation and shape of settlements

Fieldwork and enquiry skills

Data collection: each candidate must collect primary data on his/her own or as part of a group. They may use:

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

Secondary sources, including internet data, may be used to supplement, but **not** to replace, the essential primary data.

Presentation: candidates may present their data in a variety of ways.

- 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
- sketch sections
- tabular presentation of data
- land-use maps

ASSESSMENT

Common Entrance at 13+	Marks		% of final mark
Fieldwork enquiry	40		20%
Written examination	80	60 minutes	80%

Fieldwork enquiry

Allocation of marks	Marks
Introduction	4
Methods of data collection	8
Results/presentation of data	8
Data analysis & conclusion	8
Evaluation	4
Fieldwork expertise	8

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.

Any geographical work undertaken outside the classroom constitutes fieldwork. For the purposes of assessment, it must involve some primary data collection. The fieldwork should be included, where appropriate, in the teaching of the specification but can also extend to topics beyond the syllabus, provided that the prescribed format for the investigation and write-up is followed. *(See Appendices IV, V and VI.)*

Written examination

Each paper will contain an Ordnance Survey map and colour resources (photographs and/or diagrams)

The format of the paper will be as follows:

Common Entrance at 13+		Marks
Section A	Location Knowledge	10-15
Section B	Ordnance Survey Map Reading	10-15
Section C	Physical Geography	25-30
Section D	Human & Environmental Geography	25-30

FURTHER ASSESSMENT DETAILS

Section A: Location Knowledge (10-15 marks)

The questions are to be answered using outline maps of the British Isles, Europe and other individual continents or maps of the world. The questions will be confined to the features and places listed in Appendix I. Outlines of mountain ranges and deserts, courses of rivers and dots to represent the locations of cities will be given.

Section B: Ordnance Survey Map Reading (10 -15 marks)

This section will comprise Ordnance Survey mapwork questions. Ordnance Survey map extracts to the scale of 1:50,000 and 1:25,000 will be used and a key to conventional symbols will be provided. The map extracts may be of any part of the United Kingdom (Britain & Northern Ireland).

Section C: Physical Geography (25-30 marks)

This section will contain **two mandatory** questions, which will be based on any of the following topics:

- **Tectonics** (Earthquakes & Volcanoes)
- **Meteorology** (Weather & Climate)
- **Geomorphology** (Rivers & Coasts)

Photographs, maps, diagrams, graphs and data tables may be used as stimulus material. Questions will include a mix of multiple choice, data response, short answers and extended answers.

Please note that questions in this section may also make reference to aspects of Human & Environmental Geography.

Section D: Human & Environmental Geography (25-30 marks)

This section will contain **two mandatory** questions, which will be based on any of the following topics:

- **Demography** (Population & Settlement)
- **Economy** (Transport & Industry)
- **Environment** (Sustainability & Stewardship)

Photographs, maps, diagrams, graphs and data tables may be used as stimulus material. Questions will include a mix of multiple choice, data response, short answers and extended answers.

Please note that questions in this section may also make reference to aspects of Physical Geography.

The assessment is designed for candidates to demonstrate their acquisition of transferable skills and their understanding of foundation geography following a specification that prepares and dovetails into GCSE study and lifelong learning.

SCHOLARSHIP

Common Academic Scholarship		Marks	60 minutes
Section A	data-response questions	50	30 minutes
Section B	essay and structured questions	50	30 minutes

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*)

FURTHER ASSESSMENT DETAILS

Section A: data-response questions (50 marks)

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

Section B: essay and structured questions (50 marks)

This section will consist of six questions. These will include essay questions as well as more structured questions, containing extended writing.

THEMATIC STUDIES

Candidates are required to study six themes:

- **Tectonics** (Earthquakes and Volcanoes)
- **Meteorology** (Weather and Climate)
- **Geomorphology** (Rivers and Coasts)
- **Demography** (Population and Settlement)
- **Economy** (Transport and Industry)
- **Environment** (Sustainability & Stewardship)

Although is recommended that topical, real-life case studies are used in teaching to illustrate processes, to engage enthusiasm and to develop candidates' understanding, the examination questions will be designed to test understanding rather than factual recall.

Candidates may refer to examples they have studied if it helps to show their understanding of a process or a feature, **but this is no longer required in the examination.**

TECTONICS (EARTHQUAKES & VOLCANOES)

Topic Strand	Focus	Key Elements
Earth's structure	the Earth's four layers	identify crust, mantle, outer core & inner core on a cross-sectional diagram of the Earth
Earth's crust & tectonic plates	oceanic & continental crust	understand the main differences between the two types of crust
	convection currents	understand how heat causes movement in the mantle and the movement of plates
	constructive & destructive plate boundaries	explain the different tectonic processes and movements and their consequences
Volcanoes & earthquakes	the global distribution of volcanoes & earthquakes	describe and explain the location of tectonic hazards on a world scale
	the nature and causes of volcanic eruptions	recognise the features of active volcanoes and understand the processes by which they are formed
	the nature and causes of earthquakes	understand the causes of earthquakes
Tectonic hazards	the environmental, human and economic effects of tectonic hazards	recognise the impacts, both immediate and long-term, that can follow volcanic eruptions and earthquakes
	human responses to tectonic hazards	appreciate the difference in human response shown by high and low-income countries

METEOROLOGY (WEATHER & CLIMATE)

Topic Strand	Focus	Key Elements
Weather & climate	the difference between weather and climate	appreciate that weather is the short term (day to day) variation in the condition of the atmosphere whereas climate consists of general weather (temperatures & precipitation) patterns over many years
	how humans can be affected by weather and climate	understand the ways in which weather and climate can impact on human lives and economic activity
	weather/climate hazards	recognise hazards associated with global warming, such as drought and severe cyclones
Earth's main climate zones	climate zones (based on temperatures and precipitation)	understand the influence of latitude on climates around the world
The climate of the British Isles	the pattern of climate and main causes of temperature and rainfall variation from place to place in the British Isles	understand the influence of latitude, altitude, relief, prevailing winds, distance from coast and the impact of the North Atlantic Drift and the Jet Stream
Microclimate	the influence of aspect, shelter, buildings, surface and natural features in relation to microclimates	appreciate the variations in temperature and wind speed within a small outside area, such as a garden or school grounds

GEOMORPHOLOGY (RIVERS & COASTS)

Topic Strand	Focus	Key Elements
Rivers	river basins	recognise catchment areas, watersheds, river valleys, tributaries, confluences & floodplains
	the long profile of a river and the characteristics and features of upper, middle and lower stages	understand how a river (and its valley) changes in appearance from source to mouth recognise river features such as spurs, rapids, waterfalls, meanders, flood plains & deltas and know at which stage they are found
	features of river erosion	understand how river erosion causes the development of valleys, and waterfalls
	how a river transports its load	understand the ways in which material of varying size may be transported
Coasts	coastlines	identify major coastal features on O.S. maps & aerial photographs
	major features of coastal erosion	recognise features such as bays, headlands, cliffs, wave cut platforms, caves, arches, stacks and stumps and be able to describe how they are created
	how the sea transports eroded material	describe and explain the process and occurrence of longshore drift
	major features of coastal deposition	recognise features such as beaches and spits and be able to describe how they are created
Flooding	flooding by rivers and/or sea	understand the causes and effects of river and coastal flooding
	the use of flood defences	recognise examples of soft and hard engineering defences and be aware of costs versus benefits

DEMOGRAPHY (POPULATION & SETTLEMENT)

Topic Strand	Focus	Key Elements
Population	population numbers and population density for the UK, Europe and the world	appreciate that human populations are unevenly spread – some places are crowded and others empty
		understand some of the physical factors that account for this uneven distribution
	how the population of a country may rise or fall	understand birth rate, death rate and migration and appreciate how they interact to determine the population of a country
	the Population Explosion	appreciate the rapid rise in the global human population and consider the consequences for humans and the planet, now and in the future
Migration	what causes people to migrate	understand migration in terms of; push and pull factors, rural to urban migration and migration from low to high-income countries
Settlement	the reasons for the location, growth and nature of individual settlements	recognise, from O.S. maps or sketch maps, different types of settlements (incl. village, town and city) and their characteristics in terms of size, shape and functions
	the relationship between settlement size and the provision of goods and services	understand how the range and number of services varies with settlement size
	the management of urban development	appreciate how towns and cities can be made attractive and healthy for their population
		consider how settlement growth can be managed to safeguard the natural environment

ECONOMY (TRANSPORT & INDUSTRY)

Topic Strand	Focus	Key Elements
Transport	the principal modes of transport – road, rail, sea and air – together with their advantages & disadvantages for transporting goods & people	appreciate how factors such as distance, load, speed, convenience and cost will influence the choice of transport for a particular journey
	containerisation and its associated transport infrastructure	appreciate how containerisation and modern facilities such as ports and air terminals facilitate global trade
Industry	the different types (sectors) of economic activity: primary, secondary, tertiary, quaternary	be able to classify a variety of jobs in any one of the four economic sectors e.g. farmer = primary
	the geographical factors that determine the location of economic activity	understand how site, power, transport, labour supply and market determine the location of economic activity
		recognise that industries may grow and decline over time
Development	high, middle and low-income countries	recognise the difference between high, middle and low-income countries
	the relationship between the level of economic development and the proportion of people working in each sector	understand the shift of employment from the primary sector to secondary, tertiary and quaternary sectors and relate this to development and economic prosperity
	the relationship between economic development and quality of life within society	understand terms including: income per person, life expectancy, health, literacy and housing and recognise how these may improve through economic growth

ENVIRONMENT (SUSTAINABILITY & STEWARDSHIP)

Topic Strand	Focus	Key Elements
Local environmental issues	how environments may be improved through one's own actions	recognise the nature of the school environment, its environs and location investigate how this environment has changed over time explore the sources and extent of pollution near the school and consider how this may be reduced in the future
National environmental issues	how environments can be protected and managed for sustainable benefit	appreciate, by studying (or possibly visiting) a National Park or AONB, the attractions for visitors understand how the environment is maintained and enhanced on a sustainable basis
	renewable versus non-renewable energy sources	understand the difference between renewable and non-renewable energy sources in the UK
Global environmental issues	global warming: causes, current and predicted consequences and possible solutions	understand some of the causes and possible consequences of global warming and climate change be aware of possible solutions to global warming and climate change
	pollution: causes, current and predicted consequences and possible solutions	recognise air, water and land pollution and be able to suggest how each can be reduced

APPENDIX I

LOCATION KNOWLEDGE

Questions will be set only on locations shown in this Appendix. It is expected that those in ***bold italics*** will be known at age 11+.

THE UNITED KINGDOM AND EUROPE

Major physical features	Continents	***Europe***
	Mountain ranges	***Alps, Pyrenees***
	Oceans	***Atlantic, Arctic***
	Seas	***Mediterranean***
	Rivers	***Rhine***
Other features		***Arctic Circle, North Pole, Prime Meridian***
British Isles	Countries	***England, Wales, Scotland, Northern Ireland, Rep. of Ireland***
	Sea areas	***English Channel, Irish Sea, North Sea***
	Rivers	***Severn, Thames, Trent, Clyde, Shannon, Mersey, Tyne***
	Upland areas	***Grampians, Lake District, Pennines, Snowdonia***
	Islands	Anglesey, Channel Islands, ***Isle of Man, Orkneys, Shetlands, Isle of Wight***
	Major cities	Aberdeen, ***Belfast***, Birmingham, Bristol, ***Cardiff***, ***Dublin***, ***Edinburgh***, Glasgow, Leeds, Liverpool, ***London***, Manchester, Newcastle, Norwich, 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)***

THE REST OF THE WORLD

Major physical features	Continents	***Africa*, *Asia*, *North America*, *South America*, *Oceania*, *Antarctica***
	Mountain ranges	Andes, ***Himalayas***, Rockies
	Deserts	Sahara, Arabian
	Oceans/seas	***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 selected capitals	Africa	***Egypt (Cairo)*,** Ethiopia (Addis Ababa), Ghana, Kenya (Nairobi), Nigeria, ***South Africa (Pretoria)***
	North America	Canada (Ottawa), Mexico (Mexico City), ***USA (Washington DC)***
	South America	***Argentina (Buenos Aires)*, *Brazil (Brazilia)*,** Chile, Colombia, Peru (Lima)
	Asia	Afghanistan, Bangladesh, ***China (Beijing)*, *India (New Delhi)*,** Indonesia, Iran, Iraq, Israel, ***Japan (Tokyo)*,** Pakistan, ***Russia (see*** Europe), Saudi Arabia, South Korea, Thailand, Turkey (also in Europe)
	Oceania	***Australia (Canberra)***, New Zealand, Papua New Guinea
Other major cities and city states		Dubai, Kolkata, Los Angeles, ***New York***, Rio de Janeiro, Sao Paulo, Shanghai, ***Sydney***, Vancouver

APPENDIX II

GLOSSARY OF USEFUL TERMS

A	
abrasion	a type of erosion involving rock particles being scraped against, and wearing away, the surface of other rocks
active	a volcano which is constantly or frequently erupting
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
anticyclone	an area of high air pressure bringing clear skies
arch	a coastal feature created by the erosion of back to back caves
atmosphere	the layer of air round the earth
attrition	a type of erosion involving rock fragments being ground together to become smaller, smoother and rounder
B	
backwash	the outgoing water from a coastal wave
bay	an area of sea between two headlands
beach	material which the sea deposits on the coast
biodiversity	the number and variety of all living things within an ecosystem
birth rate	the number of babies born per thousand of the population per year
braiding	a river feature consisting of islands of sediment deposited in the river channel in its middle course
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 to pass round a town
C	
CBD	Central Business District: the commercial and business centre of a town or city, with highest land values
climate	the average weather over many years
collision boundary	where continental plates collide, forming mountain chains
compass	an instrument used to identify direction
condense	gas becoming liquid
confluence	the point where two rivers (including tributaries) meet

conservative boundary	where two tectonic plates slide past each other, but where crust is neither formed nor destroyed
conserve	not to waste resources
constructive boundary	where two tectonic plates move apart from each other and new crust is formed
containerisation	to transport goods in standard-sized, sealed containers
continent	a large land mass (a total of seven)
contour line	a line on an OS map joining all points of the same height
convection current	heated plumes of magma which create crustal plate movement
convectional rain	rain formed by the sun heating the land surface causing moist air to rise, condense and produce heavy rainfall
core	the centre of the Earth
corrasion	a type of erosion involving rock particles being scraped against, and wearing away, the surface of other rocks
corrosion	a chemical process involving the dissolving away of sedimentary rocks, e.g. chalk, limestone a type of erosion by water involving the dissolving away of rock, particularly limestone and chalk
crust	the thin outer layer of solid rock round the Earth's surface

D

death rate	the number of deaths per thousand of the population per year
delta	a depositional landform created where a river splits into numerous outlets
depression	a cyclonic weather system bringing precipitation and winds
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
detached	a house which is completely separate from other houses
dispersed	spread out
distribution	the spread of places, people or data
dormant	inactive
drainage basin	an area of land which is drained by a single river and its tributaries
drought	a prolonged period of below average precipitation

E

earthquake	a sudden and violent shaking of the ground caused by tectonic movements
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 around the middle of the Earth
erosion	the wearing away of land by material carried in rivers, glaciers, waves and wind
estuary	the final section of a river, subject to tides
ethnic group	people of the same cultural background
evaporate	liquid turning to gas
exploit	to seek and to use a natural resource for human benefit
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 rock breaks and the energy of an earthquake is released
fog	cloud at ground level (reducing visibility to less than 1km)
front	the boundary between warm and cool air masses
frontal rainfall	rain formed when warm, moist air rises over cold air, causing condensation and precipitation
function	the activities of a settlement

G

geothermal energy	heat and electricity produced from hot, underground water
gorge	a deep, steep-sided valley
greenfield site	land which has not previously been built on

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	an area in which plants and animals have adapted in order to survive there
headland	a promontory of resistant rock which juts out into the sea
HIC	High Income Country
hierarchy	a ranking of settlements according to their size, functions or importance
high order settlement	a settlement which contains top- level shops and services
HS2	High Speed Railway 2 - a planned high-speed railway proposed to run between London (Euston) and the Midlands and the North of England
humidity	the moisture in the air
hydro-electric power	electricity produced by water being released through dam turbines
hydraulic action	a process of erosion involving water and air trapped in cracks and crevices
I	
igneous	a type of rock/process/landform involving magma
impermeable	not allowing water to pass through
infiltration	the movement of water from surface into the soil
interception	precipitation landing on plants, trees or buildings
interlocking spurs	a series of alternating rocky projections found in mountain river valleys
irrigation	the artificial watering of crops
isotherm	a line on a map joining points of equal temperature
J	
jet stream	a fast-flowing, narrow air current found in the atmosphere
joint	a crack in bedrock
K	
key	a list giving the meaning of symbols on a map

L

lahar	a product of volcanic eruptions, composed of a mixture of ash and water
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
levée	an embankment next to a river channel, raised above the flood plain
LIC	Low Income Country
life expectancy	the average age which men and women may expect to reach in a particular country
linear	extending in a line
longshore drift	the movement of sand and pebbles along a beach by wave action
low order settlement	a settlement which contains few basic shops and services
lower course	the stage of a river as it nears the sea, dominated by the process of deposition

M

magma	molten rock beneath the Earth's crust
mantle	the semi-solid mass of rock beneath the Earth's crust
market	the place/point where goods and services are sold
megacity	a very large city, typically one with a population of over ten million people
metamorphic	a rock that has undergone transformation by heat and/or pressure
MIC	Middle Income Country
microclimate	the local climate of a small area e.g. a garden
middle course	the stage of a river between its upper and lower sections, containing a mixture of erosion and deposition
migration	the movement of people from one place to another
mouth	the point where a river enters a sea, ocean or lake
multinational	a company which operates in several different countries

N

national park	an area of countryside of outstanding beauty which is protected from development
natural increase	a rise in population caused by a greater number of births than deaths

NIC	Newly Industrialised Country
North Atlantic Drift	an ocean current which warms coastal areas in western Europe
northing	a horizontal grid line on an OS map
nucleated	clustered together
O	
oxbow lake	the cut-off remnant of a meander found in the lower course of a river
OS	Ordnance Survey
P	
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 formed by erosion 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, allowing it to flow through
precipitation	rain, snow, hail or sleet
prevailing wind	the most common direction of wind e.g. SW in the British Isles
primary industry	an economic activity involving the collecting of food and raw materials from the Earth
primary data	information gathered in person through fieldwork
pull factors	reasons why migrants are attracted to a destination
push factors	reasons why migrants leave their homes to go elsewhere
pyroclastic flow	a cloud of superheated gas and ash ejected from a volcano
Q	
quaternary industry	a high-tech industry involving research and manufacturing, employing highly- skilled workers, e.g. computer chips, pharmaceuticals
R	
rapids	fast-flowing, white-water section of the upper course of a river
raw material	mineral and agricultural resources which can be processed to make something else
recycling	the reuse of waste material

relief	the height and shape of land
relief rainfall	rain formed when moist air is forced to rise over highland, causing cooling, condensation and precipitation
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 which can be used for the benefit of people
retail	the sale of products to the public
Richter Scale	a logarithmic scale used to measure the magnitude of earthquakes
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
routeway	a line of transport, e.g., road, rail, sea or air
run-off	the movement of water across a surface
rural	relating to the countryside

S

saltation	the transport of sand in a hopping fashion in water or air
science park	a development of high-tech industries often close to a university
scree	piles of broken rock found beneath steep rock faces
secondary data	information collected by a third party
secondary industry	an economic activity involving the manufacturing of goods
sedimentary rock	layered rock formed by the deposition of sediments
seismic wave	a shock wave produced by earthquakes
seismometer	a sensitive instrument used to measure earthquakes
semi-detached	a house joined on one side to another
service industry	an economic activity such as retail, administration, education, healthcare or tourism
settlement	a place where people live
settlement pattern	the shape and spacing of settlements
site	the exact location of a settlement
situation	the location of a settlement in relation to the surrounding area (its environs)
slip-off slope	a gently-sloping area formed on the inside of a river meander
solution	the transport of a soluble load in water
social	relating to society

source	the beginning of a river
spit	an extended beach which grows by deposition across a bay or river mouth
spur	a rocky projection found in the upper stage of a river's course
spurs	see *interlocking spurs*
stack	a pillar of rock which stands in the sea
stewardship	looking after resources in a sustainable way for the future
subduction zone	the downward movement of crust at a destructive plate boundary
suburb	the residential and commercial development at the edge of a city
sunrise industry	a newly-developed, growing business sector
sunset industry	a long-established business sector in decline
suspension	the transport of silt in water
sustainable	using resources in a manner which allows them to be available for future generations
swash	an incoming coastal wave
symbol	an image, letter or number used on a map to indicate a particular landscape feature

T

tectonic plate	a large, rigid section of the Earth's crust
terraced	a house joined to another on both sides, forming rows
tertiary industry	an economic activity providing a service (as opposed to a product) for their customers
through flow	the movement of water through the soil as part of the water cycle
tourism	a tertiary economic activity involving the commercial organisation of holidays and visits to places of interest
traction	the transport of boulders in a rolling motion in water
transpiration	the release of water vapour into the air from plants
transportation	the movement of eroded material
tributary	a river joining a larger river
tsunami	a sea wave caused by earthquakes and volcanic eruptions

U

upper course	the section of a river near its source, dominated by the processes of erosion
urban	relating to a town or city
urbanisation	the increase in the percentage of people living in cities

V

volcano	a mountainous vent or fissure in the Earth's crust which emits lava and other igneous products
volcanic bomb	lava exploded into the air which solidifies as it falls

W

waterfall	a point on a river where water falls vertically
watershed	an area of highland separating river basins
water table	the upper surface of water in the ground
weather	the day-to-day condition of the atmosphere
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
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 the 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

scholarship only

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)

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 ideally (but not necessarily) link with a theme or topic contained in the current specification.

Advice on the suitability of specific investigations can 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.

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.

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)*.

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).

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.

How much time should be taken for 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.

Deadline dates for submission

15 October (Autumn Common Entrance);

15 January (Spring Common Entrance);

15 March (Summer Common Entrance)

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.

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 for junior schools to liaise with senior schools about the submission of projects and/or forms. 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

INTRODUCTION (4 marks)

Mark	
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.

METHODS OF DATA COLLECTION (8 marks)

Mark	
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.

RESULTS/PRESENTATION OF DATA (8 marks)

Mark	
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 (8 marks)
7-8	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.
5-6	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.
3-4	Some interpretation of the results; some attempt to explain the geography involved.
0-2	Little explanation of findings and/or justification of methods; invalid conclusions.

Mark	EVALUATION (4 marks)
3-4	Strong evaluation; several suggestions for improving the project.
0-2	Weak evaluation; few or 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

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

TO THE HEAD OF GEOGRAPHY

SENIOR SCHOOL .....

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	**8**		
Evaluation to include suggestions on how the investigation could be improved	**4**		
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 .....