

Independent Schools
Examinations Board

COMMON ENTRANCE EXAMINATION AT 13+

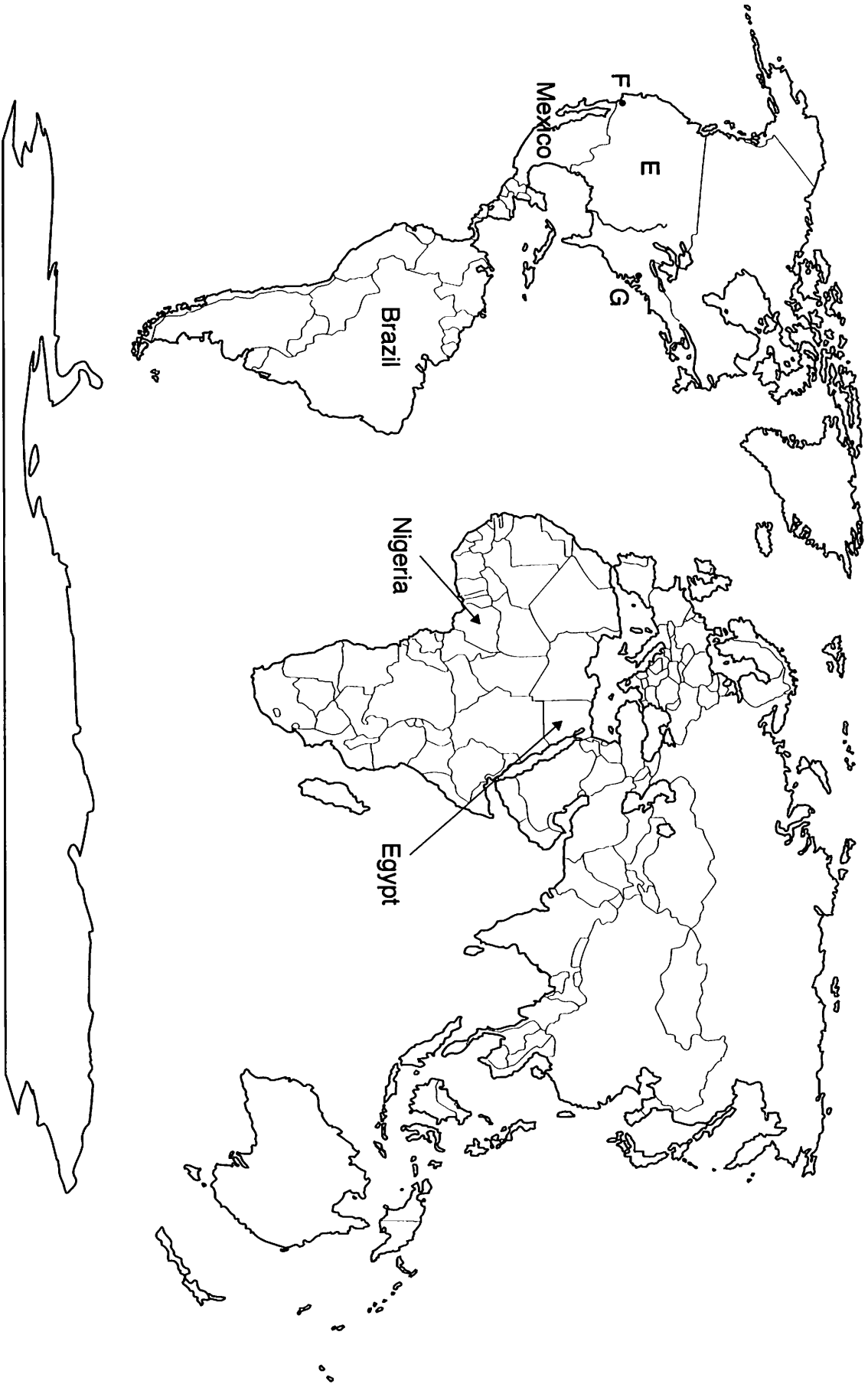
GEOGRAPHY

MARK SCHEME

This is a suggested, not a prescriptive, mark scheme.

Wednesday 7 November 2012





SECTION A: GLOBAL LOCATION

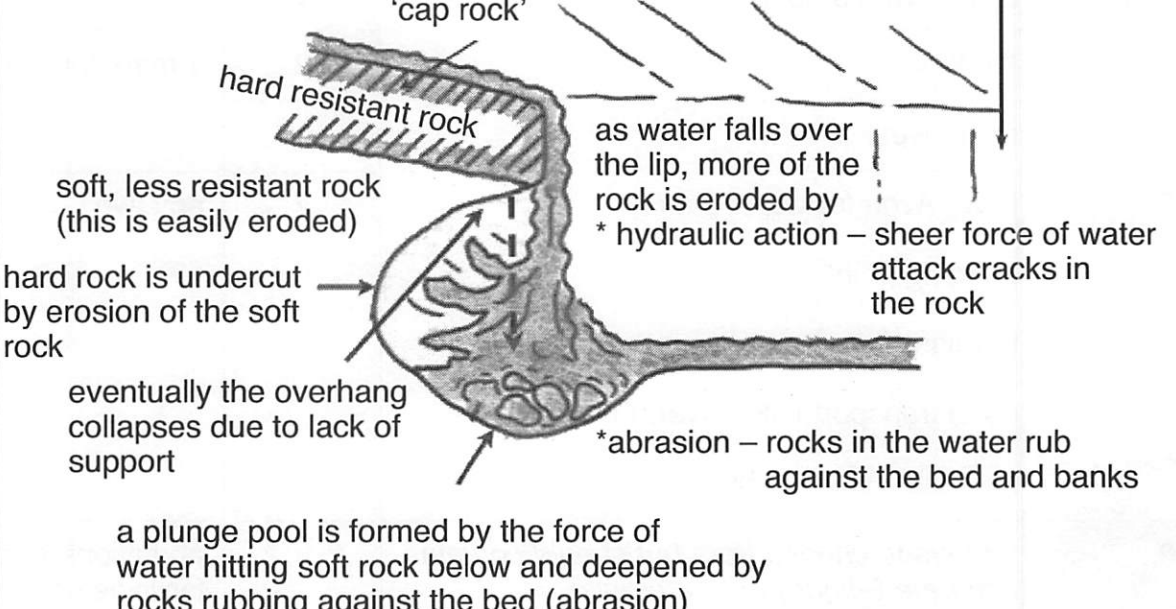
Q.	Answer	Mark	Additional Guidance
1.	<i>see world map</i>	4	
2. (a)	Mississippi	1	
(b)	United States of America (USA)	1	
(c)	(North) Atlantic Ocean	1	
3. (a)	Africa	1	
(b)	Equator	1	
4.	F = Los Angeles G = Washington DC	1 1	
5.	Rockies	1	Appalachians also acceptable

SECTION B: ORDNANCE SURVEY MAPWORK

Q.	Answer	Mark	Additional Guidance
1.	A3062	1	
2. (a)	mast	1	
(b)	church with a spire	1	
3.	1.6 km	2	1 mark for 1.5/1.7 km
4.	south west	1	
5.	River Avon for water supply bridging point farmland/woodland good transport links (river, Fosse Way) defensive sites — hills	2	any two
6.	<i>various to choose from but should contain accurate 6-figure grid reference</i>	2 × 2	attractions and/or facilities acceptable

SECTION C: THEMATIC STUDIES

Rivers and Coasts

Q.	Answer	Mark	Additional Guidance					
1. (a)	the break-up of rocks in situ	1						
(b)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px;">biological</td> <td rowspan="3" style="text-align: center; vertical-align: middle;">/</td> <td rowspan="3" style="padding: 5px;">Rock surfaces are weakened and crack as they expand and contract when heated by the sun.</td> </tr> <tr> <td style="padding: 5px;">exfoliation / onion skin</td> </tr> <tr> <td style="padding: 5px;">chemical</td> </tr> </table>	biological	/	Rock surfaces are weakened and crack as they expand and contract when heated by the sun.	exfoliation / onion skin	chemical	3	<p>Rain absorbs carbon dioxide from the atmosphere forming a weak acid. This is able to dissolve limestone rocks, widening joints and cracks.</p> <p>The effect of plants and animals on rocks.</p>
biological	/	Rock surfaces are weakened and crack as they expand and contract when heated by the sun.						
exfoliation / onion skin								
chemical								
(c) (i)	location Y	1						
(ii)	deeper water	2	1 mark only for just deeper water					
	less friction to volume leading to faster flowing water							
(d)	traction/saltation	1						
(e)	 <p>gradually the waterfall retreats upstream, leaving a steep-sided GORGE</p> <p>'cap rock'</p> <p>hard resistant rock</p> <p>soft, less resistant rock (this is easily eroded)</p> <p>hard rock is undercut by erosion of the soft rock</p> <p>eventually the overhang collapses due to lack of support</p> <p>as water falls over the lip, more of the rock is eroded by * hydraulic action – sheer force of water attack cracks in the rock</p> <p>*abrasion – rocks in the water rub against the bed and banks</p> <p>a plunge pool is formed by the force of water hitting soft rock below and deepened by rocks rubbing against the bed (abrasion)</p>	4	better candidates will refer to gorge formation and say that waterfalls retreat upstream					

Earthquakes and Volcanoes

Q.	Answer	Mark	Additional Guidance
2. (a) (i)	they form lines or belts	1	accept 'they follow plate boundaries'
(ii)	earthquakes occur at plate boundaries/margins	1	
(iii)	the 'Ring of Fire' refers to the large number of volcanoes located around the Pacific Plate boundary	1	
(b)	lava flows pyroclastic flows lahars ash clouds volcanic bombs toxic gases	2	any two
(c)	it was a major earthquake – 7.0 magnitude epicentre was close to the city it struck at a busy time of the day when most people would have still been at work Haiti is an LEDC and less able to offer protection to people and buildings buildings were not built strongly enough to withstand the earthquake – not earthquake-proof a shortage of rescue workers and medical facilities as Haiti is an LEDC	2	any two
(d)	quicker response from emergency services – MEDCs have more investment and equipment advanced emergency planning – national and local scales education programmes for the public on how to prepare, react and cope with earthquakes, e.g. Japan's national earthquake day earthquake-proof buildings designed to cope with seismic waves – MEDCs can invest in this technology more medical care, hospitals and doctors available	4	candidates must explain two advantages clearly

Weather and Climate

Q.	Answer	Mark	Additional Guidance
3. (a) (i)	<p>Ysbyty-lfan has more rainfall throughout the year</p> <p>the highest rainfall for Ysbyty-lfan is in the winter months, October to January.</p> <p>rainfall in Terrington St Clement is more evenly spread throughout the year.</p>	2	for 2 marks, candidates need to give two clear differences in rainfall figures between the two locations
(ii)	<p>prevailing wind brings moist air from the SW</p> <p>this air is forced to rise over high land/mountains resulting in relief rainfall</p> <p>there is less rainfall in the east due to the rain shadow effect</p>	3	1 mark for each point clearly explained
(b)	<p>altitude – an increase in altitude reduces temperature, approximately one degree for every 150 m in the UK</p> <p>areas sheltered from the wind – warmer, e.g. in the lee of a hedge</p> <p>aspect – south-facing slopes are warmer in the northern hemisphere due to direct exposure to the sun</p> <p>north-facing slopes receive less sunlight (the reverse in southern hemisphere countries)</p> <p>urban heat island effect – raises temperatures in city centres by several degrees</p> <p>darker surfaces – absorb more sunlight energy, e.g. tarmac</p> <p>proximity to water – e.g. a deep lake can warm nearby areas in the winter and cool these areas in the summer</p>	2	for 2 marks, candidates need to explain fully the chosen factor

Q.	Answer	Mark	Additional Guidance
(c) (i)	higher temperatures in the west and lower in the east	2	the use of figures from the map will give the additional mark here
(ii)	higher temperatures in the west due to the warming influence of the sea water and the North Atlantic Drift ocean current	1	
(iii)	higher temperatures in the south and lower in the north	2	the use of figures from the map will give the additional mark here
(iv)	higher temperatures in the south due to the effect of latitude – closer to the Equator	1	more able candidates might refer to the urban heat island effect around London
Economic Activity			
4. (a)	724 605 = Fosse Farm = primary 785 641 – museum = tertiary	2	
(b) (i)	in Ghana more people are employed in the primary sector, e.g. farming Ghana has fewer people employed in the secondary sector the UK has more than twice the proportion of people employed in the tertiary sector	2	1 mark for each difference
(ii)	Ghana is an LEDC so more people are involved in primary industries, e.g. farming, forestry, and mining – they export these products to earn income fewer people are employed in the secondary sector as Ghana is still developing its manufacturing base and still imports a high % of manufactured goods The UK has highly mechanised primary and tertiary sectors and being a richer country can support a large service sector	2	1 mark for a valid point, with an additional mark for explanation/ extension
(c) (i)	<i>advantages:</i> jobs/income/investment in the local economy, e.g. new roads and infrastructure/improvements in quality of life/development of the country's economy	2	2 marks for two examples
(ii)	<i>disadvantages:</i> pollution/environmental damage/deforestation/loss of wildlife/destruction of tribal areas	2	

Environmental Issues

Q.	Answer	Mark	Additional Guidance
5. (a) (i)	Pembrokeshire Coast – 4.2 million	1	
(ii)	Peak District – £659 million	1	
(iii)	<i>two from:</i> footpath erosion/littering/traffic congestion/noise pollution/disturbance of wildlife and ecosystems/high visitor numbers in honeypot sites	2	
(b)	<i>depends on the case study but can include a national park, AONB, SSSI, managed woodland area and National Trust land</i>	2	
(i)	to protect landscape/wildlife habitat to reduce land-use conflict to avoid overcrowding in particular areas		reasons need to be clear and specific for 2 marks
(ii)	<i>depends on case study</i> <i>two clear management examples need to be given</i> designated footpaths car parks picnic and BBQ areas fenced-off areas to allow regrowth of vegetation woodland management – coppicing landscape flora and fauna protected from damage and pollution ongoing maintenance of signage and facilities enables the area to receive visitors all year round and year on year	4	any two but candidates need to show an understanding of how these methods are sustainable for 2 marks
Total		80	