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<th>Syllabus ref.</th>
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<td></td>
<td>Explain what can be done to manage the impacts of river flooding</td>
<td>Select a type of river management and show a photograph – learners ask questions that they want to be answered – what, where, when, why, who is affected, etc. Whole class discussion (see: <a href="http://www.bbc.co.uk/schools/qcsebitesize/geography/water_rivers/river_flooding_management_rev1.shtml">www.bbc.co.uk/schools/qcsebitesize/geography/water_rivers/river_flooding_management_rev1.shtml</a>). Introduce ways in which rivers can be managed – could be a card sorting activity – categorise into soft and hard engineering. For each, learners write a short description of how each reduces the flooding hazard with possible advantages and disadvantages. Learners could be provided with a scenario – a river that has flooded and a budget - they have to decide how the river hazard is going to be managed. Decision-making activity in groups followed up by a justification of their choice of scheme. This could also be followed up by a role-play – different viewpoints on the chosen scheme. <strong>Extension activity:</strong> Should rivers be allowed to flood? Learners present and explain their ideas. (I)</td>
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<td>2.2 Case study</td>
<td>Know a case study of the opportunities presented by a river, the hazards associated with it and their management</td>
<td>Learners should know a case study of the opportunities presented by a river, the hazards associated with it and their management. (Named river – can be LEDCs or MEDCs context). Name and locate river – learners draw labelled sketch map with appropriate named places. Provide stimulus information about the benefits provided by the river (and floodplain/delta if appropriate) – learners write up as an advertisement – reasons to live in this location. Photos and video clips of flood events and erosion – learners write up as newspaper article with appropriate development of ideas and place-specific information. Can use more than one case to illustrate hazards. Named examples of how the flood is managed (short term aid and longer term responses) with a description of the scheme and an explanation of how it has managed the hazard – short presentation to the class. The following links will be useful here: Rivers: <a href="http://www.geography.learnonthenet.co.uk/topics/river.html">www.geography.learnonthenet.co.uk/topics/river.html</a> River flooding and management issues: <a href="http://www.bbc.co.uk/schools/qcsebitesize/geography/water_rivers/river_flooding_management_rev1.shtml">www.bbc.co.uk/schools/qcsebitesize/geography/water_rivers/river_flooding_management_rev1.shtml</a></td>
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<td>2.3 Coasts</td>
<td>Demonstrate an</td>
<td>Show learners photographs of different coastlines to set the scene – define the term ‘coast’ and add to key word</td>
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|              | understanding of the work of the sea and wind in eroding, transporting and depositing | glossary. Introduce the concept of ‘waves’ – explain how waves are formed and the factors that affect the strength of a wave – learners note take from whole class presentation. (I)  
Learners work in pairs to complete a card sorting activity to understand the difference between constructive and destructive waves and use this information to complete annotated diagrams of each. They should link these to beach profiles and answer questions to explain the impact of the type of wave on the profile of the beach – describe and explain.  
Recap erosion and the four types of wave erosion – link back to work from rivers and place in the context of the coast.  
Introduce transport and define the term ‘longshore drift’ – learners sequence diagrams to show how the process operates. Add descriptions to each stage and write their own short explanation of the process. (I)  
Discuss deposition on the coast. Introduce the role of wind erosion on the coast, transport and deposition and link to the formation of sand dunes.  
**Fieldwork opportunity:** measuring beach profiles, measuring the size and shape of pebbles and tracking movement of pebbles along a coastline (longshore drift investigation). |
|              | Describe and explain the formation of the landforms identified with these processes | Shows photographs of examples of features of erosion – cliffs, wave-cut platforms, caves, arches, stacks, bay and headland coastline. For each, share appropriate named examples. Learners should complete fully annotated diagrams and explanations to show the formation of each type of landform. (I)  
Introduce the features of deposition (beaches, spits and sand dunes) again using photographs and named examples – learners produce fully annotated diagrams and explanations to show the formation of each type of landform. Link beach profiles to earlier work on types of waves. (I) Learners can also use sequence diagrams to show formation – include a transect through a sand dune system. |
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<td>Describe coral reefs and mangrove swamps and the conditions required for their development</td>
<td><strong>Map work opportunity</strong>: identifying coastal features from a map. Learners describe a stretch of coastline from a map. Could make a link to later unit on tourism – the human and physical attractions of a stretch of coastline and tourist facilities. The following links will be useful here: Erosional landforms: <a href="http://www.bbc.co.uk/schools/gcsebitesize/geography/coasts/erosional_landforms_rev1.shtml">www.bbc.co.uk/schools/gcsebitesize/geography/coasts/erosional_landforms_rev1.shtml</a> Erosional landforms (video): <a href="http://www.bbc.co.uk/schools/gcsebitesize/geography/coasts/erosional_landforms_video.shtml">www.bbc.co.uk/schools/gcsebitesize/geography/coasts/erosional_landforms_video.shtml</a> Depositional landforms (video): <a href="http://www.bbc.co.uk/schools/gcsebitesize/geography/coasts/depositional_landforms_video.shtml">www.bbc.co.uk/schools/gcsebitesize/geography/coasts/depositional_landforms_video.shtml</a> Coasts: <a href="http://www.s-cool.co.uk/gcse/geography/coasts">www.s-cool.co.uk/gcse/geography/coasts</a> Coastal landscapes: <a href="http://www.revisionworld.com/gcse%E2%80%93revision/geography/coastal%E2%80%93landscapes">www.revisionworld.com/gcse–revision/geography/coastal–landscapes</a> Learners analyse maps to describe the distribution of coral reefs and mangrove swamps. (I) Use this to introduce the conditions needed for each through whole class presentation or provide data tables and statistics for learners to analyse and draw conclusions from. Learners annotate a photograph of each to describe a coral reef and mangrove swamp and also the conditions that are required for their development. For coral reefs, learners should sketch the different types of reef and describe – atoll, fringing and barrier. Make use of appropriate examples throughout. (I) Illustrate with reference to a named example for each.</td>
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<td>Demonstrate an understanding that coasts present hazards and offer opportunities</td>
<td><strong>Extension activity</strong>: Explain what opportunities are offered by the coast. Develop each idea and use evidence from photographs and maps. (I) Using photographs or visual clips or headlines from newspaper articles, learners work in small groups again to identify hazards and opportunities. Revisit the photographs that were shown to learners at the start of the unit and also the map extract. Learners work in groups to list all of the different opportunities that the coast might offer and then develop these to explain the benefits of each – for example, sandy beaches encourage tourism such as water sports, sunbathing and this encourages tourism which provides jobs, income, etc.</td>
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<td>the hazards found on the coast. Present as a mind map. Focus on coastal erosion and tropical storms but discussion may also generate other valid ideas. Extend each branch of the mind map with suggested impacts of each. (I)</td>
<td>Provide learners with information about different types of coastal protection (including photographs or diagrams). Learners discuss the information in pairs and complete a table to show how each works and the advantages and disadvantages of each. Provide a scenario about a stretch of coastline and a budget to work with and learners work in small groups to complete a decision-making activity – which stretch of coastline should be protected and why? How shall we protect that stretch of coastline and why? Present their ideas to the class – other learners take notes of ideas about different schemes and peer-assess the presentations. Follow up with role-play – overall class vote for a scheme and then how different groups of people would feel about this scheme and why. Set up a whole class debate – should we protect the coastline? Write up as an extended piece of writing presenting both viewpoints. (I) The following links will be useful here: Coastal management: <a href="http://www.bbc.co.uk/schools/gcsebitesize/geography/coasts/coastal_management_rev1.shtml">www.bbc.co.uk/schools/gcsebitesize/geography/coasts/coastal_management_rev1.shtml</a> Coasts: <a href="http://www.s%E2%80%93cool.co.uk/gcse/geography/coasts">www.s–cool.co.uk/gcse/geography/coasts</a> Coastal landscapes: <a href="http://www.revisionworld.com/gcse%E2%80%93revision/geography/coastal%E2%80%93landscapes">www.revisionworld.com/gcse–revision/geography/coastal–landscapes</a></td>
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<td>2.3 Case study</td>
<td>Know a case study of the opportunities presented by an area of coastline, the hazards associated with it and their management</td>
<td>Learners should know a case study of the opportunities presented by an area of coastline, the hazards associated with it and their management Name and locate a stretch of coastline – identify on a map extract and use satellite images/Google earth too. Learners produce an annotated sketch map to name places and identify key features – place-specific reference. Provide background information about the coastline – for example on geology – learners complete a fact file. Analyse information to show how the coastline is used – show as a mind map with photographs, sketches, examples and annotation. Discuss the opportunities created by each. Learners research hazards along the coast – write up as TV broadcasts or newspaper reports (causes and effects). Need to include erosion and tropical storms. More than case study can be used to illustrate hazards. Learners produce a presentation about how this stretch of coastline is managed – to include named examples of coastal</td>
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management schemes. The scale of case study is important. The area needs to be of a sufficient size to demonstrate an awareness of opportunities, hazards and management. It should be less than the size of a country unless it is a very small country or the whole country is affected by one of the hazards.

Past and specimen papers

Past/specimen papers and mark schemes are available to download at https://teachers.cie.org.uk (F)

2.2 Rivers
Nov 2012 Paper 13 Q3ai and ii
Nov 2012 Paper 13 Q3aii and iv
Nov 2012 Paper 13 Q3bi and ii
Nov 2013 Paper 11 Q3a and 3b
Nov 2012 Paper 13 Q3c

2.3 Coasts
Jun 2013 Paper 12 Q3aiii
Jun 2012 Paper 13 Q3a
Nov 2012 Paper 11 Q3aii, iii, iv and 3bii
Jun 2013 Paper 12 Q3aiv
Jun 2013 Paper 11 Q3a and 3bi
Jun 2012 Paper 13 Q3b
Nov 2012 Paper 11 Q3bi
Jun 2013 Paper 12 Q3b