

## Section B Small-scale Dynamic Planet (optional topics – study topic 5 or 6)

### Topic 5 Coastal Change and Conflict

#### Key ideas

#### Detailed content

#### 5.1 How are different coastlines produced by physical processes?

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| <p>a Geological structure and rock type have a major influence on coastal development and landforms.</p> | <p>Investigate the contrasts between a named soft rock coast and a named hard rock coast in terms of cliff profiles, cliff features and erosional land forms.</p> <p>Compare concordant and discordant coasts (headlands and bays) and assess the influence of rock type, joints and faults.</p>  |
| <p>b Marine processes, sub-aerial processes, mass movement and climate change are also important.</p>    | <p>Investigate how destructive waves, sub-aerial processes and mass movement create a range of erosional landforms, including cliffs, wave-cut platforms, caves, arches and stacks and how constructive waves, deposition and longshore drift create beaches, bars and spits.</p> <p>Explore the possible consequences of climate change on marine erosion and deposition, including an increased frequency of storms and rising sea level.</p> |

#### 5.2 Why does conflict occur on the coast and how can this be managed?

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| <p>a Physical processes lead to coastal change and retreat, which threatens people and property and generates conflicting views.</p> | <p>Investigate a coastline experiencing rapid coastal retreat, e.g. Holderness, to examine why rates of erosion vary and the threats posed to people and the environment by rapid erosion.</p> <p>Explore the conflicting views of how the case study coastal area should be managed.</p>  |
| <p>b There is a range of coastal management options from traditional hard engineering to more modern holistic approaches.</p>        | <p>For a named coastline, investigate the costs and benefits of traditional hard engineering structures, including groynes and sea walls.</p> <p>Consider the costs and benefits of soft engineering, including beach replenishment, and more radical approaches including 'do nothing' and 'strategic realignment' linked to Integrated Coastal Zone Management (ICZM).</p> |