<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>Links to exam specifications</th>
<th>Key resources</th>
<th>Suggested Activities</th>
<th>Outcomes</th>
<th>Extension(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODULE 1 ‘Climate Change Impacts – Physical’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| To identify and categorise the physical impacts of climate change | A Level Geography (Edexcel, AQA, OCR, WJEC) A Level Environmental Studies | Physical Impacts of Climate Change Resource List Internet & computers A3 paper and coloured pens | - Students examine various sources of information about the physical impacts of climate change, e.g. sea-level rise, melting ice sheets (Greenland & Antarctica) and glaciers, reduced sea-ice extent (Arctic especially), biodiversity (plants and animals), habitats & ecosystems, extreme weather, atmospheric & oceanic circulation systems, agriculture etc.  
- In small groups, find different ways of categorising these, e.g. direct/indirect, weather, ecosystems etc.  
- Each group presents its findings to the class and students do their own summary table or mind map about physical climate change impacts.  
**NB:** There is no ‘right way’ to do this activity - students may find other ways than those suggested. The important thing is that they can think about and justify the decisions they make as to how they categorise the physical impacts of climate change, and that they understand how some impacts are linked to each other. | There are a wide variety of physical impacts of climate change. Many of the physical climate change impacts are linked, for example ocean currents and extreme weather. | Students to: a) collate examples of each impact; b) explain or demonstrate how some impacts are linked. |
| To understand how different physical impacts of climate change affect different parts of the world | A Level Geography (Edexcel, AQA, OCR, WJEC) A Level Environmental Studies | Physical Impacts of Climate Change Resource List PowerDown secondary school resources: [http://powerdown.actionaid.org.uk/](http://powerdown.actionaid.org.uk/) Internet & computers | - Students locate the physical impacts they identified in the previous activity – either on a class wall map of the world or through a Google Earth activity.  
- Then students complete their own map of impacts for revision – e.g. using colour coded boxes for different types of impacts, whether the examples shown are MEDCs or LEDCs etc. | Many parts of the world are affected in different ways by the physical impacts of climate change. | Students to consider/explore and describe how different countries respond to the physical impacts of climate change in ways that suit their location and environment. |
| To analyse the current and possible future effects of climate change on specific locations | A Level Geography (AQA, WJEC) | Physical Impacts of Climate Change Resource List | - Students research, prepare and present case study presentations (may be as creative in their presentations as they like) on physical climate change impacts from one or more of the following locations:  
- British Isles  
- chosen tropical region  
- alpine tundra region  
- Bangladesh | Detailed case study knowledge of the current and future physical impacts of climate change in specific parts of the world. | Students can practise applying the information by looking at past exam questions – see: Climate Change Physical Impacts Exam Specification & Climate Change Physical Impacts exam questions |

| To examine the direct and indirect impacts of climate change | A Level Geography (Edexcel, AQA, OCR)  
A Level Environmental Studies | Physical Impacts of Climate Change Resource List | - In friendship groups, students decide which physical impacts are direct and which are indirect.  
- Simple ‘experts activity’ – each group member is given a number 1 – 4 (more or less depending on the group sizes). Groups are then rearranged by number, and each group researches and produces material on one indirect physical impact of climate change.  
- Students return to their original groups and teach | Some of the direct impacts of climate change, e.g. increased temperatures and sea-level rise, have additional impacts such as on ecosystems, changing weather patterns, causing extreme weather events or altering patterns of ocean currents which are indirect but can have serious impacts. | Throughout activity ask students to keep a separate list of human impacts they can identify (explain these are indirect impacts to be examined in greater detail in other separate activities) |
<table>
<thead>
<tr>
<th>To review the physical impacts of climate change</th>
<th>A Level Geography (Edexcel, AQA, OCR, WJEC)</th>
<th>A Level Environmental Studies</th>
<th>each other about the impact they have studied.</th>
<th>consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large plastic world floor map Quiz questions</td>
<td>Climate Change Physical Impacts Exam Specification &amp; Climate Change Physical Impacts exam questions</td>
<td>- In groups, students prepare ‘Taboo’ questions for and play ‘Climate Change Impacts – Physical Taboo’ (see: <a href="http://www.geoworld.co.uk/tab.htm">www.geoworld.co.uk/tab.htm</a> for how to apply Taboo in Geography teaching). - Practise past exam questions, peer assessment and self-assessment using mark schemes: - in groups - individually with resources/notes - under timed conditions.</td>
<td>Comprehensive knowledge and understanding of the physical impacts of climate change.</td>
<td>Students construct their own exam questions and marking schemes (may share questions amongst peers and mark one another’s answers).</td>
</tr>
</tbody>
</table>