

# Loch Glencoul

## Student Sheet



The purpose of this visit is to observe some of the structures produced by thrust faulting during a mountain building episode. Just over 400 million years ago, before the Atlantic Ocean existed, a wide ocean called the Iapetus closed; the join is across what is now Norway, the UK and eastern USA. The closing ocean exerted huge forces on the rocks until a mountain range was pushed up. These forces produced folds and major thrust faults inside the mountains. A similar process is taking place forming the Himalayan Mountains today.

### General instructions to students:

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1. Note the main RISKS at the site when you arrive.
2. Respect the geological code of conduct at all times, do not disturb wildlife, close gates, do not remove rocks/fossils or sand from the site.
3. Before leaving transport, check that you have suitable clothing and footwear and the equipment to record your field observations:
  - ✓ Pencils
  - ✓ Clipboard
  - ✓ Task sheet
4. Stay close to your teacher/supervisor at all times. (Include site specific hazards if required, water / cliffs etc)
5. Try and complete your observations in as much detail as possible. Listen to the teacher as they explain what you are looking at and ask questions if you are unsure about any aspects of the site.

**Tasks to be completed:**

Task	Description	Completed (tick)
1	At Site 1- Draw a sketch of the hillside shown on the interpretation panel and note key features, including rock types and vegetation.	<input type="checkbox"/>
2	Explain the nature of the contact between the lower piece of gneiss and the overlying Cambrian Quartzite.	<input type="checkbox"/>
3	Explain how the Lewisian Gneiss lies both under and above the Cambrian rocks.	<input type="checkbox"/>
4	At Site 2- Draw a sketch, which covers the area from the top of the Stac of Glencoul down to the level of the loch, including those drawn from Site 1. Note key features.	<input type="checkbox"/>
5	Using information and understanding from Sites 1 and 2 construct a history of events that have formed the landscape here.	<input type="checkbox"/>

Name

Location

Loch Glencoul

**1. At Site 1- Draw a sketch of the hillside shown on the interpretation panel and note key features, including rock types and vegetation.**



**2. Explain the nature of the contact between the lower piece of gneiss and the overlying Cambrian Quartzite.**

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**3. Explain how the Lewisian Gneiss lies both under and above the Cambrian rocks.**

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Name

Location

Loch Glencoul

**4. At Site 2 - Draw a sketch, which covers the area from the top of the Stac of Glencoul down to the level of the loch, including those drawn from Site 1. Note key features.**



**5. Using information and understanding from Sites 1 and 2 construct a history of events that have formed the landscape here.**

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