

The Wild Man Who Changed the World – Discovering Glaciers



Before you begin, look through the John Muir graphic novel and read the section *The Wild Man Who Changed the World*, which describes John Muir's first-hand experience of glaciers:

'And I was certain now that ancient glaciers really had carved out the Yosemite Valley and the Sierras, like giant ice-cutters.

Men: Twaddle! Silly sheep-herder!

Woman: God made the mountains and valleys – not glaciers!

No one else believed this new theory so I went back to my mountains, determined to find proof. . .

John Muir: These grooves and markings show that rivers of ice gouged out vast paths as they moved through the bedrock.

The glaciers of the last Ice Age made this valley!

Man: By Jove, he's right!

The aim of this activity is to discover how the Scottish landscape has been shaped. John Muir was one of the first people to conclude that the major landforms in Yosemite Valley, California were created by glaciers and not a major catastrophic event. During the Ice Age, glaciers and ice sheets covered much of Scotland and carved out deep u-shaped valleys with steep sides containing ribbon lakes.



John Muir, Earth - Planet, Universe - Teaching Support Notes

Your teacher will now show you some photographs of key glacial features and explain how they were formed, including a glacier, an arête, a pyramid peak, a deep u-shaped valley, a corrie and a lochan (or tarn).

Split into pairs to think about the meaning of the word 'glaciation' and create a definition.

'Glaciation' means.....
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Now join together into a bigger group. Each group will be given a particular glacial feature (from the list above). In groups prepare a presentation to explain how it was formed and then present your findings to the rest of the class.

Allocate one person to prepare notes, one to draw supporting illustrations, one person to label these illustrations and the remaining pupils in the group should then deliver the presentation.

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Refer to the additional information in the Glacial Features Explained worksheet provided by your teacher.