

Students: fill in next to the word answer and return the document for assessment.

Geography

Mountain and volcano

## Book: The Mountain Book

Pages 14-19

Everything here is based on our Curriculum Visions book The Mountain Book.

In this segment we are going to think about what happens when glaciers cut into mountains.

You will need to go to page 14 of the book.

Part 1

Play the entire middle video on page 14. It tells you everything you need to know about glaciers. Keep an eye out to be able to answer this question: What are the cracks on the surface of the glacier?

Answer.....

Crevasses, showing where the brittle ice has changed direction quickly.

Part 2

What action goes on above the glacier?

Answer.....

Frost action where any rain freezes into ice overnight, expands and breaks up rocks above the glacier. Only happens with glaciers that have at least part of summer above freezing.

Part 3

Make a summary of how a glacier works using the information given in the video you have watched.

Answer.....

A glacier forms when snow high in the mountains consolidates to ice. The ice slides down the valley under its own weight. Frost shattered material from the valley sides above the glaciers fall onto its surface. Underneath, the ice pulls rocks free and then uses them to scrape at the remaining rock, deepening the valley.

Part 4

Now Play the top video on page 14. Make sure you watch it right through in full screen. It shows features left by ice on Snowdon mountain, Wales.

Write down each of the features that get labelled on the video. Choose any one and explain how it formed.

Answer.....

Glacial lake formed by extra deep scouring of glacier into softer area of rocks; arete: knife edge left when two glaciers wear away adjacent flanks of a mountain peak; corrie/cirque/cwm: a hollow made by a small glacier in what was the headwaters of a stream; pyramidal peak: a peak that has been cut into by several corrie glaciers, steeping its faces.

#### Part 4

Now play the bottom video on page 14. You will see some glaciers and then an ice sheet. What is the difference between them??

Answer.....

An ice sheet overwhelms the landscape, peaks as well. It is what Britain looked like in the Ice Age (this is Greenland today).

#### Part 5

Turn to page 16.

Write down why valleys with glaciers in have a different shape to those with rivers in.

Answer.....

Ice moves slowly and cannot twist and turn, so it scours a more direct path.

#### Part 6

Why are waterfalls common in areas that once had glaciers?

Answer.....

Because the glaciers overdeepened valleys, meaning that tributaries are now left high above the main valley floor. The result is that streams have to fall down the main valley sides.

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Or you may want to see related books. If so just go to the top of the screen, select geography, and from the page that opens choose Mountain or Volcano.