

Unit 4 Glaciers

1. Whole class instruction

Objective: To introduce children to an important aspect of mountain erosion.



1.1. Go to Mountain>>Multimedia 4>>video 21

“Do you know what a glacier is? Did you know that glaciers have shaped where we live – and not that long ago either? So let’s have a look at one...”

- ▶ Open the video activity. Make sure children know the glacier is in a valley and fed by compacted snow near the peaks.
- ▶ Understand that erosion takes place underneath as emphasised by the video, and that glaciers grow in winter and shrink due to melting in summer.

Play the video of the Morteratsch glacier in the Alps. You may need to play this twice as the environment will not be familiar to many children and they will need considerable support.

1.2. Go to Textbook pages 14-19

“Let’s look at a section through a glacier”.

- ▶ Basic section with landscape behind relates to the video they have just watched.
- ▶ More able students will be able to go to **Glacier** Creative Topic and see the world’s variety of glaciers and features.
- ▶ On page 19 you will see a diagram of how passes are created. The example is Glen Coe (in case you are doing Scottish Mountains in lesson plan 10).

The picture in the textbook page 15 is the same glacier as in the video.

2a. Group exploration

2.1. TG photocopiable pages 46 - 50

- ▶ Print out the photocopiable and ask children to complete the questions. These will reinforce the discussion you had on the textbook pages.

2b. Literacy activity

- ▶ There is no literacy activity to go with this physical geography unit.

3. Plenary session

- ▶ Get children to say what they think they have learned and present it perhaps on the whiteboard or in their own books.

4. Further work/homework

- ▶ If you cannot get glacier ice cubes into class, ask children to make their own. Some could use the camera on their phones to produce shots or a video of the result to show in class.



A very good experiment about glacial erosion: Take an ice cube tray and put a thin sprinkling of sand in the bottom of each compartment. Fill with water and put in the freezer. Bring to school if necessary in a bag meant for keeping frozen food.

Give a frozen cube to each child and get them to feel the gritty underside of the 'glacier' they are holding. Now get them to rub it over a piece of plastic or other surface that is easily scratched to show abrasion. It is great fun. Do not scratch on windows!!