



SCIENCE WORKSHEET

Name: Class: Date:

WATER, ICE AND LAND RELIEF

1.- How water acts on the landscape.

Water is a very important agent which transforms the landscape. This is due to its abundance and because it is in constant movement. This movement, the water cycle, is due to external energy provided by the Sun and gravity.

Waters transform the landscape through three processes: erosion, transport and sedimentation. But we can find significant differences in the result of the action on the land relief depending of whether it is caused by water currents, rainwater, ice, the sea, etc.

2.- Rainwater.

Rainwater or streams are superficial waters, produced by the rain, which flow without a fixed course. They have a strong erosive power, the rocky materials are soft and there is no vegetation to contain them. Gullies are typical landscapes formed by this kind of water.

3.- Torrents and rivers.

Torrents are short water courses on the sides of mountains. The water does not flow through them all the time, but only when the ice melts or when there is lot of rain. Valleys and ravines are formed through the action of torrents.

Unlike torrents, **rivers** are permanent water courses. Their most significant action on relief is the formation of fluvial valleys.

4.- The sea.

The action of the sea, due to the force of the waves and the currents, modifies the landscape of the coast. Cliffs and beaches are examples of landscapes modelled by the sea.

5.- Glaciers.

Glaciers are authentic rivers of ice which can only be found in high mountains and the Polar regions. The ice moves very slowly from the highest to the lowest areas. As they move, glaciers drag many stones with them which cause erosion of the materials they pass over. The most visible



result of the action of a glacial valley, which is different from a fluvial valley. There are many glacial valleys in many mountains areas, although the glacial no longer exists.

Answer the questions.

1.- What is the difference between a torrent and a river?

2.- What is the difference between rainwater and torrent?

3.- What is a glaciari?

4.- In what areas of the planet will we find glaciers nowadays?

5.- Why are there glacial valleys in some places where there is a river, and not a glacier?

6.- Why do rivers form "V"-shaped valleys and glaciers "U"-shaped valleys?
