

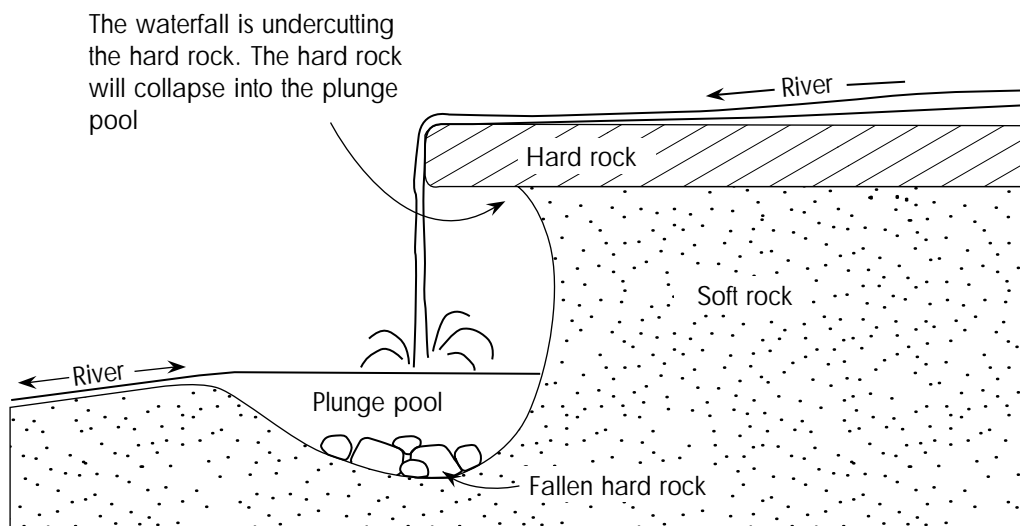
Waterfalls

Rivers do not always flow smoothly. Sometimes water has to drop from a high place to a low place. We call these features waterfalls.

Waterfalls are often found near to the source of a river. They happen when there is a piece of hard rock which the river cannot erode.

Most waterfalls are small. The water often drops just a few centimetres. However, the biggest waterfalls can be hundreds of metres high.

This diagram is a cross-section of a waterfall. This is what it would look like if we cut through the land and look at it from the side.



As the river drops over the waterfall, it carries its load of stones and pebbles with it. This helps the waterfall to erode a deep pool under the waterfall. This is called a plunge pool.

The soft rock under the hard rock is also eroded. Hard rock is left sticking out. This will eventually collapse into the plunge pool. If this keeps happening, the waterfall will slowly move towards the source of the river.

Many people like to see waterfalls, so they can attract large numbers of tourists.

Research

Use your library to find out about the Niagara Falls or another famous waterfall.

How do plants survive in the desert?

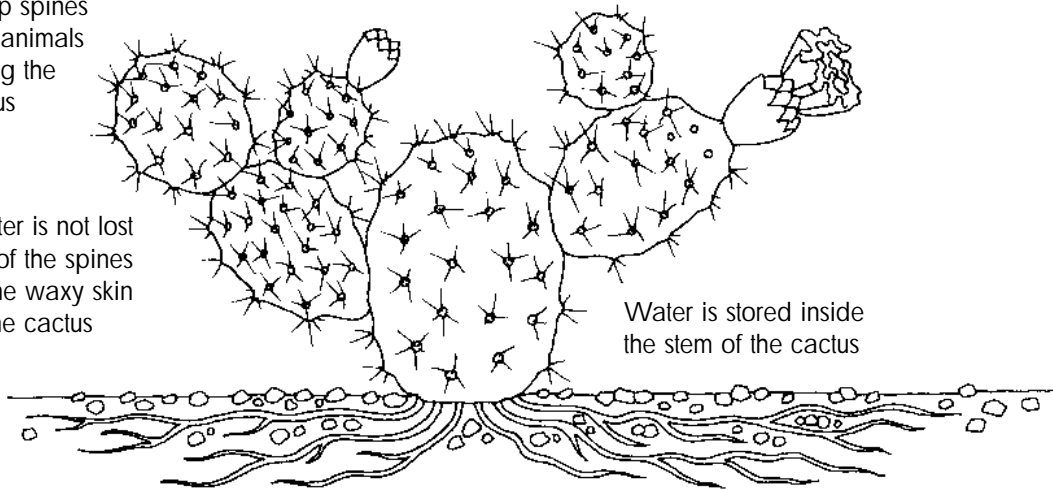
Plants in deserts have to be able to live in very dry places. They have to find the little water that falls as rain and store it.

Here are some of the ways that they can do this. This kind of plant is called a cactus.

Sharp spines stop animals eating the cactus

Water is not lost out of the spines or the waxy skin of the cactus

Water is stored inside the stem of the cactus



The roots are close to the surface and stretch a long way to find water

How do animals survive in the desert?

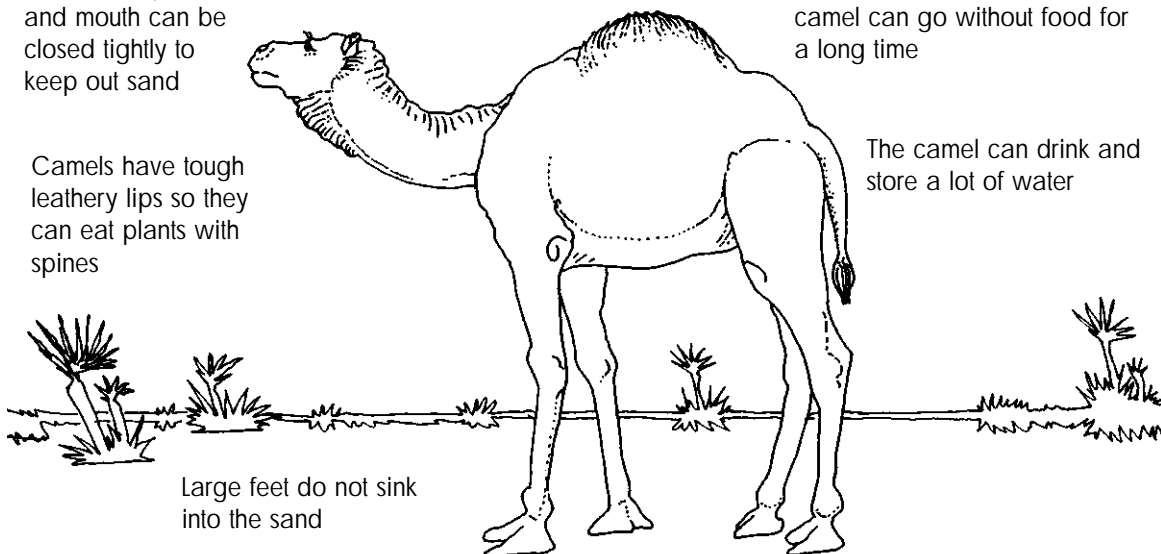
Many animals spend the day in cool burrows and only come out at night. The camel has adapted to life in the desert. It has many special features that help it live on the surface.

The nose, eyes and mouth can be closed tightly to keep out sand

The hump stores fat so the camel can go without food for a long time

Camels have tough leathery lips so they can eat plants with spines

The camel can drink and store a lot of water



Large feet do not sink into the sand

Exercise: Farmer Green's new field

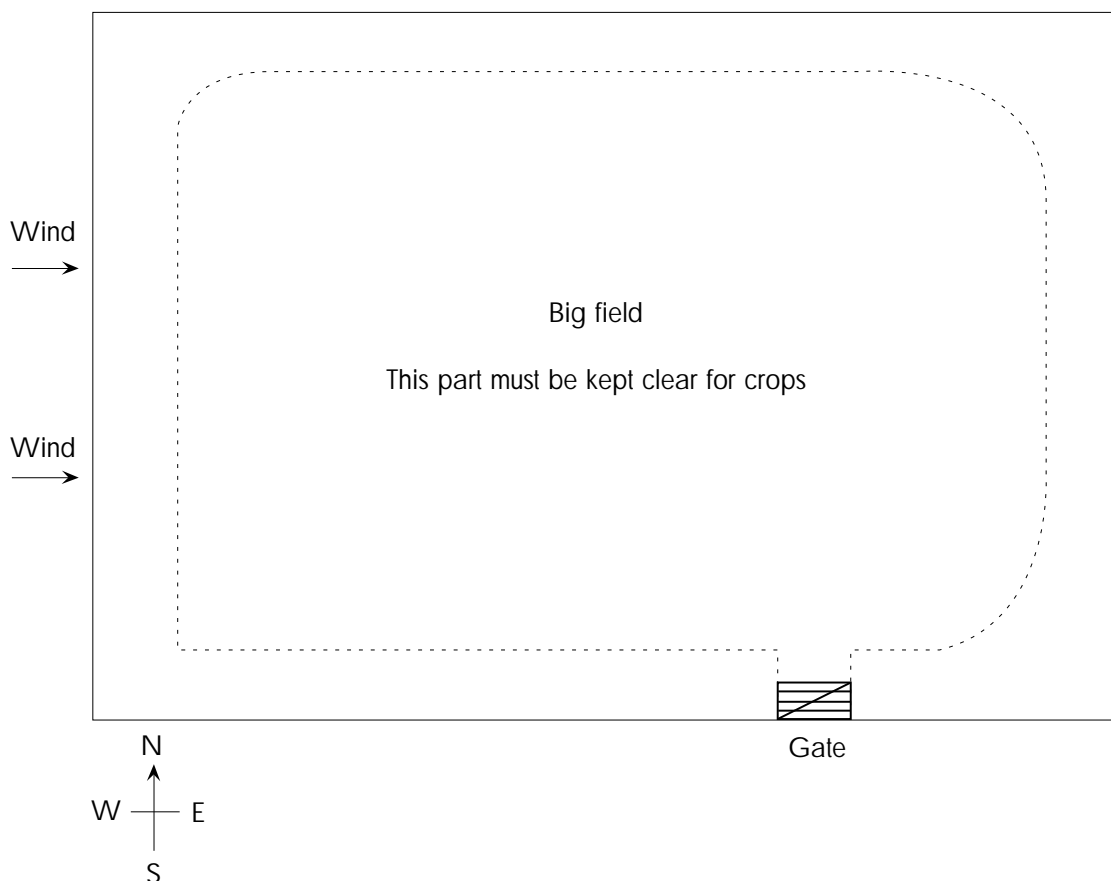
Mrs Green is a farmer. She is not happy with her big field. It used to be three smaller fields. They were made into one field ten years ago to make more room for crops when her parents ran the farm.



Now Mrs Green has problems with the field. There are no hedges to stop the wind damaging the crops. She also feels that she doesn't need all of this land. She would like to plant trees to shelter the crops in the field from the wind.

She also wants to plant trees and bushes and make a pond. This will provide somewhere for animals to live.

Here is a map of the field. The dotted line shows the part that Mrs Green wants to grow crops in. You can plan the rest of the field. Draw a a line of trees to stop the wind damaging the crops. Decide where to put more trees, some bushes and a pond. Draw these on the map and write labels to say what they are.



How does quarrying harm the environment?

A quarry is a huge hole in the ground. It has been dug so that rock or gravel can be taken out. These materials are mostly used for building. Quarries are very useful but they do harm the environment. Here are what some people think about a quarry near to their homes:



"Good farmland has been destroyed. The wildlife has gone."

"We can use the gravel from the quarry for building."

"The quarry makes lots of noise and is dangerous."

"The quarry is ugly. It spoils the view."

"Lots of people have jobs at the quarry."

"The lorries going to the quarry are noisy and dangerous."

Activity

Some people had good things to say about the quarry. Others had bad things to say. Can you sort them out?

Write down two good things about the quarry.

1 _____

2 _____

Write down four bad things about the quarry.

1 _____

2 _____

3 _____

4 _____