Landscape Helpful Hints

Comparing images taken on Earth, may help you to identify important features on Mars.

Landscape Helpful Hints

Doing practical tests and investigations may help you to find out how these features were made.

Scientists call this 'modelling'.

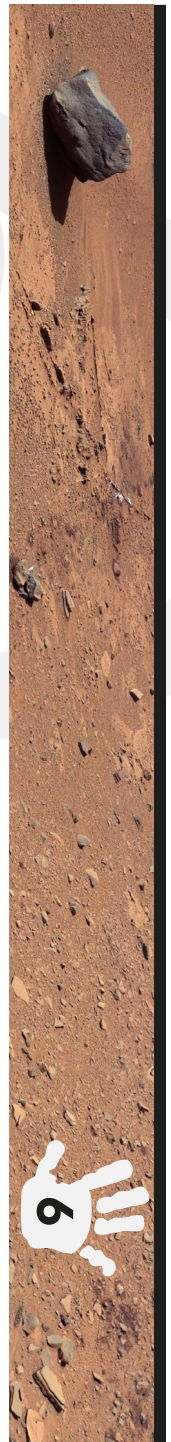
Landscape Helpful Hints

After your experiments, read the experts information about the important features you have been investigating. You could find out more from books on the internet.

Landscape Helpful Hints

Talk about your observations and measurements. How do you think the features were made?

Do your conclusions agree with the experts?



Landscape Fabulous Facts

A crater is a hole, usually circular in shape, made when a piece of rock (meteorite) or an ice/rock mixture (comet) from outer space crashes into a rocky planet such as Mars.

Landscape Fabulous Facts

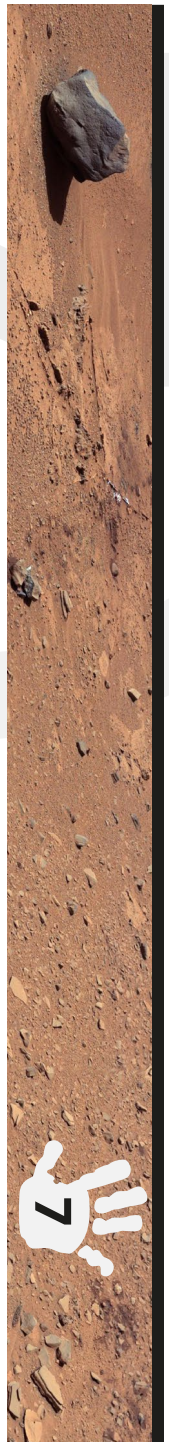
Mars is very cold and temperatures average -55 C but it may not always have been so cold. There could be ice on or under the surface. Scientists believe that where water is, or has been there, may may be a chance of finding evidence of Life.

Landscape Fabulous Facts

Volcanoes and/or lava flows can be found on all large rocky planets . Lava can make channels similar to those made by water.

Landscape Fabulous Facts

Where heat from volcanoes and water are close together on Earth, scientists are finding life. In hot springs they have found different kinds of living things.



Tooting Crater

The photographs (Images L and M) were taken by a special camera on a spacecraft.

The crater is west of a big volcano called Olympus Mons (see Mars map Image Q).

Crater age:

Scientists think that the crater is very young, less than 2 million years old!. The crater is very deep. It seems that there has not been time for its edge to be worn away.

Main features:

The crater is 29km in diameter and 2200m deep. It is a very large crater.

The photograph shows the inside of the crater.

We can see the craters raised edge, the lower level crater floor and the craters peak in the centre. We can see shapes that look a bit like those that would be made by 'splatting' an object into a wet muddy surface! This tells us that water ws in the rocks hit by the meteorite to form Tooting Crater.

Volcano Ceraunius Tholus

It is north east of a very big volcano called Olympus Mons.

Volcano age:

The volcano is thought to be roughly 3 billion years old! It has not been active since this time.

Main features:

This is a medium sized volcano. It is 6km high. It has a big , deep hole in the centre that has a smooth floor inside.

This is where lava bursts out onto the volcano's surface.

Main features

Ceraunius Tholus is though to be a shield volcano. This means that it was built by lots of eruptions of runny lava so its sides are not steep.

You may notice that the volcano has dark coloured 'lines' which run from the top to the bottom, all around its edges. These are thought to be ditches made by water

What is the Eberswalde feature?

It is made from small rock particles carried and dropped, usually by wind or flowing water.

In Eberswalde, scientists think that most of the rock has been carried away by water, as you can see big channels in the photograph.

Scientists thing that the feature is similar to the deltas on Earth. When a river flows into a lake or sea, a delta can be made. In Eberswalde, they thing there used to be a lake in the crater floor.

Delta age:

Scientists think it is 1.5-2 billion years old because there are lots of small craters on the surface.

You can see wide channels or ditches in image P. They are up to 150 metres wide. Just like rivers on Earth you can see bends in the channels.

Water flows fastest around the outside of river bends.