

Atmospheric pressure

At sea level, the Earth's atmosphere exerts a pressure of about 100 000 Pa. The exact value of atmospheric pressure varies with the weather conditions and can be measured with a barometer.

The strength of atmospheric pressure can be observed by removing the air from inside a metal can with a vacuum pump. The pressure of the air on the outside of the can crushes the sides.

Atmospheric pressure decreases with height. On the top of Mount Everest, for example, the atmospheric pressure is only one-third of that at sea level. This is why mountaineers struggle for breath at high altitudes.