
Winds and air pressure

Winds

As we know that moving air is called wind. Winds are caused by differences in air pressure. Most differences in air pressure (wind) are caused by the unequal heating of the atmosphere. Convection currents form when an area of Earth's surface is heated by the sun's rays. Air over the heated surface expands and becomes less dense. As the air becomes less dense, its air pressure decreases. If a nearby area is not heated as much, the air above the less-heated area will be cooler and denser. The cool, dense air with a higher pressure flows underneath the warm, less dense air. This forces the warm air to rise.

Air pressure

The air around you has weight, and it presses against everything it touches. That pressure is called atmospheric pressure, or air pressure. It is the force exerted on a surface by the air above it as gravity pulls it to Earth. The barometer is used to measure atmospheric pressure.

Air pressure is exerted in all the directions.

Consequences of air pressure

1. The nose bleeding at higher altitudes is the result of low air pressure. The capillaries burst out inside the nose due to the difference between the internal and external pressure of the body.
2. We are able to drink lemonade or any other drink using a straw just because the pressure inside the straw falls when one sucks the air upwards. Now the large air pressure formed within the straw forces the drink into the straw.
3. We don't feel the air pressure outside the body as our blood contains dissolved oxygen at a higher pressure than the air pressure which counter balances the air pressure.