

# LAND AND SEA BREEZES

As the name suggests, the 2 breezes occur in coastal areas or areas near large bodies of water. Water and land have different heating abilities. Water takes a bit more time to warm up and is able to hold on to heat longer than land does.

In the day, when the sun is up, the land heats up very quickly and the air above it warms up a lot more than the air over the water. The warm air over the land is less dense and begins to rise. Low pressure is created.

The air pressure over the water is higher with cold dense air, which moves to occupy the space created over the land. The cool air that comes along is called a sea breeze.



In the night, the opposite happens. The land quickly loses its' heat while the water stays warmer. This means the air over the water is warmer, less dense, and begins to rise. Low pressure is created over the water. Cold and dense air over the land begins to move to the water surface to replace the warmer rising air. The cool breeze from the land is called a sea breeze.

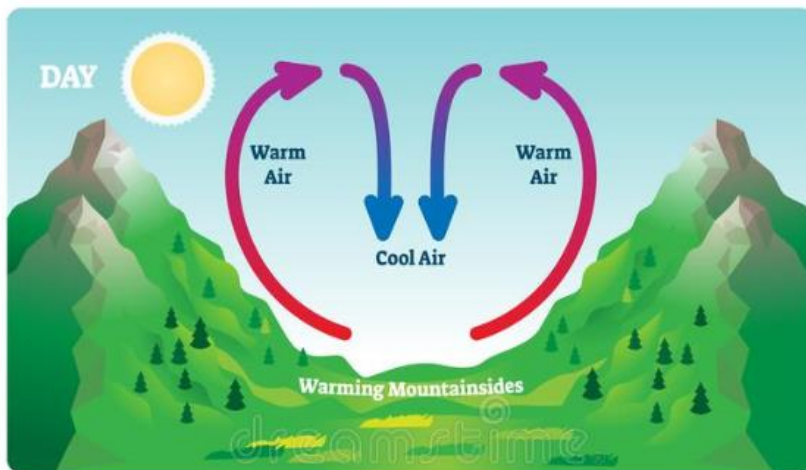


# MOUNTAIN AND VALLEY BREEZES

In a similar behavior as land and sea breezes, mountains (hills) and surrounding valleys also have breezes called Mountain and Valley Breezes.

During the day, the air over the mountain slope heats up more than the air at the bottom of the mountain. The warm air over the slope reduces the density. A low pressure is created at the top of the mountain and high pressure from the cool air below forces a cool breeze to move upward. This created a breeze called a valley breeze, and it common during warmer months when there is a lot of heating from the sun.

## VALLEY BREEZE



At night, it is a lot cooler as the sun sets. So the air on the upper slope of the mountain cools off quickly and becomes more dense. A high pressure is created. At this time, the air in the valley floor is a lot warmer, creating a low pressure and is forced to out of the way by the cooler air falling down the mountain slope. This is called a mountain breeze and is a lot more common in colder months when there is less warming from the sun.

