

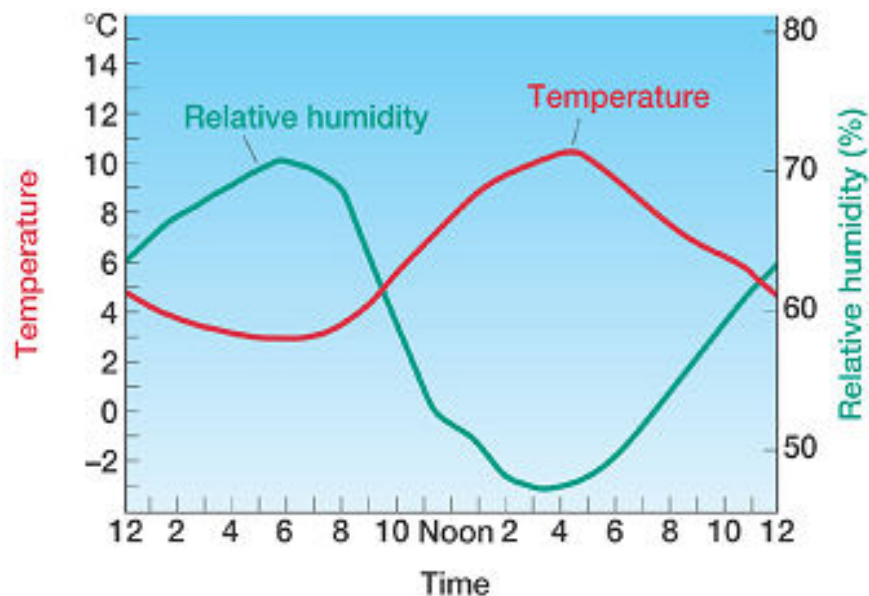
Relative Humidity (RH) is a measure of the moisture content in the air. It is a measure of the 'actual humidity' relative to the maximum possible humidity at a given temperature.

Assume air is like a big sponge that soaks up moisture. Eventually it can be saturated when it will hold the maximum amount possible. Assume also that this 'sponge' will soak up more moisture as it gets warmer, and release moisture as it is cooled down.

Relative Humidity of the air is the amount of moisture (water vapour) in the air compared to the maximum amount of moisture that the air can hold at a given temperature. It is expressed as a percentage, so the maximum is 100 %. The formula for relative humidity is

$$\text{Relative Humidity \%} = \frac{\text{Moisture in the air now}}{\text{Maximum possible moisture air can hold at the current temperature}} \times 100$$

The diagram below illustrates how the relative humidity changes with temperature. Initially as the temperature decreases RH increases. Later as the temperature increases RH decreases.



This illustrates that the ability of air to hold moisture changes with temperature. An increase in temperature is reflected as a lowering of the relative humidity.