



Weather | Measuring Temperature and Air Pressure



Meteorology relies on field-mode observations, for which weather-related data can be easily obtained without much lab equipment. The most common measurements taken include temperature and barometric pressure; temperature measurements particularly are crucial to weather forecasts, or even life's minutiae, such as choosing clothes for the day.

Measurements of temperature and air pressure can be taken by even simple devices, such as thermometers and (aneroid) barometers. This equipment does not require much effort to transport or adjust, and is easy to handle. On the basis of their own measurements, learners can comprehend measuring processes, and may even critically scrutinize results offered by weather reports. These very basic methods simplistically introduce meteorological measurements to learning, and guarantee students a sense of immediate achievement. The data can be aggregated and linked to other weather elements, highlighting interrelations and correlations with other aspects of meteorological study

With regard to the Educational Standards in Geography for the Intermediate School Certificate, students can ...

... in accordance with specific problems, issues and goals, gather information in the field (e. g., observation, mapping, measuring, counting, taking samples, questionnaire survey) or by means of simple experiments (M2S5)

... purposefully associate the information thus acquired with other geographical information (M3S7)

Temperature and air pressure can be measured everywhere. It should be taken into account that the measurements run without interference, preventing inaccuracy in results. To ensure that the temperature of the surrounding air is the same as the thermometer, it must be detached from heat sources and, most importantly, shaded from sunlight. Accordingly, one must avoid direct sunlight on a barometer, as this will heat the device and cause a false recording of falling pressure as the metal cell expands.