

Thermometer and its uses 2nd Practical Lect. 2nd Term



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Teaching of Physiology College of Technology & Health Sciences Radiological Techniques Department One of the main uses of the thermometer is to measure the temperature of an object, environment and atmosphere.

There are various types of thermometers and have multiple applications in different fields.

A thermometer is a device used for measuring temperature. This ice-covered thermometer shows that the temperature is about 0 degrees Celsius, or 32 degrees Fahrenheit. If this thermometer displayed the kelvin scale, used by scientists, the temperature would read about 274 degrees. A thermometer is an instrument that measures temperature. The three most common units of measurement for temperature are Celsius, Fahrenheit, and kelvin. The Celsius scale is part of the metric system. The metric system of measurement also includes units of mass, such as kilograms, and units of length, such as kilometers.

The metric system, including Celsius, is the official system of measurement for almost all countries in the world.

Most scientific fields measure temperature using the Celsius scale. Zero degrees Celsius is the freezing point of water, and 100 degrees Celsius is the boiling point of water.

Three nations do not use the Celsius scale. The United States, Burma, and Liberia use the Fahrenheit scale to measure temperature. However, even in these countries, scientists use the Celsius or kelvin scale to measure temperature. Water freezes at 32 degrees Fahrenheit and boils at 212 degrees Fahrenheit. The Kelvin scale is used by physicists and other scientists who need to record very precise temperatures.

The kelvin scale is the only unit of measurement to include the temperature for "absolute zero," the total absence of any heat energy. This makes the kelvin scale essential to scientists who calculate the temperature of objects in the cold reaches of outer space. Water freezes at 273 kelvins, and boils at 373 kelvins.