

Coherent Introduction Script

Have you ever bought a gallon of gasoline, a meter of fabric, a kilogram of tomatoes and wondered if you're really getting the measured quantity you paid for?

Measurements have been important ever since humans began living in communities and trading with each other. The first measurements were based on what was handy – a person's foot for length, grains of wheat for weight, the movement of the sun for time. Eventually, measurement became standardized within communities, for example, by keeping a rod of exact length in a public space.

As societies grew more complex, science and technology as well as commerce demanded more precise measurement science. The metric system, now known as the SI, or International System, had its beginnings in the late 1700s in France. In 1875 International Bureau of Weights and Measures was established by treaty to coordinate activities among the national measurement institutes of the member nations.

The SI system now has seven basic units- the meter, kilogram, second, ampere, kelvin, mole and candela. No longer based on the king's foot or a lump of metal stored in a temple, the SI units are based on constants of nature such as the speed of light.

Today, the national institutes, such as the National Institute for Standards and Technology in the United States ensure that local measurements are traceable to the standards of the International System of Measurements. It is organizations like these that ensure that "you get what you pay for".