JOURNAL OF INTERNATIONAL SCIENTIFIC RESEARCH
Volume 2, Issue 5, February, 2025 Online ISSN: 3030-3508
https://spaceknowladge.com

THE RATIO IN MEASUREMENT BETWEEN THE USA AND UZBEKISTAN

Asatullayev Rustamjon Baxtiyarovich0020[1]
[1] *Scientific supervisor*
Yuldasheva Sevinch Ural qizi [1]
[1] *Student*

ARTICLE INFO

ARTICLE HISTORY:

Received:18.02.2025
Revised: 19.02.2025
Accepted:20.02.2025

KEYWORDS:

Measurement systems, Imperial System, Metric System, United States, Uzbekistan, trade, education, science, healthcare, unit conversion.

ABSTRACT:

This article explores the differences between the Imperial System used in the United States and the Metric System followed in Uzbekistan. It examines their historical backgrounds, key features, and practical applications in various fields such as trade, education, science, and healthcare. While the Metric System is widely accepted worldwide for its simplicity and consistency, the Imperial System remains in use in the United States, creating challenges in international communication and trade. The study highlights the advantages of the Metric System in ensuring accuracy and ease of calculations and discusses the implications of these differences in daily life and professional sectors.

INTRODUCTION. **Measurement systems play a fundamental role in shaping industrial standards,scientific research,and everyday life.The constrast between the imperial system used in the Unidet States and the metric system followed in Uzbekistan presents challenges and opportunities in various sectors.**

The imperial system is based on historical unists such as inches,feet,pounds,and gallons,originally developed from traditional British measurements.The metric system,on the other hand,was introduced during the French Revolution and is based on units of ten,making it easier for calculations and conversions.The metric system is the global standard,with only a few countries,including the Unidet States,still relying on imperial measurements

Measurement systems play a crucial role in everyday life, from simple cooking instructions to complex scientific calculations. However, different countries use distinct measurement standards, which can sometimes lead to confusion, especially in global trade, education, and communication. This article explores the differences and similarities between the measurement systems of the United States and Uzbekistan, highlighting their historical backgrounds, practical applications, and the challenges they present.

The Measurement System in the USA

The United States primarily uses the Imperial System, which includes units such as inches, feet, miles, pounds, and gallons. This system, derived from British imperial units, remains widely used despite most of the world adopting the Metric System (SI – Système International d'Unités).

Key Features of the US Measurement System:

Length: 1 inch = 2.54 cm, 1 foot = 12 inches, 1 mile = 1.609 kilometers

Weight: 1 pound = 0.453 kilograms, 1 ounce = 28.35 grams

Volume: 1 gallon = 3.785 liters, 1 pint = 0.473 liters

Temperature: Measured in Fahrenheit (°F), where water freezes at 32°F and boils at 212°F

The USA's adherence to the Imperial System creates challenges in international trade and scientific collaboration. Most global industries and research institutions rely on metric units, requiring frequent conversions that can lead to errors and inefficiencies.

The Measurement System in Uzbekistan

Uzbekistan, like most countries, uses the Metric System, which is based on multiples of ten. This system simplifies calculations and ensures consistency across various fields, from medicine and engineering to trade and education.

Key Features of the Uzbek Measurement System:

Length: 1 meter = 100 centimeters, 1 kilometer = 1000 meters

Weight: 1 kilogram = 1000 grams, 1 ton = 1000 kilograms

Volume: 1 liter = 1000 milliliters

Temperature: Measured in Celsius (°C), where water freezes at 0°C and boils at 100°C

Since Uzbekistan follows international standards, communication with foreign partners is more straightforward, and there is no need for constant unit conversion, as in the US. This is especially beneficial in medicine, where accurate measurements are critical.

Historical Background

The United States' continued use of the Imperial System can be traced back to British colonial influence and resistance to change. Despite attempts to adopt the Metric System, cultural attachment and economic factors have kept the Imperial System in place

Uzbekistan, on the other hand, inherited the Metric System from the Soviet Union and has continued to use it since gaining independence. This system aligns with global scientific and economic standards, making international cooperation easier.

Practical Implications and Challenges

1. Education and Science

In Uzbekistan, students learn the Metric System from an early age, making mathematical calculations more straightforward. In contrast, American students often struggle with conversions between inches, feet, and miles, which can complicate learning.

2. Trade and Business

Uzbek businesses trading with the US must convert metric measurements to imperial units, which can lead to miscalculations and inefficiencies. Conversely, American co

3. Healthcare and Medicine

In medicine, precision is crucial. Uzbek doctors and pharmacists use the Metric System, ensuring consistency with global medical standards. However, in the US, some medications and medical devices still use imperial measurements, requiring conversions that can introduce errors.

4. Daily Life

Uzbek citizens easily measure distances, weights, and temperatures in a logical, decimal-based system. Meanwhile, Americans must remember complex unit relationships (e.g., 1 mile = 5280 feet), which can be inconvenient.

ConclusionMeasurement systems play a crucial role in everyday life, from simple cooking instructions to complex scientific calculations. However, different countries use distinct measurement standards, which can sometimes lead to confusion, especially in global trade, education, and communication. This article explores the differences and similarities between the measurement systems of the United States and Uzbekistan, highlighting their historical backgrounds, practical applications, and the challenges they present.

References:

1. Alder, K. (2002). *The Measure of All Things: The Seven-Year Odyssey and Hidden Error That Transformed the World*. Free Press.

2. Cardarelli, F. (2003). *Encyclopaedia of Scientific Units, Weights and Measures: Their SI Equivalences and Origins.* Springer.

3. Klein, H. A. (1974). *The World of Measurements: Mastering the Art of Measurement.* Simon & Schuster.

4. Taylor, B. N., & Thompson, A. (2008). *The International System of Units (SI).* National Institute of Standards and Technology.

5. United States Metric Association (USMA). (2023). *Why the Metric System Matters.* Retrieved from www.metric.org

6. Uzbekistan National Agency for Standardization, Metrology, and Certification. (2023). *Metric Standards in Uzbekistan.* Retrieved from www.standart.uz