What type of assessment is TIMSS?

TIMSS is developed through an international consensus building process involving input from U.S. and international experts in mathematics, science, and measurement. The assessment contains a mix of questions: some require students to select appropriate responses, while others require that students solve problems and provide written answers. TIMSS 2023 will be a digitally-based assessment administered on supplied tablets.

Other information collected by TIMSS

TIMSS also considers the context in which learning occurs. Students, teachers, and schools are asked about a variety of aspects of the environments in which content is taught, learned, practiced, and applied. In this way, TIMSS provides each country with information on the factors related to mathematics and science achievement.
How does the United States compare internationally?

Results from TIMSS 2019

Scores and score gaps:

- The U.S. had higher average scores than most participating countries in mathematics and science at both the 4th and 8th grades.
- The U.S. had relatively large score gaps between the top- and bottom-performing students.

U.S. average scores 1995–2019:

- In mathematics, in both 4th and 8th grades, average scores increased over the long term.
- In science, in 4th and 8th grades, there were no significant changes over the long term.

Gender differences:

- Boys outperformed girls in 4th grade in both mathematics and science; there were no gender differences in the 8th grade in either subject.

Additional TIMSS 2019 results can be found at https://nces.ed.gov/timss/results19

Participating education systems in TIMSS 2019

**Countries**

North and South America
- Canada
- Chile
- United States

Asia and Middle East
- Armenia
- Azerbaijan
- Bahrain
- Chinese Taipei
- Georgia
- Hong Kong SAR
- Iran, Islamic Rep. of
- Israel
- Japan
- Jordan
- Kazakhstan
- Korea, Rep. of
- Kuwait
- Lebanon
- Malaysia
- Oman
- Pakistan
- Philippines
- Qatar
- Russian Federation
- Saudi Arabia
- Singapore
- United Arab Emirates

Africa
- Egypt
- Morocco
- South Africa

Australia and Oceania
- Australia
- New Zealand

Europe
- Albania
- Austria
- Belgium (Flemish)
- Bosnia & Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- England
- Finland
- France
- Germany
- Hungary
- Ireland
- Italy
- Kosovo
- Latvia
- Lithuania
- Malta
- Montenegro
- The Netherlands
- Northern Ireland-GBR
- Norway
- Poland
- Portugal
- Romania
- Serbia
- Slovak Republic
- Spain
- Sweden
- Turkey

**Benchmarking participants**

- Abu Dhabi-UAE
- Dubai-UAE
- Gauteng-ZAF
- Madrid-ESP

- Moscow City-RUS
- Ontario-CAN
- Quebec-CAN
- Western Cape-ZAF

**Source:** https://nces.ed.gov/timss/participation.asp