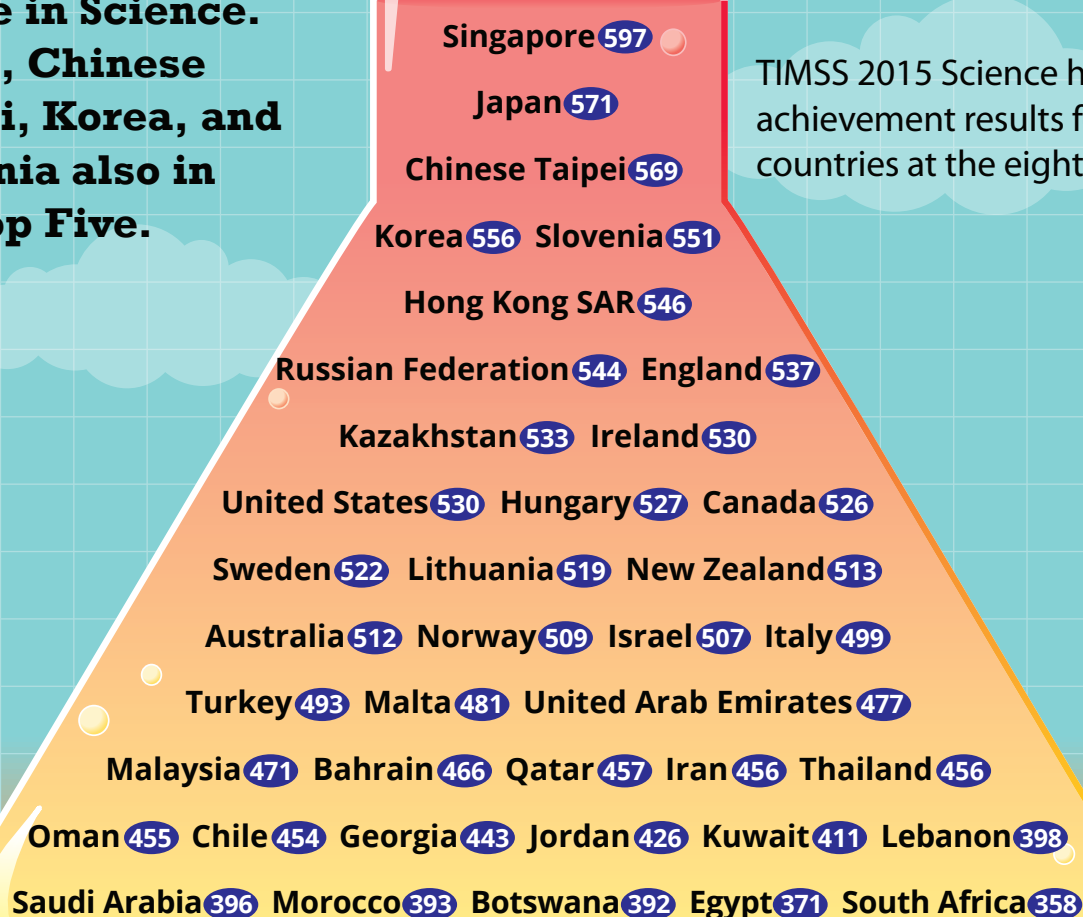


International Science Achievement

Singapore the Top Achiever at Eighth Grade in Science. Japan, Chinese Taipei, Korea, and Slovenia also in the Top Five.



TIMSS 2015 Science has achievement results for **39** countries at the eighth grade.

Please see Exhibit 1.4 for statistically significant differences.

Trends at Eighth Grade Show Increases in Science Achievement Around the World

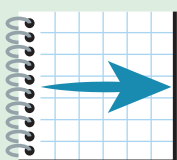
Trends 2011-2015: 34 Countries

15 Countries Higher Average Achievement



Bahrain, Georgia, Hong Kong SAR, Japan, Kazakhstan, Lithuania, Malaysia, Morocco, Oman, Qatar, Slovenia, South Africa, Sweden, Turkey, United Arab Emirates

15 Countries Same Average Achievement



Australia, Chile, Chinese Taipei, England, Hungary, Israel, Italy, Korea, Lebanon, New Zealand, Norway, Russian Federation, Singapore, Thailand, the United States

4 Countries Lower Average Achievement



Botswana, Iran, Jordan, Saudi Arabia

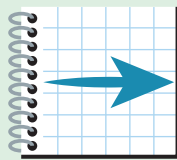
Trends 1995-2015: 16 Countries

9 Countries Higher Average Achievement



Hong Kong SAR, Ireland, Japan, Korea, Lithuania, Russian Federation, Singapore, Slovenia, the United States

4 Countries Same Average Achievement



Australia, England, Iran, New Zealand

3 Countries Lower Average Achievement



Hungary, Norway, Sweden

In TIMSS 2015, Although there Was No Difference between Boys and Girls in Science Achievement in More than Half the Countries, Girls Outperformed Boys in Three-fourths of the Remaining Countries.

Of the 39 TIMSS 2015 Countries:

- Girls had higher achievement in **14** countries, with an average difference of **28** points.
- Boys had higher achievement in **5** countries, with an average difference of **11** points.
- **20** countries had no difference between boys and girls in average science achievement.



Short Term Trends Show Increasing Advantage for Girls in Science Achievement, While 20-year Trends Show Great Reduction in Boys' Historical Advantage in Science

Trends 2011-2015: 34 Countries

- In 2011, boys had higher average achievement in **8** countries, compared to **12** countries for girls.
- In 2015, boys had higher average achievement in **5** countries, compared to **12** countries for girls.
- Among the **34** countries, there was no average achievement difference between boys and girls in **14** countries in 2011 and **17** countries in 2015.

Trends 1995-2015: 16 Countries

- In 1995, boys had higher average achievement than girls in almost all countries (**15 of 16**), with an average difference of **21** points. There were only two countries with no achievement difference.
- In 2015, boys had higher average achievement than girls in only **3** countries, with an average difference of **11** points. There was no achievement difference in **13** countries.