

TABLE 1-5

Average TIMSS science scores of students in grade 8 and percentage of students in highest and lowest percentiles among participating developed economies, by education system: 2015

(Average score and percent)

Education system	Mean score	Percentage of student scores			
		Below 5th percentile	Below 10th percentile	At or above 90th percentile	At or above 95th percentile
Participating developed economy, total	532	5.0	10.0	10.0	5.0
Singapore	597 *	2.4 *	4.9 *	34.0 *	21.5 *
Taiwan	569 *	3.3 *	6.3 *	20.2 *	10.9 *
Japan	571 *	1.6 *	3.8 *	17.9 *	9.5 *
South Korea	556 *	2.4 *	5.8 *	13.6 *	7.4 *
Slovenia	551 *	2.7 *	6.2 *	12.2 *	6.2 *
Russia	544 *	3.3 *	7.5 *	10.1	5.2
England	537	4.6	10.2	10.0	5.1
Israel	507 *	15.2 *	22.3 *	8.8	4.6
United States	530	6.0	11.6	8.0	3.7
Hong Kong	546 *	3.3 *	6.2 *	7.7	3.4
Sweden	522	7.9	13.3	7.0	3.0
New Zealand	513 *	10.6 *	18.2 *	7.0	3.5
Ireland	530	5.8	10.8	6.8	3.1
Lithuania	519	6.4	13.2	5.0 *	2.2 *
Malta	481 *	20.4 *	28.8 *	4.9 *	2.4 *
Australia	512 *	8.7 *	15.6 *	4.9 *	2.1 *
Canada	526	3.8 *	8.8 *	4.2 *	1.6 *
Norway	509 *	7.9	15.3 *	3.8 *	1.6 *
Italy	499 *	9.7 *	18.2 *	2.5 *	0.9 *

* = estimate is significantly different from U.S. estimate at the 0.05 level of statistical significance.

TIMSS = Trends in International Mathematics and Science Study.

Note(s)

Education systems are listed in descending order by the percentage of students scoring at or above the 90th percentile. TIMSS participants include both countries, which are complete, independent political entities, and non-national entities (e.g., Hong Kong). Developed economies are based on the International Monetary Fund (IMF) designation of advanced economies (Table A, pg. 132 in *World Economic Outlook: Challenges to Steady Growth*, 2018). IMF classifies Russia as a developing economy, but it is included in this analysis because it is a large economy with high levels of student achievement.

Source(s)

National Center for Science and Engineering Statistics, National Science Foundation, special tabulations (2018) of the 2015 TIMSS; Martin MO, Mullis IVS, Foy P, and Hooper M, *TIMSS 2015 International Results in Science* (2016).