

Annex A

**Table A1. Overall rank positions and mean scores of education systems in TIMSS
2023 for G4 Mathematics and Science**

G4 Mathematics			G4 Science		
Rank	Education System	Mean (2023)	Rank	Education System	Mean (2023)
1	Singapore	615	1	Singapore	607
2	Chinese Taipei	607	2	Korea, Republic of	583
3	Korea, Republic of	594	3	Chinese Taipei	573
4	Hong Kong, SAR	594	4	Türkiye^	570
5	Japan	591	5	England	556
6	Macao SAR	582	6	Japan	555
7	Lithuania	561	7	Poland	550
8	Türkiye^	553	8	Australia	550
9	England	552	9	Hong Kong, SAR	545
10	Poland	546	10	Finland	542
11	Ireland	546	11	Lithuania	537
12	Romania	542	12	Macao SAR	536
13	Netherlands	537	13	Sweden	533
14	Latvia	534	14	United States	532
15	Norway	531	15	Ireland	532
16	Czech Republic	530	16	Norway	530
17	Sweden	530	17	Bulgaria	530
18	Bulgaria	530	18	Romania	526
19	Finland	529	19	Czech Republic	526
20	Australia	525	20	Slovenia	526
21	Germany	524	21	Latvia	526
22	Denmark	524	22	Hungary	524
23	Serbia	523	23	Denmark	522
24	Belgium (Flemish)	521	24	Canada	521
25	Hungary	520	25	Slovak Republic	521
26	Portugal	517	26	New Zealand	517
27	United States	517	27	Netherlands	517
28	Cyprus	516	28	Germany	515
29	Slovak Republic	515	29	Portugal	511
30	Slovenia	514	30	Italy	511
31	Italy	513	31	Serbia	510
32	Armenia	513	Scale Centrepoint		
33	Albania	512	32	Spain	504
34	Canada	504	33	United Arab Emirates	495
Scale Centrepoint		500	34	Albania	491
35	Spain	498	35	Belgium (Flemish)	488
36	United Arab Emirates	498	36	France	488
37	Georgia	498	37	Cyprus	487
38	Azerbaijan, Republic of	494	38	Belgium (French)	481
39	New Zealand	490	39	Chile	479
40	Belgium (French)	489	40	Bahrain	475
41	Kazakhstan	487	41	Qatar	472
42	France	484	42	Kazakhstan	467
43	Montenegro	477	43	Georgia	465
44	North Macedonia	474	44	Montenegro	461
45	Qatar	464	45	Armenia	457
46	Bahrain	462	46	Bosnia and Herzegovina^	448
47	Kosovo	451	47	North Macedonia	439
48	Bosnia and Herzegovina^	447	48	Oman	433
49	Chile	444	49	Iran, Islamic Republic of	432
50	Uzbekistan	443	50	Saudi Arabia	428
51	Jordan	427	51	Brazil	425
52	Oman	421	52	Azerbaijan, Republic of	422
53	Iran, Islamic Republic of	420	53	Jordan	418
54	Saudi Arabia	420	54	Uzbekistan	412
55	Brazil	400	55	Kosovo	403
56	Morocco	393	56	Morocco	390
57	Kuwait	382	57	Kuwait	373
58	South Africa	362	58	South Africa	308

Notes:

- i. ^ denotes education system whose mean score is not statistically significantly different from Singapore's in 2023.
- ii. The scale centrepoint is a fixed point on the scale that does not change from one cycle of TIMSS to the next, and thus does not depend on the performance of the particular participants in each cycle. This allows valid comparisons across cycles.
- iii. ^ Caution has to be taken when interpreting Bosnia & Herzegovina's and Türkiye's data in TIMSS 2023: only 62% of the international target population for Bosnia & Herzegovina were included, while Türkiye has a high overall exclusion rate of 22% at G4.

Source: IEA

Table A2 Overall rank positions and mean scores of education systems in TIMSS 2023 for G8 Mathematics and Science

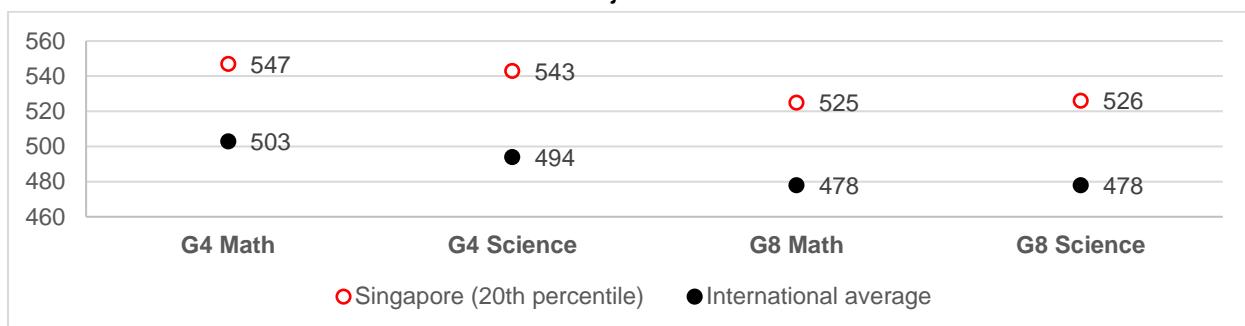
G8 Mathematics			G8 Science		
Rank	Education System	Mean (2023)	Rank	Education System	Mean (2023)
1	Singapore	605	1	Singapore	606
2	Chinese Taipei #	602	2	Chinese Taipei	572
3	Korea, Republic of #	596	3	Japan	557
4	Japan #	595	4	Korea, Republic of	545
5	Hong Kong, SAR	575	5	England	531
6	England	525	6	Finland	531
7	Ireland	522	7	Türkiye^	530
8	Czech Republic	518	8	Hong Kong, SAR	528
9	Sweden	517	9	Czech Republic	527
10	Lithuania	514	10	Ireland	525
11	Austria	512	11	Hungary	522
12	Australia	509	12	Sweden	521
13	Türkiye^	509	13	Australia	520
14	Hungary	506	14	Lithuania	519
15	Finland	504	15	United States	513
16	Norway	501	16	Austria	512
17	Italy	501	17	Portugal	506
	Scale Centrepoint	500	18	Malta	501
18	Malta	499	19	Italy	501
19	Romania	496		Scale Centrepoint	500
20	Cyprus	494	20	Norway	488
21	United Arab Emirates	489	21	United Arab Emirates	486
22	United States	488	22	France	486
23	Israel	487	23	Qatar	481
24	France	479	24	Israel	481
25	Azerbaijan, Republic of	479	25	Romania	466
26	Portugal	475	26	Cyprus	464
27	Georgia	467	27	Oman	456
28	Kazakhstan	454	28	Chile	455
29	Qatar	451	29	Bahrain	452
30	Bahrain	426	30	Georgia	448
31	Iran, Islamic Republic of	423	31	Kazakhstan	443
32	Uzbekistan	421	32	Malaysia	426
33	Chile	416	33	Brazil	420
34	Oman	411	34	Kuwait	420
35	Malaysia	411	35	Saudi Arabia	419
36	Kuwait	399	36	Iran, Islamic Republic of	419
37	Saudi Arabia	397	37	Jordan	413
38	South Africa	397	38	Azerbaijan, Republic of	411
39	Jordan	388	39	Uzbekistan	396
40	Palestinian National Authority	382	40	Palestinian National Authority	393
41	Brazil	378	41	South Africa	362
42	Morocco	378	42	Morocco	327
	New Zealand~	485		New Zealand~	502
	Cote d'Ivoire*	263		Cote d'Ivoire*	183

Notes:

- i. # denotes education system whose mean score is not statistically significantly different from Singapore's in 2023.
- ii. The scale centrepoint is a fixed point on the scale that does not change from one cycle of TIMSS to the next, and thus does not depend on the performance of the particular participants in each cycle. This allows valid comparisons across cycles.
- iii. ^ Caution has to be taken when interpreting Türkiye's data in TIMSS 2023 because it has a high overall exclusion rate of 20% at G8.
- iv. ~ IEA excluded New Zealand from the main ranking list because its school participation rate of 65% after replacement did not meet the technical requirement for minimum school participation rates (85%).
- v. * IEA excluded Cote d'Ivoire from the main ranking list because its average achievement in both subjects could not be reliably measured as more than 25% of its students have achievement too low for estimation.

Source: IEA

Figure A1. 20th-percentile scores for **Singapore** in TIMSS 2023, by grade and subject

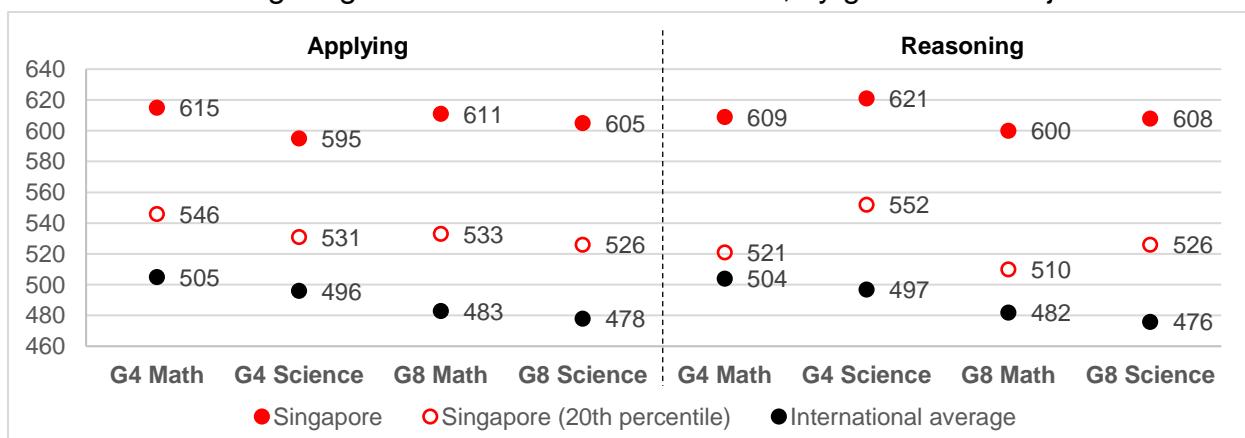


Note:

Source: Ministry of Education, Singapore

For each grade and subject, Singapore's 20th-percentile score is statistically significantly higher than the corresponding international average.

Figure A2. Singapore's mean and 20th-percentile scores for "Applying" and "Reasoning" cognitive domains in TIMSS 2023, by grade and subject



Note:

Source: Ministry of Education, Singapore

For each grade, subject and cognitive domain, Singapore's mean and 20th-percentile scores are statistically significantly higher than the corresponding international average.