Appendix 10D: TIMSS 2019 Item Statistics by Booklet Position

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 4 Mathematics (eTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
ME01 - Positions 1 & 4	11,670	11,603	53.1	48.3	2.7	4.7	0.1	2.8
ME02 - Positions 2 & 3	11,541	11,670	51.4	51.8	4.3	4.5	0.0	1.9
ME03 - Positions 1 & 4	11,596	11,542	50.3	49.4	4.4	5.9	0.1	1.2
ME04 - Positions 2 & 3	11,598	11,596	49.2	48.3	4.6	5.4	0.2	4.2
ME05 - Positions 1 & 4	11,634	11,598	51.2	48.2	2.6	4.5	0.1	2.9
ME06 - Positions 2 & 3	11,584	11,634	48.8	47.7	2.5	3.8	0.1	2.6
ME07 - Positions 1 & 4	11,635	11,585	49.7	48.7	2.5	2.9	0.0	0.8
ME08 - Positions 2 & 3	11,594	11,636	46.0	45.7	2.9	3.3	0.1	3.1
ME09 - Positions 1 & 4	11,614	11,594	48.7	45.7	2.5	4.2	0.1	2.8
ME10 - Positions 2 & 3	11,578	11,614	49.2	48.5	3.7	4.9	0.1	3.4
ME11 - Positions 1 & 4	11,613	11,577	51.0	48.8	4.2	5.5	0.1	2.0
ME12 - Positions 2 & 3	11,634	11,613	48.6	46.3	4.0	5.2	0.1	3.5
ME13 - Positions 1 & 4	11,605	11,633	52.1	50.1	2.5	3.3	0.0	1.8
ME14 - Positions 2 & 3	11,603	11,605	49.3	48.6	3.2	4.3	0.1	2.8
Overall	**162,499**	**162,500**	**49.9**	**48.3**	**3.3**	**4.5**	**0.1**	**2.5**

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 4 Mathematics (paperTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
MP01 - Positions 1 & 4	5,984	5,977	52.7	48.8	3.6	5.1	0.1	4.1
MP02 - Positions 2 & 3	5,997	5,984	49.7	51.3	7.3	6.3	0.3	1.9
MP03 - Positions 1 & 4	5,990	5,997	49.0	46.6	6.8	8.4	0.1	3.4
MP04 - Positions 2 & 3	5,984	5,990	50.1	49.0	6.3	6.7	0.3	4.6
MP05 - Positions 1 & 4	5,960	5,983	51.7	48.8	4.7	5.9	0.1	3.8
MP06 - Positions 2 & 3	5,974	5,960	49.6	48.7	5.3	5.9	0.2	1.8
MP07 - Positions 1 & 4	5,967	5,974	50.9	49.6	3.8	5.1	0.1	1.4
MP08 - Positions 2 & 3	6,002	5,967	42.2	42.7	8.0	6.6	0.3	3.6
MP09 - Positions 1 & 4	5,994	6,002	50.0	46.4	6.2	7.2	0.1	4.1
MP10 - Positions 2 & 3	5,976	5,994	47.5	47.6	5.9	5.4	0.3	3.5
MP11 - Positions 1 & 4	5,973	5,976	49.4	47.6	6.1	8.0	0.1	3.6
MP12 - Positions 2 & 3	6,005	5,973	47.9	47.0	5.6	5.8	0.3	4.1
MP13 - Positions 1 & 4	5,983	6,005	51.7	49.3	5.3	6.1	0.1	3.9
MP14 - Positions 2 & 3	5,978	5,982	49.2	49.3	6.2	6.0	0.2	2.8
Overall	**83,767**	**83,764**	**49.4**	**48.1**	**5.8**	**6.3**	**0.2**	**3.3**

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 4 Less Difficult Mathematics (paperTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
MN01 - Positions 1 & 4	4,399	4,375	48.0	47.2	6.1	6.7	0.2	2.2
MN03 - Positions 1 & 4	4,434	4,389	48.6	44.6	5.0	6.6	0.2	4.5
MN04 - Positions 2 & 3	4,419	4,434	49.2	49.9	7.1	7.2	0.3	4.1
MN05 - Positions 1 & 4	4,435	4,419	53.4	50.2	5.3	7.1	0.2	2.8
MN07 - Positions 1 & 4	4,440	4,413	53.6	51.6	7.3	7.9	0.3	2.9
MN09 - Positions 1 & 4	4,397	4,405	53.3	50.0	4.3	7.3	0.2	4.3
MN11 - Positions 1 & 4	4,407	4,373	44.3	42.9	6.5	7.5	0.1	2.9
MN12 - Positions 2 & 3	4,391	4,407	49.3	48.8	6.5	6.5	0.2	2.9
MN13 - Positions 1 & 4	4,420	4,391	48.2	46.8	5.2	5.6	0.2	2.6
MN14 - Positions 2 & 3	4,375	4,420	50.8	50.6	7.5	7.2	0.2	2.7
MP02 - Positions 2 & 3	4,389	4,398	28.3	28.0	13.5	12.8	0.4	4.3
MP03 - Positions 2 & 3	4,412	4,435	27.8	27.9	13.8	13.6	0.3	4.0
MP08 - Positions 2 & 3	4,405	4,440	23.6	23.0	13.4	12.6	0.7	7.5
MP13 - Positions 2 & 3	4,373	4,397	28.5	29.3	9.5	8.2	0.5	3.4
Overall	**61,696**	**61,696**	**43.4**	**42.2**	**7.9**	**8.3**	**0.3**	**3.7**

TIMSS 2019 Country Average Item Statistics by Booklet Position—Grade 4 Mathematics

Country	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
Albania	4,417	4,417	62.3	61.8	4.1	5.0	0.2	2.8
Armenia	5,380	5,380	43.9	42.2	13.4	13.8	0.7	7.4
Australia	5,879	5,879	48.9	47.4	3.0	3.8	0.2	2.6
Austria	4,463	4,463	51.4	50.3	4.7	6.1	0.0	1.2
Azerbaijan	5,220	5,220	50.5	50.0	10.0	9.0	0.3	2.8
Bahrain	5,758	5,758	40.2	38.4	7.9	8.6	0.1	1.9
Belgium (Flemish)	4,646	4,646	52.4	51.7	3.9	3.8	0.0	1.6
Bosnia and Herzegovina	5,612	5,612	50.3	49.3	12.0	11.8	0.1	3.4
Bulgaria	4,267	4,267	52.9	51.2	8.6	8.3	0.1	2.8
Canada	13,576	13,576	43.2	41.6	2.7	4.0	0.2	4.0
Chile	4,161	4,161	32.4	28.8	5.1	8.0	0.4	10.0
Chinese Taipei	3,763	3,763	67.9	67.5	0.8	1.0	0.0	0.1
Croatia	3,783	3,783	43.9	43.4	3.8	4.5	0.0	1.1
Cyprus	4,061	4,061	52.7	51.2	3.6	4.3	0.1	3.8
Czech Republic	4,689	4,689	50.5	48.6	4.4	5.5	0.0	1.5
Denmark	3,213	3,213	50.0	46.9	4.7	6.8	0.2	6.4
England	3,393	3,393	55.1	55.0	2.6	3.3	0.1	1.0
Finland	4,723	4,723	50.3	48.9	4.2	5.1	0.1	1.8
France	4,179	4,179	39.7	38.2	6.9	8.7	0.1	4.1
Georgia	3,765	3,765	37.3	35.5	7.8	9.7	0.1	4.7
Germany	3,434	3,434	47.0	45.4	5.0	6.4	0.1	2.6
Hong Kong SAR	2,964	2,964	68.4	67.9	0.9	1.1	0.0	0.2
Hungary	4,569	4,569	50.0	49.3	2.3	2.8	0.0	1.1
Iran, Islamic Rep. of	5,989	5,989	34.8	32.5	10.6	11.8	0.6	10.8
Ireland	4,566	4,566	56.7	55.7	2.4	2.5	0.0	0.9
Italy	3,738	3,738	45.8	43.2	4.6	6.5	0.1	4.6
Japan	4,193	4,193	68.5	68.2	1.7	2.0	0.0	1.1
Kazakhstan	4,786	4,786	46.3	46.0	4.6	5.3	0.1	2.9
Korea, Rep. of	3,893	3,893	68.6	67.7	1.0	1.3	0.0	0.2
Kosovo	4,490	4,491	50.6	49.9	5.2	5.4	0.2	2.6
Kuwait	4,417	4,417	39.5	38.0	5.6	5.9	0.4	3.4
Latvia	4,474	4,473	57.5	55.9	3.4	4.0	0.1	1.8
Lithuania	3,739	3,739	51.5	50.2	2.8	3.4	0.1	0.7

TIMSS 2019 Country Average Item Statistics by Booklet Position—Grade 4 Mathematics (continued)

Country	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
Malta	3,626	3,626	43.6	42.1	2.2	2.9	0.0	1.1
Montenegro	5,060	5,060	51.4	50.2	13.8	14.0	0.2	4.2
Morocco	7,712	7,712	37.1	34.9	7.0	7.8	0.2	3.9
Netherlands	3,336	3,336	51.1	49.1	3.0	4.0	0.1	1.8
New Zealand	5,002	5,002	41.9	40.7	3.7	4.6	0.3	3.8
North Macedonia	3,264	3,264	56.9	55.6	5.9	6.8	0.3	5.1
Northern Ireland	3,491	3,491	61.5	60.9	2.6	3.0	0.1	0.9
Norway (5)	3,938	3,938	54.9	52.8	3.7	5.0	0.3	4.1
Oman	6,801	6,801	30.6	28.9	4.3	5.7	0.3	4.5
Pakistan	3,942	3,942	27.2	25.9	18.5	17.7	0.6	5.8
Philippines	5,495	5,495	26.2	25.5	5.8	6.8	0.5	3.3
Poland	4,881	4,881	50.0	48.2	7.7	8.3	0.1	2.2
Portugal	4,297	4,297	49.0	46.9	2.7	4.0	0.0	3.2
Qatar	4,929	4,929	32.9	30.6	3.9	5.2	0.1	5.0
Russian Federation	4,022	4,022	59.8	59.0	2.2	2.9	0.0	1.0
Saudi Arabia	5,445	5,445	43.2	42.1	5.0	5.6	0.2	2.8
Serbia	4,373	4,373	48.6	47.6	7.9	8.5	0.2	4.4
Singapore	5,983	5,983	72.5	72.2	0.5	0.7	0.0	0.2
Slovak Republic	4,243	4,243	45.0	43.2	4.4	5.1	0.0	1.6
South Africa (5)	11,842	11,842	36.3	35.0	3.7	4.4	0.1	3.0
Spain	9,543	9,543	44.8	43.1	3.5	4.7	0.1	2.1
Sweden	3,958	3,958	49.3	46.4	4.8	7.2	0.3	5.7
Turkey (5)	4,028	4,028	48.1	47.5	1.9	2.6	0.0	0.9
United Arab Emirates	25,785	25,785	39.3	37.4	2.7	3.9	0.1	3.3
United States	8,769	8,769	50.8	49.2	1.1	1.9	0.1	2.9
International Average	**307,965**	**307,965**	**48.5**	**47.1**	**4.9**	**5.7**	**0.2**	**3.0**
Ontario, Canada	3,810	3,810	45.4	43.6	2.4	3.7	0.1	4.2
Quebec, Canada	3,816	3,816	50.3	48.9	2.6	3.8	0.0	2.7
Moscow City, Russian Fed.	3,842	3,842	66.4	65.6	1.6	1.9	0.0	0.4
Madrid, Spain	3,385	3,385	46.7	44.8	3.3	4.0	0.0	1.5
Abu Dhabi, UAE	9,001	8,998	31.3	29.4	2.9	3.9	0.1	3.0
Dubai, UAE	7,262	7,262	52.6	51.2	1.6	2.5	0.0	2.4

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 4 Science (eTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
SE01 - Positions 2 & 3	11,666	11,617	51.0	51.1	2.5	3.5	0.0	4.2
SE02 - Positions 1 & 4	11,554	11,667	55.0	52.6	3.5	4.5	0.1	1.9
SE03 - Positions 2 & 3	11,585	11,554	53.0	52.1	2.9	4.1	0.0	2.5
SE04 - Positions 1 & 4	11,603	11,584	58.8	57.3	2.5	4.0	0.1	1.1
SE05 - Positions 2 & 3	11,630	11,603	53.7	53.0	3.6	4.8	0.1	3.4
SE06 - Positions 1 & 4	11,594	11,630	50.6	47.7	5.5	8.4	0.2	2.2
SE07 - Positions 2 & 3	11,624	11,594	46.7	46.0	3.2	4.2	0.1	3.6
SE08 - Positions 1 & 4	11,603	11,625	56.1	54.9	1.9	3.3	0.1	1.5
SE09 - Positions 2 & 3	11,603	11,603	53.2	52.6	4.4	5.0	0.1	2.5
SE10 - Positions 1 & 4	11,596	11,603	53.6	52.2	1.5	2.9	0.1	1.6
SE11 - Positions 2 & 3	11,592	11,596	51.0	50.5	6.1	6.6	0.1	3.5
SE12 - Positions 1 & 4	11,647	11,592	56.0	53.1	2.2	3.7	0.1	1.9
SE13 - Positions 2 & 3	11,596	11,647	49.9	50.1	2.9	3.4	0.1	4.1
SE14 - Positions 1 & 4	11,617	11,596	57.1	54.8	1.8	3.1	0.1	1.4
Overall	**162,510**	**162,511**	**53.3**	**52.0**	**3.2**	**4.4**	**0.1**	**2.5**

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 4 Science (paperTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
SP01 - Positions 2 & 3	5,977	5,987	48.3	48.5	6.5	7.0	0.2	3.6
SP02 - Positions 1 & 4	6,005	5,977	51.0	49.4	7.5	7.8	0.2	2.1
SP03 - Positions 2 & 3	5,984	6,005	48.9	48.1	6.2	6.0	0.0	2.6
SP04 - Positions 1 & 4	5,994	5,984	55.5	52.9	4.9	6.6	0.1	1.7
SP05 - Positions 2 & 3	5,948	5,994	51.2	51.2	5.5	5.5	0.1	2.5
SP06 - Positions 1 & 4	5,974	5,948	50.1	46.6	6.9	9.7	0.2	2.2
SP07 - Positions 2 & 3	5,952	5,974	43.6	43.5	6.2	6.1	0.1	3.3
SP08 - Positions 1 & 4	6,017	5,952	55.6	53.6	4.3	5.5	0.1	1.7
SP09 - Positions 2 & 3	5,983	6,017	48.6	49.2	6.7	6.4	0.2	2.4
SP10 - Positions 1 & 4	6,010	5,983	52.4	49.5	3.4	5.8	0.1	2.7
SP11 - Positions 2 & 3	5,959	6,010	50.0	49.0	7.4	7.9	0.2	5.0
SP12 - Positions 1 & 4	6,011	5,959	53.6	51.6	5.4	6.0	0.0	2.8
SP13 - Positions 2 & 3	5,979	6,011	47.5	46.8	5.8	8.7	0.0	0.4
SP14 - Positions 1 & 4	5,987	5,979	56.1	53.6	3.4	5.3	0.2	2.6
Overall	**83,780**	**83,780**	**50.9**	**49.5**	**5.7**	**6.7**	**0.1**	**2.5**

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 4 Science (Less Difficult paperTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
SP01 - Positions 2 & 3	4,381	4,396	32.2	31.3	12.0	12.0	0.4	6.3
SP02 - Positions 1 & 4	4,406	4,382	33.9	32.9	13.9	13.3	0.6	4.8
SP03 - Positions 2 & 3	4,408	4,406	35.9	33.8	9.7	11.4	0.1	5.6
SP04 - Positions 1 & 4	4,429	4,408	38.4	37.5	10.0	10.8	0.4	3.5
SP05 - Positions 2 & 3	4,413	4,428	33.0	32.4	9.3	11.3	0.0	4.6
SP06 - Positions 1 & 4	4,431	4,413	31.3	30.3	15.3	16.9	0.7	4.5
SP07 - Positions 2 & 3	4,420	4,431	30.3	30.4	12.6	12.1	0.3	6.7
SP08 - Positions 1 & 4	4,421	4,420	35.7	34.0	9.4	11.2	0.4	3.6
SP09 - Positions 2 & 3	4,379	4,421	34.1	32.9	9.3	11.2	0.3	4.9
SP10 - Positions 1 & 4	4,409	4,378	33.5	32.4	9.0	10.7	0.5	4.3
SP11 - Positions 2 & 3	4,391	4,408	30.4	29.2	13.7	15.6	0.2	6.9
SP12 - Positions 1 & 4	4,411	4,392	36.1	34.1	10.6	10.5	0.1	4.6
SP13 - Positions 2 & 3	4,398	4,410	31.9	29.8	10.3	14.5	0.0	3.2
SP14 - Positions 1 & 4	4,396	4,399	37.9	35.6	7.8	9.4	0.4	4.6
Overall	**61,693**	**61,692**	**33.9**	**32.6**	**10.9**	**12.2**	**0.3**	**4.9**

TIMSS 2019 Country Average Item Statistics by Booklet Position—Grade 4 Science

Country	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
Albania	4,422	4,422	48.7	47.0	6.0	6.9	0.3	3.6
Armenia	5,391	5,391	43.0	40.2	13.0	15.9	0.3	5.0
Australia	5,878	5,878	56.9	55.7	2.9	3.7	0.1	2.0
Austria	4,464	4,464	52.1	51.2	4.6	5.6	0.0	1.7
Azerbaijan	5,185	5,185	38.0	37.4	13.6	13.2	0.4	3.1
Bahrain	5,760	5,760	49.5	46.9	4.5	6.5	0.1	2.0
Belgium (Flemish)	4,653	4,653	47.9	47.5	4.8	4.6	0.0	1.6
Bosnia and Herzegovina	5,611	5,611	41.1	40.0	12.6	13.8	0.2	4.3
Bulgaria	4,267	4,267	59.1	58.2	6.6	7.1	0.0	1.7
Canada	13,579	13,579	51.9	50.4	2.7	3.8	0.1	3.2
Chile	4,158	4,158	44.9	42.0	3.9	6.5	0.4	8.1
Chinese Taipei	3,764	3,764	60.8	60.0	2.0	2.6	0.0	0.5
Croatia	3,784	3,784	52.3	51.5	2.7	3.5	0.0	0.8
Cyprus	4,062	4,062	52.1	50.3	4.4	6.0	0.1	4.4
Czech Republic	4,688	4,688	54.6	53.6	4.0	5.0	0.0	1.1
Denmark	3,220	3,220	52.6	51.0	3.5	4.8	0.1	3.3
England	3,387	3,387	54.9	54.1	2.3	3.0	0.0	0.7
Finland	4,711	4,711	59.3	58.6	2.9	3.6	0.0	0.7
France	4,184	4,184	47.0	45.3	6.3	8.7	0.1	5.0
Georgia	3,764	3,764	39.1	36.7	8.2	10.8	0.2	6.3
Germany	3,432	3,432	52.8	50.7	4.3	6.3	0.1	4.2
Hong Kong SAR	2,968	2,968	54.9	53.6	2.2	3.4	0.0	0.8
Hungary	4,570	4,570	55.8	54.8	2.2	3.1	0.0	1.7
Iran, Islamic Rep. of	5,994	5,994	41.1	39.7	9.7	11.5	0.4	6.9
Ireland	4,576	4,576	55.1	54.0	2.7	3.2	0.0	0.9
Italy	3,740	3,740	50.4	48.7	4.2	6.4	0.1	4.7
Japan	4,192	4,192	62.6	61.1	2.2	2.5	0.0	1.1
Kazakhstan	4,791	4,791	47.4	46.9	5.0	6.0	0.0	2.3
Korea, Rep. of	3,891	3,891	66.7	67.0	1.1	1.3	0.0	0.1
Kosovo	4,486	4,484	34.8	33.6	9.3	10.0	0.2	3.2
Kuwait	4,412	4,412	34.0	32.8	9.2	10.1	0.3	3.4
Latvia	4,476	4,476	59.0	57.6	2.8	3.3	0.1	1.2
Lithuania	3,738	3,738	54.4	54.1	2.7	3.3	0.0	0.6

TIMSS 2019 Country Average Item Statistics by Booklet Position—Grade 4 Science (continued)

Country	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
Malta	3,625	3,625	47.4	46.2	2.5	3.4	0.0	1.1
Montenegro	5,068	5,068	41.7	39.4	14.3	15.8	0.4	7.7
Morocco	7,714	7,714	29.9	28.1	10.5	12.7	0.2	4.7
Netherlands	3,337	3,337	50.9	49.7	2.8	3.4	0.1	1.1
New Zealand	5,003	5,003	49.8	48.8	3.3	4.8	0.2	2.2
North Macedonia	3,262	3,262	38.7	36.8	10.4	12.8	0.6	8.8
Northern Ireland	3,490	3,490	52.9	51.9	3.3	3.7	0.1	1.0
Norway (5)	3,940	3,940	56.8	55.8	2.9	3.4	0.1	1.7
Oman	6,811	6,811	39.9	38.3	6.0	7.7	0.1	3.2
Pakistan	3,919	3,919	21.9	21.9	23.7	23.7	0.6	4.9
Philippines	5,501	5,501	20.9	20.2	10.3	12.0	0.3	4.2
Poland	4,875	4,875	55.6	55.0	6.5	7.2	0.0	1.2
Portugal	4,297	4,297	49.4	46.9	3.0	5.2	0.0	5.1
Qatar	4,933	4,933	41.4	39.8	4.4	6.3	0.3	6.9
Russian Federation	4,021	4,021	62.9	62.2	2.3	3.2	0.1	1.2
Saudi Arabia	5,448	5,448	35.7	35.0	9.0	9.4	0.1	2.7
Serbia	4,376	4,376	55.4	52.8	6.3	7.7	0.2	4.2
Singapore	5,983	5,983	68.0	67.2	0.8	1.1	0.0	0.3
Slovak Republic	4,246	4,246	53.4	52.6	3.6	5.1	0.0	1.4
South Africa (5)	11,852	11,852	26.1	24.6	5.1	7.2	0.3	6.2
Spain	9,544	9,544	51.5	50.2	3.1	4.1	0.0	1.7
Sweden	3,951	3,951	56.7	55.2	3.4	4.7	0.1	2.1
Turkey (5)	4,028	4,028	54.9	53.4	2.2	3.0	0.0	1.7
United Arab Emirates	25,796	25,796	45.5	43.8	3.3	5.1	0.2	4.1
United States	8,770	8,770	56.5	55.1	1.4	2.4	0.2	3.3
International Average	**307,988**	**307,986**	**48.9**	**47.6**	**5.4**	**6.6**	**0.1**	**3.0**
Ontario, Canada	3,806	3,806	53.0	51.1	2.5	3.7	0.1	3.9
Quebec, Canada	3,828	3,828	52.3	50.8	2.7	3.7	0.1	2.1
Moscow City, Russian Fed.	3,841	3,841	68.8	67.5	1.7	2.3	0.0	0.8
Madrid, Spain	3,388	3,388	52.5	51.3	2.7	3.5	0.0	1.0
Abu Dhabi, UAE	9,004	9,004	36.7	35.1	3.8	5.7	0.2	4.6
Dubai, UAE	7,265	7,265	57.6	55.9	1.7	2.7	0.1	2.3

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 8 Mathematics (eTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
ME01 - Positions 1 & 4	8,099	8,152	46.0	44.9	3.9	5.4	0.1	1.2
ME02 - Positions 2 & 3	8,140	8,099	43.1	41.8	6.8	6.5	0.1	2.0
ME03 - Positions 1 & 4	8,134	8,140	46.0	43.3	4.1	6.4	0.1	1.9
ME04 - Positions 2 & 3	8,164	8,134	43.0	39.9	6.5	7.2	0.1	2.9
ME05 - Positions 1 & 4	8,153	8,164	47.0	45.1	3.3	5.6	0.0	1.1
ME06 - Positions 2 & 3	8,095	8,153	42.9	41.4	8.0	8.4	0.0	2.0
ME07 - Positions 1 & 4	8,090	8,095	49.6	47.5	3.7	5.3	0.0	0.6
ME08 - Positions 2 & 3	8,120	8,090	40.7	38.7	7.5	8.2	0.1	2.1
ME09 - Positions 1 & 4	8,138	8,120	37.0	35.5	5.3	8.3	0.1	1.0
ME10 - Positions 2 & 3	8,106	8,137	43.6	41.1	8.2	10.5	0.1	2.7
ME11 - Positions 1 & 4	8,101	8,106	46.4	44.4	4.0	5.8	0.1	1.2
ME12 - Positions 2 & 3	8,187	8,101	40.0	37.3	8.3	9.8	0.2	2.7
ME13 - Positions 1 & 4	8,188	8,187	47.2	42.9	3.4	5.6	0.0	1.4
ME14 - Positions 2 & 3	8,152	8,188	43.5	42.7	4.4	4.7	0.1	1.6
Overall	**113,867**	**113,866**	**44.0**	**41.9**	**5.5**	**7.0**	**0.1**	**1.8**

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 8 Mathematics (paperTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
MP01 - Positions 1 & 4	8,070	8,086	39.0	36.9	5.1	6.2	0.1	2.0
MP02 - Positions 2 & 3	8,026	8,070	32.0	31.9	9.2	8.7	0.1	2.3
MP03 - Positions 1 & 4	8,045	8,026	37.7	33.2	7.7	9.9	0.1	2.9
MP04 - Positions 2 & 3	8,063	8,045	35.0	34.0	9.9	9.3	0.2	3.2
MP05 - Positions 1 & 4	8,053	8,063	41.4	38.5	5.7	7.6	0.1	1.9
MP06 - Positions 2 & 3	8,083	8,053	31.4	31.9	8.8	8.4	0.1	1.7
MP07 - Positions 1 & 4	8,088	8,083	38.4	36.8	5.7	7.2	0.0	1.0
MP08 - Positions 2 & 3	8,052	8,088	31.3	30.5	10.0	9.7	0.1	1.4
MP09 - Positions 1 & 4	8,051	8,052	30.6	28.7	7.6	8.9	0.1	1.5
MP10 - Positions 2 & 3	8,107	8,051	34.7	33.8	11.0	11.7	0.2	1.9
MP11 - Positions 1 & 4	8,118	8,107	35.9	33.6	6.6	8.5	0.1	1.9
MP12 - Positions 2 & 3	8,113	8,118	30.3	29.1	9.9	10.4	0.1	2.9
MP13 - Positions 1 & 4	8,087	8,113	36.7	32.7	6.2	6.5	0.1	1.9
MP14 - Positions 2 & 3	8,086	8,088	33.6	33.5	6.7	6.7	0.2	2.0
Overall	**113,042**	**113,043**	**34.9**	**33.2**	**7.9**	**8.5**	**0.1**	**2.0**

TIMSS 2019 Country Average Item Statistics by Booklet Position—Grade 8 Mathematics

Country	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
Australia	9,002	9,002	49.4	48.3	5.0	5.7	0.2	1.4
Bahrain	5,724	5,724	39.3	37.4	11.5	11.8	0.0	0.8
Chile	4,100	4,100	28.5	25.7	10.8	13.2	0.1	4.0
Chinese Taipei	4,914	4,914	66.3	65.7	1.5	2.0	0.0	0.2
Cyprus	3,515	3,515	42.5	40.6	6.6	7.6	0.0	1.1
Egypt	7,201	7,201	25.7	24.0	7.9	8.0	0.2	2.4
England	3,345	3,345	43.2	41.1	7.1	8.9	0.1	1.5
Finland	4,835	4,835	40.4	38.8	5.5	6.9	0.2	1.6
France	3,869	3,869	35.1	32.9	8.9	11.3	0.0	2.4
Georgia	3,309	3,309	31.5	29.1	11.5	13.5	0.1	2.3
Hong Kong SAR	3,255	3,255	58.9	58.3	2.8	3.2	0.2	0.8
Hungary	4,559	4,559	46.0	44.8	4.7	5.3	0.0	0.2
Iran, Islamic Rep. of	5,975	5,975	32.3	29.5	10.5	12.4	0.1	3.3
Ireland	4,109	4,109	48.2	47.2	5.4	6.1	0.3	1.5
Israel	3,725	3,725	45.2	42.0	5.8	7.4	0.0	2.0
Italy	3,618	3,618	38.8	36.2	7.3	9.3	0.1	2.5
Japan	4,444	4,444	66.0	65.0	2.2	2.8	0.1	0.6
Jordan	7,172	7,172	25.3	23.3	5.5	6.6	0.1	1.6
Kazakhstan	4,447	4,447	38.8	38.0	9.4	10.1	0.1	2.2
Korea, Rep. of	3,858	3,858	65.3	64.4	1.9	2.4	0.1	0.3
Kuwait	4,569	4,569	23.4	21.8	6.0	6.4	0.2	2.5
Lebanon	4,724	4,724	25.9	24.4	18.3	19.1	0.3	4.8
Lithuania	3,823	3,823	42.8	41.2	5.8	6.5	0.0	0.4
Malaysia	7,065	7,065	37.7	35.5	1.7	2.6	0.0	1.8
Morocco	8,431	8,431	19.0	18.2	15.3	14.7	0.1	2.4
New Zealand	6,025	6,025	42.4	41.3	6.0	6.8	0.2	1.7
Norway (9)	4,541	4,541	41.1	38.1	9.6	11.9	0.4	3.7
Oman	6,745	6,745	26.6	24.6	5.6	6.2	0.1	3.0
Portugal	3,369	3,369	40.2	37.2	5.8	7.6	0.0	1.4

TIMSS 2019 Country Average Item Statistics by Booklet Position—Grade 8 Mathematics (continued)

Country	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
Qatar	3,882	3,882	29.7	27.3	4.8	6.5	0.1	2.5
Romania	4,485	4,485	41.9	38.9	9.9	10.8	0.1	2.2
Russian Federation	3,900	3,900	50.6	48.2	6.8	8.4	0.0	2.0
Saudi Arabia	5,680	5,680	23.7	21.5	4.8	5.6	0.0	1.0
Singapore	4,845	4,845	67.0	66.2	1.1	1.4	0.0	0.4
South Africa (9)	20,796	20,796	21.4	20.9	4.2	4.5	0.0	2.6
Sweden	3,970	3,970	41.6	37.7	7.5	10.7	0.2	4.2
Turkey	4,075	4,075	38.4	37.0	5.6	6.8	0.0	0.7
United Arab Emirates	22,327	22,326	34.1	31.2	3.3	4.5	0.0	1.6
United States	8,683	8,683	44.8	42.5	1.9	2.7	0.1	2.5
International Average	**226,911**	**226,910**	**40.0**	**38.1**	**6.6**	**7.6**	**0.1**	**1.9**
Ontario, Canada	3,764	3,764	46.6	43.5	4.0	5.7	0.2	3.5
Quebec, Canada	3,173	3,173	50.7	47.7	3.7	5.4	0.2	2.6
Moscow City, Russian Fed.	3,780	3,780	59.1	56.3	5.6	7.4	0.0	1.2
Gauteng, RSA (9)	5,621	5,621	23.0	22.4	3.4	3.6	0.0	2.1
Western Cape, RSA (9)	5,340	5,340	27.0	26.4	4.4	4.8	0.0	2.3
Abu Dhabi, UAE	8,201	8,201	29.0	26.2	2.9	3.9	0.1	1.5
Dubai, UAE	5,726	5,726	47.4	44.3	3.0	4.6	0.0	1.6

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 8 Science (eTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
SE01 - Positions 2 & 3	8,074	8,160	52.5	51.4	5.6	6.7	0.1	1.2
SE02 - Positions 1 & 4	8,155	8,074	48.9	46.8	2.9	4.2	0.1	0.7
SE03 - Positions 2 & 3	8,124	8,155	45.0	43.7	5.1	5.4	0.2	0.8
SE04 - Positions 1 & 4	8,176	8,124	47.8	45.0	5.3	7.4	0.1	0.7
SE05 - Positions 2 & 3	8,149	8,176	48.6	48.5	5.1	5.8	0.1	0.8
SE06 - Positions 1 & 4	8,100	8,149	43.1	40.7	8.6	10.4	0.0	0.7
SE07 - Positions 2 & 3	8,080	8,100	45.1	44.6	3.9	4.2	0.1	0.6
SE08 - Positions 1 & 4	8,123	8,080	47.6	45.9	2.6	4.5	0.0	0.8
SE09 - Positions 2 & 3	8,126	8,124	39.8	39.4	4.5	4.8	0.1	1.0
SE10 - Positions 1 & 4	8,124	8,126	48.1	46.9	2.2	3.3	0.1	0.5
SE11 - Positions 2 & 3	8,104	8,124	49.4	48.5	3.8	4.1	0.1	1.1
SE12 - Positions 1 & 4	8,195	8,104	51.3	48.4	1.5	2.9	0.0	0.8
SE13 - Positions 2 & 3	8,179	8,195	52.8	52.5	2.8	3.3	0.1	1.4
SE14 - Positions 1 & 4	8,159	8,179	48.8	45.8	2.0	3.7	0.1	0.6
Overall	**113,868**	**113,870**	**47.8**	**46.3**	**4.0**	**5.0**	**0.1**	**0.8**

TIMSS 2019 International Average Item Block Statistics by Booklet Position—Grade 8 Science (paperTIMSS)

Item Block	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
SP01 - Positions 2 & 3	8,068	8,079	43.2	42.0	7.8	8.4	0.1	1.7
SP02 - Positions 1 & 4	8,039	8,068	40.7	38.4	6.0	6.8	0.1	1.3
SP03 - Positions 2 & 3	8,042	8,039	38.7	37.9	6.1	6.7	0.1	2.1
SP04 - Positions 1 & 4	8,063	8,042	39.1	36.4	8.9	10.4	0.1	1.9
SP05 - Positions 2 & 3	8,055	8,063	39.3	38.8	8.3	9.2	0.1	1.9
SP06 - Positions 1 & 4	8,080	8,055	36.9	34.9	10.9	12.5	0.0	1.7
SP07 - Positions 2 & 3	8,092	8,080	38.6	38.6	6.8	6.3	0.1	1.0
SP08 - Positions 1 & 4	8,064	8,092	39.9	37.3	5.5	7.0	0.1	1.1
SP09 - Positions 2 & 3	8,049	8,064	33.4	33.1	7.0	6.9	0.1	1.5
SP10 - Positions 1 & 4	8,105	8,049	40.9	39.7	5.1	5.7	0.0	1.3
SP11 - Positions 2 & 3	8,105	8,105	38.1	37.8	7.1	7.7	0.1	1.3
SP12 - Positions 1 & 4	8,115	8,104	42.5	39.5	4.0	4.8	0.0	1.3
SP13 - Positions 2 & 3	8,092	8,115	42.7	41.4	6.4	7.1	0.2	2.9
SP14 - Positions 1 & 4	8,080	8,092	40.3	37.0	4.0	5.8	0.0	2.1
Overall	**113,049**	**113,047**	**39.6**	**38.1**	**6.7**	**7.5**	**0.1**	**1.6**

TIMSS 2019 Country Average Item Statistics by Booklet Position—Grade 8 Science

Country	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
Australia	9,002	9,002	53.7	52.2	3.8	4.0	0.2	1.1
Bahrain	5,719	5,719	43.3	41.4	4.9	5.9	0.0	0.7
Chile	4,097	4,097	38.8	36.5	6.5	8.6	0.1	1.6
Chinese Taipei	4,910	4,910	59.1	59.1	1.9	2.1	0.0	0.1
Cyprus	3,520	3,520	42.1	40.2	5.7	6.3	0.0	1.0
Egypt	7,200	7,199	28.9	27.4	9.3	9.6	0.1	2.0
England	3,358	3,358	48.0	46.0	4.0	5.4	0.2	1.0
Finland	4,843	4,843	53.1	52.1	3.2	3.8	0.2	0.7
France	3,870	3,870	42.5	40.3	5.4	7.2	0.1	1.2
Georgia	3,308	3,308	34.2	31.9	9.8	12.6	0.1	1.4
Hong Kong SAR	3,253	3,253	44.7	42.8	3.6	4.8	0.2	0.7
Hungary	4,558	4,558	52.0	51.2	3.8	4.2	0.0	0.0
Iran, Islamic Rep. of	5,976	5,976	37.3	34.9	8.1	9.5	0.1	2.1
Ireland	4,097	4,097	49.9	49.2	3.8	4.1	0.2	1.1
Israel	3,721	3,721	47.2	45.3	4.2	5.3	0.0	0.6
Italy	3,618	3,618	44.5	42.7	5.3	6.2	0.0	0.9
Japan	4,442	4,442	58.9	58.3	2.1	2.6	0.0	0.4
Jordan	7,174	7,174	36.6	34.8	4.8	5.9	0.1	1.1
Kazakhstan	4,453	4,453	40.9	39.7	8.3	9.5	0.1	1.9
Korea, Rep. of	3,858	3,858	55.5	54.7	2.0	2.5	0.0	0.1
Kuwait	4,569	4,569	35.5	34.4	5.3	6.0	0.1	1.5
Lebanon	4,714	4,714	26.3	24.6	17.1	18.6	0.1	3.6
Lithuania	3,823	3,823	48.9	47.9	3.5	4.2	0.0	0.0
Malaysia	7,064	7,064	42.5	41.3	1.1	1.6	0.0	0.8
Morocco	8,444	8,444	26.7	25.7	13.7	14.7	0.0	1.8
New Zealand	6,021	6,021	48.9	47.2	4.3	5.0	0.1	1.2
Norway (9)	4,538	4,538	44.2	42.6	6.3	8.1	0.3	1.7
Oman	6,745	6,745	38.9	37.4	4.4	4.9	0.1	1.9
Portugal	3,362	3,362	48.3	46.9	3.8	4.9	0.0	0.3
Qatar	3,881	3,881	41.2	39.0	3.7	5.0	0.1	1.2
Romania	4,489	4,489	42.0	39.6	8.6	9.9	0.1	1.4
Russian Federation	3,899	3,899	52.6	51.5	4.7	5.6	0.0	0.7

TIMSS 2019 Country Average Item Statistics by Booklet Position—Grade 8 Science (continued)

Country	Sample Sizes		Average Percent Correct Across Items (Weighted)		Average Percent Omitted Responses Across Items (Weighted)		Average Percent Not Reached Across Items (Weighted)	
	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4	Positions 1 & 3	Positions 2 & 4
Saudi Arabia	5,678	5,678	35.2	32.9	5.0	5.8	0.0	0.7
Singapore	4,848	4,848	65.1	64.5	0.8	0.9	0.0	0.1
South Africa (9)	20,807	20,807	27.6	26.5	4.1	5.5	0.1	4.3
Sweden	3,974	3,974	50.2	48.1	5.1	6.9	0.2	1.9
Turkey	4,077	4,077	46.4	45.2	4.2	5.2	0.0	0.5
United Arab Emirates	22,322	22,324	40.5	38.7	3.1	4.2	0.0	0.9
United States	8,686	8,686	50.1	48.3	1.5	2.1	0.2	1.6
International Average	**226,918**	**226,919**	**44.2**	**42.6**	**5.1**	**6.1**	**0.1**	**1.2**
Ontario, Canada	3,767	3,767	47.1	45.5	2.8	3.8	0.1	1.6
Quebec, Canada	3,170	3,170	51.5	49.8	2.2	2.9	0.0	0.5
Moscow City, Russian Fed.	3,783	3,783	57.4	55.9	3.4	4.1	0.0	0.3
Gauteng, RSA (9)	5,629	5,629	30.6	29.4	2.8	3.6	0.1	2.5
Western Cape, RSA (9)	5,339	5,339	33.5	32.2	3.4	4.4	0.0	2.9
Abu Dhabi, UAE	8,197	8,198	34.3	32.1	3.4	4.7	0.0	0.9
Dubai, UAE	5,726	5,726	52.9	51.6	1.9	2.8	0.0	0.8