

**Exhibit 2.10: Percentages of Students Reaching the International Benchmarks of Mathematics Achievement Across Assessment Years**

Country	Advanced International Benchmark (625)						High International Benchmark (550)					
	Percent of Students						Percent of Students					
	2015	2011	2007	2003	1999	1995	2015	2011	2007	2003	1999	1995
Singapore	54	48 ▲	40 ▲	44 ▲	42 ▲	40 ▲	81	78	70 ▲	77	77	84
Chinese Taipei	44	49 ▼	45	38 ▲	37 ▲		72	73	71	66 ▲	67 ▲	
Korea, Rep. of	43	47	40	35 ▲	32 ▲	31 ▲	75	77	71 ▲	70 ▲	70 ▲	67 ▲
Hong Kong SAR	37	34	31 ▲	31 ▲	28 ▲	23 ▲	75	71	64 ▲	73	70	65 ▲
Japan	34	27 ▲	26 ▲	24 ▲	29 ▲	29 ▲	67	61 ▲	61 ▲	62 ▲	66	67
Kazakhstan	15	3 ▲					41	23 ▲				
Russian Federation	14	14	8 ▲	6 ▲	12	9 ▲	46	47	33 ▲	30 ▲	39 ▲	38 ▲
Israel	13	12					38	40				
Hungary	12	8 ▲	10	11	13	10	37	32 ▲	36	41	43 ▼	40
United States	10	7 ▲	6 ▲	7 ▲	7	4 ▲	37	30 ▲	31 ▲	29 ▲	30 ▲	26 ▲
England	10	8	8	5 ▲	6 ▲	6 ▲	36	32	35	26 ▲	25 ▲	27 ▲
Australia	7	9	6	7		7	30	29	24 ▲	29		33
Ireland	7					8	38					37
Lithuania	6	5	6	5	3 ▲	2 ▲	34	29 ▲	30 ▲	28 ▲	18 ▲	17 ▲
New Zealand	6	5		5	6	6	27	24		24	26	28
Turkey	6	7					20	20				
Slovenia	6	4 ▲	4	3 ▲		4 ▲	32	27 ▲	25 ▲	21 ▲		22 ▲
United Arab Emirates	5	2 ▲					20	14 ▲				
Malta	5		5				29		26 ▲			
Sweden	3	1 ▲	2	3		12 ▼	26	16 ▲	20 ▲	24		46 ▼
ψ Qatar	3	2					14	10 ▲				
Malaysia	3	2 ▲	2	6 ▼	10 ▼		18	12 ▲	18	30 ▼	36 ▼	
Italy	3	3	3	3	4		24	24	17 ▲	19 ▲	21	
Thailand	3	2	3		3		10	8	12		17 ▼	
ψ Iran, Islamic Rep. of	2	2	1 ▲	0 ▲	1 ▲	0 ▲	12	8 ▲	5 ▲	3 ▲	6 ▲	4 ▲
Georgia	2	3	1 ▲				15	13	7 ▲			
Bahrain	2	1	0 ▲	0 ▲			12	8 ▲	3 ▲	2 ▲		
Norway (8)	1	1	0 ▲	0		4 ▼	17	12 ▲	11 ▲	10 ▲		26 ▼
ψ Oman	1	0	0 ▲				6	4 ▲	2 ▲			
ψ Chile	1	1		0	1		7	5		3 ▲	4 ▲	
✕ South Africa (9)	1	1					3	3				
ψ Egypt	0		1	1			5		5	6		
Lebanon	0	1	1	0			8	9	10	4 ▲		
✕ Saudi Arabia	0	1					2	5 ▼				
✕ Jordan	0	0	1 ▼	1 ▼	3 ▼		3	6 ▼	11 ▼	8 ▼	12 ▼	
ψ Kuwait	0		0				1		0 ▲			
ψ Botswana (9)	0	0					2	2				
✕ Morocco	0	0					2	2				

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

**Benchmarking Participants**

Dubai, UAE	10	5 ▲	3 ▲				36	23 ▲	17 ▲			
Quebec, Canada	9	6 ▲	8	8	18 ▼	14	47	40 ▲	37 ▲	45	60 ▼	54
Florida, US	7	8					28	31				
Ontario, Canada	6	4 ▲	6	6	6	3 ▲	37	31 ▲	33	34	32	26 ▲
Abu Dhabi, UAE	3	2					14	12				

- ▲ 2015 percent significantly higher
- ▼ 2015 percent significantly lower

An empty cell indicates a country did not participate in that year's assessment.

Trend results for Kuwait do not include private schools. Trend results for Lithuania do not include students taught in Polish and Russian. South Africa (9) tested one year later.

✕ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 25%.

ψ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

**Exhibit 2.10: Percentages of Students Reaching the International Benchmarks of Mathematics Achievement Across Assessment Years (Continued)**

Country	Intermediate International Benchmark (475)						Low International Benchmark (400)					
	Percent of Students						Percent of Students					
	2015	2011	2007	2003	1999	1995	2015	2011	2007	2003	1999	1995
Singapore	94	92	88 ▲	93	94	98 ▼	99	99	97 ▲	99	99	100 ▼
Chinese Taipei	88	88	86	85 ▲	85 ▲		97	96	95	96	95 ▲	
Korea, Rep. of	93	93	90 ▲	90 ▲	91	89 ▲	99	99	98 ▲	98 ▲	99	97 ▲
Hong Kong SAR	92	89	85 ▲	93	92	88	98	97	94 ▲	98	98	96
Japan	89	87 ▲	87 ▲	88	90	91	98	97	97	98	98	98
Kazakhstan	71	57 ▲					91	85 ▲				
Russian Federation	78	78	68 ▲	66 ▲	73	73	95	95	91 ▲	92 ▲	93	93
Israel	65	68					84	87				
Hungary	67	65	69	75 ▼	75 ▼	74 ▼	88	88	91	95 ▼	93 ▼	94 ▼
United States	70	68	67	64 ▲	62 ▲	61 ▲	91	92	92	90	87 ▲	86 ▲
England	69	65	69	61 ▲	60 ▲	61 ▲	93	88 ▲	90	90	88 ▲	87 ▲
Australia	64	63	61	65		68	89	89	89	90		90
Ireland	76					73	94					91
Lithuania	69	64 ▲	65	63 ▲	53 ▲	50 ▲	92	90	90	90	85 ▲	81 ▲
New Zealand	58	57		59	57	64 ▼	85	84		88	84	89 ▼
Turkey	42	40					70	67				
Slovenia	73	67 ▲	65 ▲	60 ▲		60 ▲	95	93 ▲	92 ▲	90 ▲		90 ▲
United Arab Emirates	46	42 ▲					73	73				
Malta	62		60				84		83 ▲			
Sweden	65	57 ▲	60 ▲	64		81 ▼	91	89 ▲	90	91		96 ▼
ψ Qatar	36	29 ▲					63	54 ▲				
Malaysia	45	36 ▲	50	66 ▼	70 ▼		76	65 ▲	82 ▼	93 ▼	93 ▼	
Italy	62	64	54 ▲	56 ▲	53 ▲		89	90	85 ▲	86 ▲	82 ▲	
Thailand	29	28	34		45 ▼		62	62	66		79 ▼	
ψ Iran, Islamic Rep. of	34	26 ▲	20 ▲	20 ▲	26 ▲	24 ▲	63	55 ▲	51 ▲	55 ▲	61	59
Georgia	42	36 ▲	26 ▲				72	62 ▲	56 ▲			
Bahrain	39	26 ▲	19 ▲	17 ▲			75	53 ▲	49 ▲	51 ▲		
Norway (8)	59	51 ▲	48 ▲	44 ▲		64 ▼	90	87 ▲	85 ▲	81 ▲		90
ψ Oman	23	16 ▲	14 ▲				52	39 ▲	41 ▲			
ψ Chile	28	23 ▲		15 ▲	16 ▲		63	57 ▲		41 ▲	46 ▲	
✕ South Africa (9)	13	9 ▲					34	24 ▲				
ψ Egypt	21		21	24			47		47	52 ▼		
Lebanon	35	38	36	27 ▲			71	73	74	68		
✕ Saudi Arabia	11	20 ▼					34	47 ▼				
✕ Jordan	18	26 ▼	35 ▼	30 ▼	33 ▼		45	55 ▼	61 ▼	60 ▼	61 ▼	
ψ Kuwait	11		6 ▲				37		29 ▲			
ψ Botswana (9)	16	15					47	50				
✕ Morocco	14	12 ▲					41	36 ▲				

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

**Benchmarking Participants**

Dubai, UAE	67	53 ▲	47 ▲				88	79 ▲	74 ▲			
Quebec, Canada	86	82	78 ▲	88	93 ▼	90	98	98	97	99	99	99
Florida, US	57	68 ▼					84	94 ▼				
Ontario, Canada	75	71 ▲	74	75	72	65 ▲	95	94	95	97 ▼	96	91 ▲
Abu Dhabi, UAE	37	39					65	71 ▼				

- ▲ 2015 percent significantly higher
- ▼ 2015 percent significantly lower