

Background of TIMSS 2015

TIMSS 2015 was organised by the International Association for the Evaluation of Educational Achievement (IEA). There were nearly 60 countries/regions participating in the assessments at Grade 4 (P4 in Hong Kong) and Grade 8 (S2 in Hong Kong). The international study aims to inform the achievements in mathematics and science at these two levels and, against the background information of the participating jurisdictions collected, to find out the explanatory factors affecting the learning of mathematics and science as well as ways of improving the learning effectiveness of these two subjects.

TIMSS has been conducted in a four-year cycle since 1995, and TIMSS 2015 was the sixth round of this international study. The main study of the Hong Kong component of TIMSS 2015 was conducted from April to mid-July in 2015. A total of 132 primary and 133 secondary schools with about 3,600 P4 students and 4,155 S2 students participated in the study.

Ranking of Grade 4 Students' Mathematics Achievement

TIMSS 2011		TIMSS 2015	
Country/Region	Average Scale Score	Country/Region	Average Scale Score
Singapore	606	Singapore	618
Korea, Rep. of	605	Hong Kong SAR	615
Hong Kong SAR	602	Korea, Rep. of	608
Chinese Taipei	591	Chinese Taipei	597
Japan	585	Japan	593
Northern Ireland	562	Northern Ireland	570
Belgium (Flemish)	549	Russian Federation	564
Finland	545	Norway	549
England	542	Ireland	547
Russian Federation	542	England	546
United States	541	Belgium (Flemish)	546
Netherlands	540	Kazakhstan	544
Denmark	537	Portugal	541
Lithuania	534	United States	539
Portugal	532	Denmark	539
Germany	528	Lithuania	535
Ireland	527	Finland	535
Serbia	516	Poland	535

TIMSS 2011		TIMSS 2015	
Australia	516	Netherlands	530
Hungary	515	Hungary	529
Slovenia	513	Czech Republic	528
Czech Republic	511	Bulgaria	524
Austria	508	Cyprus	523
Italy	508	Germany	522
Slovak Republic	507	Slovenia	520
Sweden	504	Sweden	519
Kazakhstan	501	Serbia	518
TIMSS Scale Average	500	Australia	517
Malta	496	Canada	511
Norway	495	Italy	507
Croatia	490	Spain	505
New Zealand	486	Croatia	502
Spain	482	TIMSS Scale Average	500
Romania	482	Slovak Republic	498
Poland	481	New Zealand	491
Turkey	469	France	488
Azerbaijan	463	Turkey	483
Chile	462	Georgia	463
Thailand	458	Chile	459
Armenia	452	United Arab Emirates	452
Georgia	450	Bahrain	451
Bahrain	436	Qatar	439
United Arab Emirates	434	Iran, Islamic Rep. of	431
Iran, Islamic Rep. of	431	Oman	425
Qatar	413	Indonesia	397
Saudi Arabia	410	Jordan	388
Oman	385	Saudi Arabia	383
Tunisia	359	Morocco	377
Kuwait	342	South Africa	376
Morocco	335	Kuwait	353
Yemen	248		

Ranking of Grade 8 Students' Mathematics Achievement

TIMSS 2011		TIMSS 2015	
Country/Region	Average Scale Score	Country/Region	Average Scale Score
Korea, Rep of	613	Singapore	621
Singapore	611	Korea, Rep of	606
Chinese Taipei	609	Chinese Taipei	599
Hong Kong SAR	586	Hong Kong SAR	594
Japan	570	Japan	586
Russian Federation	539	Russian Federation	538
Israel	516	Kazakhstan	528
Finland	514	Canada	527
United States	509	Ireland	523
England	507	United States	518
Hungary	505	England	518
Australia	505	Slovenia	516
Slovenia	505	Hungary	514
Lithuania	502	Norway	512
TIMSS Scale Average	500	Lithuania	511
Italy	498	Israel	511
New Zealand	488	Australia	505
Kazakhstan	487	Sweden	501
Sweden	484	TIMSS Scale Average	500
Ukraine	479	Italy	494
Norway	475	Malta	494
Armenia	467	New Zealand	493
Romania	458	Malaysia	465
United Arab Emirates	456	United Arab Emirates	465
Turkey	452	Turkey	458
Lebanon	449	Bahrain	454
Malaysia	440	Georgia	453
Georgia	431	Lebanon	442
Thailand	427	Qatar	437
Macedonia, Rep. of	426	Iran, Islamic Rep. of	436
Tunisia	425	Thailand	431
Chile	416	Chile	427
Iran, Islamic Rep. of	415	Oman	403
Qatar	410	Kuwait	392
Bahrain	409	Egypt	392
Jordan	406	Botswana	391
Palestinian Nat'l Auth.	404	Jordan	386
Saudi Arabia	394	Morocco	384
Indonesia	386	South Africa	372
Syrian Arab Republic	380	Saudi Arabia	368
Morocco	371		
Oman	366		
Ghana	331		

Ranking of Grade 4 Students' Science Achievement

TIMSS 2011		TIMSS 2015	
Country/Region	Average Scale Score	Country/Region	Average Scale Score
Korea, Rep. of	587	Singapore	590
Singapore	583	Korea, Rep. of	589
Finland	570	Japan	569
Japan	559	Russian Federation	567
Russian Federation	552	Hong Kong SAR	557
Chinese Taipei	552	Chinese Taipei	555
United States	544	Finland	554
Czech Republic	536	Kazakhstan	550
Hong Kong SAR	535	Poland	547
Hungary	534	United States	546
Sweden	533	Slovenia	543
Slovak Republic	532	Hungary	542
Austria	532	Sweden	540
Netherlands	531	Norway	538
England	529	England	536
Denmark	528	Bulgaria	536
Germany	528	Czech Republic	534
Italy	524	Croatia	533
Portugal	522	Ireland	529
Slovenia	520	Germany	528
Northern Ireland	517	Lithuania	528
Ireland	516	Denmark	527
Croatia	516	Canada	525
Australia	516	Serbia	525
Serbia	516	Australia	524
Lithuania	515	Slovak Republic	520
Belgium (Flemish)	509	Northern Ireland	520
Romania	505	Spain	518
Spain	505	Netherlands	517
Poland	505	Italy	516
TIMSS Scale Average	500	Belgium (Flemish)	512
New Zealand	497	Portugal	508
Kazakhstan	495	New Zealand	506
Norway	494	TIMSS Scale Average	500
Chile	480	France	487
Thailand	472	Turkey	483
Turkey	463	Cyprus	481
Georgia	455	Chile	478
Iran, Islamic Rep. of	453	Bahrain	459
Bahrain	449	Georgia	451
Malta	446	United Arab Emirates	451
Azerbaijan	438	Qatar	436
Saudi Arabia	429	Oman	431

TIMSS 2011		TIMSS 2015	
United Arab Emirates	428	Iran, Islamic Rep. of	421
Armenia	416	Indonesia	397
Qatar	394	Saudi Arabia	390
Oman	377	Morocco	352
Kuwait	347	Kuwait	337
Tunisia	346		
Morocco	264		
Yemen	209		

Ranking of Grade 8 Students' Science Achievement

TIMSS 2011		TIMSS 2015	
Country/Region	Average Scale Score	Country/Region	Average Scale Score
Singapore	590	Singapore	597
Chinese Taipei	564	Japan	571
Korea, Rep. of	560	Chinese Taipei	569
Japan	558	Korea, Rep. of	556
Finland	552	Slovenia	551
Slovenia	543	Hong Kong SAR	546
Russian Federation	542	Russian Federation	544
Hong Kong SAR	535	England	537
England	533	Kazakhstan	533
United States	525	Ireland	530
Hungary	522	United States	530
Australia	519	Hungary	527
Israel	516	Canada	526
Lithuania	514	Sweden	522
New Zealand	512	Lithuania	519
Sweden	509	New Zealand	513
Italy	501	Australia	512
Ukraine	501	Norway	509
TIMSS Scale Average	500	Israel	507
Norway	494	TIMSS Scale Average	500
Kazakhstan	490	Italy	499
Turkey	483	Turkey	493
Iran, Islamic Rep. of	474	Malta	481
Romania	465	United Arab Emirates	477
United Arab Emirates	465	Malaysia	471
Chile	461	Bahrain	466
Bahrain	452	Qatar	457
Thailand	451	Iran, Islamic Rep. of	456
Jordan	449	Thailand	456
Tunisia	439	Oman	455
Armenia	437	Chile	454
Saudi Arabia	436	Georgia	443
Malaysia	426	Jordan	426
Syrian Arab Republic	426	Kuwait	411
Palestinian Nat'l Auth.	420	Lebanon	398
Georgia	420	Saudi Arabia	396
Oman	420	Morocco	393
Qatar	419	Botswana	392
Macedonia, Rep. of	407	Egypt	371
Lebanon	406	South Africa	358
Indonesia	406		
Morocco	376		
Ghana	306		