Exhibit 3.12: Achievement in Science Cognitive Domains by Gender

Country	Knowing		Applying		Reasoning	
	Girls	Boys	Girls	Boys	Girls	Boys
Australia	505 (3.2)	516 (3.1) ▲	512 (3.5)	513 (3.4)	511 (3.3)	515 (3.2)
Bahrain	487 (3.5) ▲	438 (3.5)	489 (3.3) ▲	441 (3.7)	493 (3.6) ▲	442 (4.3)
Botswana (9)	379 (5.0) ▲	363 (3.4)	409 (3.9) ▲	387 (4.5)	398 (3.2) ▲	381 (3.0)
1 † Canada	512 (2.3)	524 (3.0) ▲	524 (2.4)	527 (2.6)	533 (2.6)	534 (2.5)
Chile	458 (3.6)	473 (4.5) ▲	442 (3.8)	450 (3.8)	443 (4.4)	454 (4.4) ▲
Chinese Taipei	582 (2.4)	596 (3.2) ▲	563 (2.2)	567 (2.7)	563 (2.5)	558 (2.6)
Egypt	376 (7.3)	368 (6.2)	378 (6.0) ▲	362 (5.6)	367 (6.2) ▲	350 (6.1)
England	520 (4.7)	525 (5.1)	543 (4.7)	534 (5.0)	545 (4.8)	545 (4.7)
1 2 Georgia	456 (3.4)	449 (4.9)	443 (3.3)	442 (3.8)	430 (4.2)	434 (4.3)
Hong Kong SAR	537 (4.1)	556 (4.6) ▲	536 (4.7)	545 (5.5)	548 (4.8)	552 (5.3)
Hungary	512 (4.8)	538 (3.6) ▲	522 (3.8)	535 (3.8) ▲	517 (4.4)	531 (4.0) ▲
Iran, Islamic Rep. of	456 (6.1)	455 (7.1)	461 (4.6)	454 (6.6)	458 (4.6)	450 (6.7)
Ireland	519 (3.2)	527 (4.6)	536 (3.1)	530 (4.4)	534 (2.8)	531 (4.6)
3 Israel	506 (4.5)	500 (5.3)	507 (4.1)	501 (4.7)	514 (4.7)	507 (5.1)
2 Italy	501 (3.7)	508 (3.2)	490 (3.0)	502 (2.7) ▲	489 (4.3)	498 (3.0)
Japan	563 (2.7)	572 (2.7) ▲	578 (2.5) ▲	571 (2.6)	573 (2.7)	568 (2.9)
Jordan	450 (4.5) ▲	410 (5.5)	448 (4.3) ▲	402 (5.3)	440 (4.3) ▲	398 (5.5)
Kazakhstan	528 (6.4)	529 (6.0)	540 (5.3) ▲	531 (4.4)	534 (5.6) ▲	522 (5.0)
Korea, Rep. of	549 (2.8)	561 (3.7) ▲	550 (2.3)	554 (2.8)	562 (2.8)	559 (3.4)
Kuwait	433 (5.6) ▲	396 (8.3)	431 (5.3) ▲	382 (8.4)	430 (5.6) ▲	369 (9.1)
Lebanon	406 (4.9)	399 (8.1)	405 (5.3) ▲	390 (7.4)	387 (6.4) ▲	375 (7.5)
2 Lithuania	511 (3.5)	516 (4.6)	519 (3.9)	514 (4.0)	527 (3.9)	524 (4.0)
Malaysia	470 (5.1) ▲	461 (5.9)	483 (4.0) ▲	469 (5.0)	470 (3.8) ▲	464 (4.6)
Malta	470 (2.3)	465 (3.6)	494 (2.6) ▲	484 (3.2)	485 (2.5) ▲	473 (3.0)
Morocco	396 (2.7)	394 (2.9)	396 (3.0) ▲	388 (3.0)	391 (2.8) ▲	379 (3.1)
† New Zealand	499 (3.3)	507 (4.4)	515 (3.6)	512 (4.6)	523 (3.7)	516 (4.3)
Norway (9)	493 (3.5)	508 (3.6) ▲	506 (3.2)	508 (3.5)	520 (3.5)	517 (3.3)
Oman	477 (3.6) ▲	434 (3.9)	478 (3.2) ▲	431 (4.1)	478 (2.6) ▲	432 (3.7)
Qatar	460 (4.4) ▲	436 (6.2)	475 (4.5) ▲	444 (5.6)	471 (4.2) ▲	437 (5.4)
Russian Federation	555 (5.4)	560 (5.6)	537 (5.1)	540 (4.7)	535 (4.5)	540 (4.5)
Saudi Arabia	417 (5.0) ▲	372 (8.1)	413 (5.4) ▲	351 (8.5)	433 (5.5) ▲	375 (8.2)
2 Singapore	589 (3.4)	598 (4.5) ▲	601 (3.8)	599 (4.5)	595 (3.5)	594 (4.2)
Slovenia	555 (2.8)	561 (3.7)	551 (2.4) ▲	544 (2.9)	557 (3.1) ▲	544 (3.1)
South Africa (9)	342 (7.3)	332 (7.0)	373 (6.9) ▲	363 (5.8)	354 (6.8)	346 (5.7)
Sweden	515 (4.1)	524 (3.6) ▲	520 (4.1)	517 (3.7)	532 (4.7) ▲	522 (4.1)
Thailand	477 (4.5) ▲	460 (5.5)	461 (4.8) ▲	437 (5.9)	456 (4.3) ▲	437 (5.1)
Turkey	497 (4.5) ▲	482 (4.9)	504 (4.0) ▲	482 (4.4)	508 (4.4) ▲	484 (4.8)
United Arab Emirates	490 (3.9) ▲	466 (4.9)	496 (3.6) ▲	460 (4.5)	490 (3.7) ▲	457 (4.4)
† United States	524 (3.6)	539 (3.6) ▲	530 (3.1)	532 (3.1)	525 (2.9)	527 (3.0)
International Avg.	487 (0.7) ▲	483 (0.8)	491 (0.7) ▲	479 (0.8)	490 (0.7) ▲	478 (0.8)
Benchmarking Participants						
† Buenos Aires, Argentina	393 (6.1)	401 (6.0)	381 (5.3)	378 (6.1)	375 (5.0)	371 (7.4)
Ontario, Canada	509 (3.0)	519 (3.4) ▲	526 (2.8)	525 (2.9)	533 (3.1)	531 (3.0)
‡ Quebec, Canada	517 (5.4)	538 (5.6) ▲	518 (4.8)	531 (5.4) ▲	530 (4.7)	541 (5.3) ▲
Norway (8)	471 (3.6)	484 (3.7) ▲	490 (3.2)	486 (3.2)	502 (3.0) ▲	495 (2.9)
Abu Dhabi, UAE	477 (7.4) ▲	429 (9.0)	487 (6.7) ▲	428 (8.5)	481 (6.5) ▲	427 (8.4)
Dubai, UAE	527 (4.1)	528 (5.6)	531 (3.9)	519 (4.9)	526 (3.8)	515 (4.7)
1 Florida, US	504 (8.9)	517 (6.8)	508 (7.0)	508 (6.0)	507 (7.5)	504 (6.5)

▲ Average significantly higher than other gender

See Appendix C.2 for target population coverage notes 1, 2, and 3. See Appendix C.8 for sampling guidelines and sampling participation notes †, ‡, and ‡.

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

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