

**Appendix E.1: Average Percent Correct in the Science Content and Cognitive Domains**

Country	Overall Science	Science Content Domains			Science Cognitive Domains		
		Life Science	Physical Science	Earth Science	Knowing	Applying	Reasoning
Australia	52 (0.6)	55 (0.6)	49 (0.7)	52 (0.7)	56 (0.6)	51 (0.7)	48 (0.6)
Bahrain	41 (0.4)	42 (0.4)	41 (0.4)	39 (0.4)	45 (0.4)	40 (0.4)	34 (0.5)
Belgium (Flemish)	49 (0.4)	50 (0.5)	46 (0.5)	49 (0.5)	50 (0.5)	48 (0.5)	47 (0.6)
Bulgaria	57 (1.2)	59 (1.2)	54 (1.2)	55 (1.2)	63 (1.2)	56 (1.2)	46 (1.2)
Canada	52 (0.5)	56 (0.5)	49 (0.5)	50 (0.6)	56 (0.5)	52 (0.5)	46 (0.5)
Chile	42 (0.5)	46 (0.5)	39 (0.5)	40 (0.6)	46 (0.5)	41 (0.6)	36 (0.6)
Chinese Taipei	59 (0.4)	58 (0.4)	61 (0.4)	58 (0.5)	62 (0.4)	58 (0.4)	56 (0.5)
Croatia	54 (0.4)	55 (0.5)	53 (0.5)	54 (0.7)	58 (0.5)	53 (0.5)	49 (0.6)
Cyprus	43 (0.5)	44 (0.5)	43 (0.6)	40 (0.6)	44 (0.5)	43 (0.6)	39 (0.5)
Czech Republic	55 (0.4)	57 (0.4)	52 (0.5)	54 (0.6)	60 (0.5)	52 (0.5)	48 (0.6)
Denmark	53 (0.4)	55 (0.4)	49 (0.6)	53 (0.6)	56 (0.5)	53 (0.5)	48 (0.6)
England	55 (0.5)	56 (0.5)	54 (0.5)	53 (0.7)	58 (0.5)	54 (0.5)	50 (0.6)
Finland	58 (0.4)	59 (0.4)	56 (0.5)	60 (0.5)	62 (0.5)	57 (0.4)	53 (0.5)
France	44 (0.5)	46 (0.5)	42 (0.5)	44 (0.7)	47 (0.6)	44 (0.6)	38 (0.5)
Georgia	39 (0.7)	42 (0.6)	35 (0.8)	37 (0.8)	44 (0.7)	38 (0.7)	29 (0.7)
Germany	53 (0.4)	54 (0.4)	53 (0.5)	51 (0.6)	56 (0.5)	52 (0.5)	48 (0.5)
Hong Kong SAR	60 (0.6)	59 (0.7)	58 (0.7)	63 (0.8)	64 (0.6)	58 (0.7)	53 (0.8)
Hungary	56 (0.7)	59 (0.7)	53 (0.7)	55 (0.8)	61 (0.7)	55 (0.7)	49 (0.7)
Indonesia	32 (0.6)	33 (0.7)	32 (0.7)	29 (0.6)	37 (0.7)	29 (0.5)	26 (0.7)
Iran, Islamic Rep. of	34 (0.6)	36 (0.6)	34 (0.6)	33 (0.7)	38 (0.6)	33 (0.6)	29 (0.7)
Ireland	53 (0.5)	55 (0.5)	51 (0.5)	55 (0.7)	57 (0.5)	53 (0.5)	47 (0.6)
Italy	51 (0.5)	53 (0.5)	49 (0.5)	49 (0.7)	56 (0.5)	49 (0.6)	45 (0.6)
Japan	62 (0.4)	60 (0.4)	65 (0.4)	60 (0.6)	59 (0.4)	63 (0.4)	63 (0.4)
Kazakhstan	58 (0.9)	58 (0.8)	58 (1.1)	56 (1.0)	62 (0.9)	56 (1.0)	53 (1.1)
Korea, Rep. of	66 (0.4)	66 (0.4)	67 (0.4)	66 (0.6)	67 (0.4)	66 (0.4)	64 (0.5)
ψ Kuwait	25 (0.7)	26 (0.8)	23 (0.7)	26 (0.6)	30 (0.8)	24 (0.7)	18 (0.6)
Lithuania	53 (0.5)	54 (0.6)	53 (0.6)	50 (0.6)	56 (0.6)	52 (0.5)	50 (0.7)
ψ Morocco	27 (0.6)	28 (0.6)	27 (0.7)	24 (0.6)	30 (0.6)	26 (0.6)	22 (0.6)
Netherlands	50 (0.5)	53 (0.5)	46 (0.5)	51 (0.7)	52 (0.6)	50 (0.5)	47 (0.6)
New Zealand	49 (0.5)	51 (0.5)	45 (0.5)	49 (0.6)	52 (0.5)	47 (0.5)	45 (0.5)
Northern Ireland	51 (0.5)	53 (0.5)	49 (0.5)	53 (0.7)	55 (0.6)	50 (0.5)	46 (0.6)
Norway (5)	55 (0.5)	58 (0.5)	50 (0.6)	58 (0.8)	58 (0.6)	55 (0.6)	49 (0.6)
Oman	38 (0.5)	39 (0.5)	38 (0.5)	36 (0.5)	41 (0.5)	37 (0.5)	32 (0.5)
Poland	57 (0.5)	61 (0.5)	54 (0.5)	56 (0.6)	60 (0.5)	58 (0.6)	52 (0.5)
Portugal	48 (0.3)	50 (0.3)	45 (0.4)	50 (0.5)	52 (0.4)	47 (0.4)	42 (0.5)
Qatar	38 (0.6)	40 (0.6)	36 (0.7)	36 (0.6)	42 (0.6)	36 (0.7)	32 (0.7)
Russian Federation	62 (0.7)	63 (0.7)	60 (0.7)	60 (0.7)	65 (0.8)	62 (0.6)	55 (0.7)
Saudi Arabia	31 (0.6)	32 (0.6)	30 (0.7)	32 (0.7)	37 (0.7)	30 (0.6)	23 (0.6)
Serbia	52 (0.7)	56 (0.6)	52 (0.8)	46 (0.9)	56 (0.7)	52 (0.8)	47 (0.8)
Singapore	67 (0.8)	71 (0.8)	68 (0.8)	57 (0.8)	67 (0.7)	68 (0.8)	65 (0.8)
Slovak Republic	52 (0.6)	53 (0.6)	52 (0.6)	50 (0.7)	57 (0.6)	50 (0.6)	44 (0.6)
Slovenia	56 (0.4)	58 (0.5)	56 (0.5)	53 (0.6)	59 (0.5)	57 (0.5)	51 (0.5)
Spain	51 (0.5)	54 (0.5)	47 (0.6)	51 (0.7)	56 (0.6)	49 (0.5)	45 (0.6)
Sweden	56 (0.7)	56 (0.6)	53 (0.8)	59 (0.8)	59 (0.7)	55 (0.8)	51 (0.7)
Turkey	45 (0.5)	45 (0.5)	46 (0.6)	44 (0.6)	48 (0.5)	44 (0.6)	41 (0.7)
United Arab Emirates	41 (0.4)	42 (0.5)	40 (0.5)	40 (0.5)	46 (0.5)	40 (0.5)	34 (0.5)
United States	57 (0.4)	61 (0.4)	54 (0.5)	56 (0.5)	61 (0.5)	57 (0.4)	51 (0.4)
International Avg.	50 (0.1)	51 (0.1)	48 (0.1)	49 (0.1)	53 (0.1)	49 (0.1)	44 (0.1)

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

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

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

**Appendix E.1: Average Percent Correct in the Science Content and Cognitive Domains (Continued)**

Country	Overall Science	Science Content Domains			Science Cognitive Domains		
		Life Science	Physical Science	Earth Science	Knowing	Applying	Reasoning
Benchmarking Participants							
Buenos Aires, Argentina	32 (0.6)	35 (0.7)	30 (0.7)	29 (0.7)	36 (0.7)	31 (0.7)	27 (0.7)
Ontario, Canada	54 (0.5)	58 (0.5)	50 (0.5)	50 (0.6)	57 (0.5)	54 (0.5)	47 (0.6)
Quebec, Canada	52 (0.8)	55 (0.8)	49 (1.0)	50 (1.0)	56 (0.9)	51 (1.0)	47 (0.9)
Norway (4)	45 (0.5)	49 (0.5)	40 (0.5)	47 (0.6)	50 (0.5)	44 (0.6)	38 (0.5)
Abu Dhabi, UAE	35 (0.9)	37 (1.0)	34 (0.9)	35 (0.9)	39 (1.0)	34 (0.9)	29 (0.8)
Dubai, UAE	53 (0.3)	54 (0.4)	51 (0.4)	51 (0.4)	57 (0.4)	52 (0.4)	45 (0.4)
Florida, US	58 (1.1)	61 (1.0)	54 (1.2)	56 (1.2)	62 (1.0)	57 (1.1)	50 (1.2)

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



**IEA**

**TIMSS & PIRLS**  
International Study Center  
Lynch School of Education, Boston College