| Country | School Participation |  | Class <br> Participation | Student Participation | Overall Participation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before Replacement | After Replacement |  |  | Before Replacement | After Replacement |
| Australia | 98\% | 100\% | 100\% | 91\% | 89\% | 91\% |
| Bahrain | 100\% | 100\% | 100\% | 97\% | 97\% | 97\% |
| Chile | 90\% | 99\% | 100\% | 96\% | 86\% | 95\% |
| Chinese Taipei | 98\% | 99\% | 100\% | 98\% | 96\% | 97\% |
| Cyprus | 100\% | 100\% | 100\% | 96\% | 96\% | 96\% |
| Egypt | 99\% | 100\% | 100\% | 97\% | 96\% | 97\% |
| England | 83\% | 90\% | 100\% | 95\% | 79\% | 85\% |
| Finland | 100\% | 100\% | 100\% | 96\% | 95\% | 95\% |
| France | 100\% | 100\% | 100\% | 97\% | 97\% | 97\% |
| Georgia | 90\% | 92\% | 100\% | 97\% | 88\% | 89\% |
| $\dagger$ Hong Kong SAR | 70\% | 86\% | 100\% | 94\% | 66\% | 81\% |
| Hungary | 95\% | 99\% | 100\% | 97\% | 92\% | 96\% |
| Iran, Islamic Rep. of | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Ireland | 97\% | 98\% | 100\% | 88\% | 85\% | 86\% |
| Israel | 95\% | 98\% | 100\% | 93\% | 88\% | 91\% |
| Italy | 97\% | 100\% | 100\% | 97\% | 94\% | 97\% |
| Japan | 83\% | 94\% | 100\% | 94\% | 77\% | 88\% |
| Jordan | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Kazakhstan | 100\% | 100\% | 100\% | 99\% | 99\% | 99\% |
| Korea, Rep. of | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| Kuwait | 99\% | 99\% | 100\% | 97\% | 96\% | 96\% |
| Lebanon | 82\% | 93\% | 100\% | 95\% | 78\% | 88\% |
| Lithuania | 99\% | 99\% | 100\% | 93\% | 92\% | 92\% |
| Malaysia | 99\% | 100\% | 100\% | 98\% | 97\% | 98\% |
| Morocco | 100\% | 100\% | 100\% | 98\% | 98\% | 98\% |
| + New Zealand | 77\% | 89\% | 100\% | 91\% | 70\% | 81\% |
| + Norway (9) | 79\% | 95\% | 99\% | 89\% | 70\% | 84\% |
| Oman | 99\% | 100\% | 100\% | 99\% | 97\% | 99\% |
| Portugal | 95\% | 99\% | 99\% | 96\% | 90\% | 94\% |
| Qatar | 100\% | 100\% | 100\% | 97\% | 97\% | 97\% |
| Romania | 95\% | 100\% | 100\% | 94\% | 89\% | 94\% |
| Russian Federation | 99\% | 100\% | 100\% | 97\% | 97\% | 97\% |
| Saudi Arabia | 100\% | 100\% | 100\% | 99\% | 99\% | 99\% |
| Singapore | 100\% | 100\% | 100\% | 96\% | 96\% | 96\% |
| South Africa (9) | 99\% | 100\% | 100\% | 96\% | 95\% | 96\% |
| Sweden | 98\% | 99\% | 100\% | 92\% | 90\% | 91\% |
| Turkey | 100\% | 100\% | 100\% | 99\% | 98\% | 99\% |
| United Arab Emirates | 100\% | 100\% | 100\% | 96\% | 96\% | 96\% |
| $\dagger$ United States | 72\% | 85\% | 100\% | 94\% | 67\% | 79\% |
| Benchmarking Participants |  |  |  |  |  |  |
| Ontario, Canada | 93\% | 93\% | 100\% | 94\% | 87\% | 88\% |
| $\ddagger$ Quebec, Canada | 74\% | 77\% | 99\% | 95\% | 70\% | 73\% |
| Moscow City, Russian Fed. | 99\% | 100\% | 100\% | 97\% | 96\% | 97\% |
| Gauteng, RSA (9) | 99\% | 100\% | 100\% | 97\% | 95\% | 97\% |
| Western Cape, RSA (9) | 99\% | 100\% | 100\% | 95\% | 95\% | 95\% |
| Abu Dhabi, UAE | 100\% | 100\% | 100\% | 96\% | 96\% | 96\% |
| Dubai, UAE | 100\% | 100\% | 100\% | 96\% | 96\% | 96\% |

TIMSS guidelines for sampling participation: The minimum acceptable participation rates were 85 percent of both schools and students, or a combined rate (the product of school and student participation) of 75 percent.
Participants not meeting these guidelines were annotated as follows:
$\dagger$ Met guidelines for sample participation rates only after replacement schools were included
$\ddagger$ Nearly satisfied guidelines for sample participation rates after replacement schools were included
三 Did not satisfy guidelines for sample participation rates
TIMSS \& PIRLS
SOURCE: IEA's Trends in International Mathematics and Science Study - TIMSS 2019
Downloaded from http://timss2019.org/download

