

Exhibit 1.12: TIMSS 2015 Achievement Items by Cognitive Domain – Fourth Grade

Cognitive Domain	Number of Trend Items in TIMSS 2015	Percentage of Trend Score Points	Number of New Items in TIMSS 2015	Percentage of New Score Points	Total Items	Achieved Percentage of Score Points	Target Percentage of Score Points
Mathematics Items							
Knowing	41 (41)	39%	23 (24)	32%	64 (65)	36%	40%
Applying	42 (45)	42%	30 (35)	46%	72 (80)	44%	40%
Reasoning	19 (20)	19%	14 (17)	22%	33 (37)	20%	20%
Total	102 (106)		67 (76)		169 (182)		
Mathematics - Numeracy Items							
Knowing			55 (55)	52%	55 (55)	52%	50%
Applying			35 (36)	34%	35 (36)	34%	15%
Reasoning			12 (15)	14%	12 (15)	14%	35%
Total			102 (106)		102 (106)		
Science Items							
Knowing	41 (44)	40%	31 (34)	43%	72 (78)	41%	40%
Applying	40 (43)	39%	27 (28)	35%	67 (71)	38%	40%
Reasoning	20 (22)	20%	17 (17)	22%	37 (39)	21%	20%
Total	101 (109)		75 (79)		176 (188)		

Score points are shown in parentheses.

Because percentages are rounded to the nearest whole number, some totals may appear inconsistent.

Counts of TIMSS Numeracy achievement items do not include the two fourth grade TIMSS 2015 mathematics blocks (see [Chapter 4](#) of the *TIMSS 2015 Assessment Frameworks*).