

TIMSS 2015 TCMA National Item Selection
Fourth Grade Science

Item (pts)	Country	National Curriculum Coverage																												
		Australia	Bahrain	Belgium (Flemish)	Bulgaria	Canada	Chile	Chinese Taipei	Croatia	Cyprus	Czech Republic	Denmark	England	Finland	France	Georgia	Germany	Hong Kong SAR	Hungary	Indonesia	Iran, Islamic Rep. of	Ireland	Italy	Japan	Kazakhstan	Korea, Rep. of	Kuwait	Lithuania	Morocco	Netherlands
S01_01	S041010 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_02	S041034 (1)	●	●	○	●	○	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	
S01_03	S041017 (1)	●	●	●	●	●	○	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_04	S041124 (1)	●	●	●	●	●	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_05	S041186 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_06	S041037 (2)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_07	S041119 (1)	○	●	○	●	○	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_08	S041105 (1)	●	●	○	●	○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_10Z	S041149Z (2)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_11	S041032 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_12	S041068 (1)	○	●	●	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S01_13	S041303 (1)	○	●	○	●	●	●	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S02_01	S061105 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_02	S061010 (1)	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_03	S061028 (1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_04	S061065 (1)	○	●	●	●	●	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_05	S061130 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_06	S061081 (1)	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_07	S061060 (1)	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_08	S061075 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_09	S061031 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_10A	S061049A (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_10B	S061049B (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_11	S061098 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_12	S061172 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_01	S051041 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_02	S051037 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_03	S051008 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_04	S051004 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_05Z	S051026Z (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_06	S051130 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_07	S051114 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_08Z	S051121Z (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_09	S051147 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_10	S051105 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_11	S051110 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_12	S051111 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_01	S061135 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_02	S061069 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_03	S061134 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_04	S061140 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_05	S061019 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_06	S061022 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_07	S061036 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_08	S061160 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_09	S061159 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_10	S061091 (2)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_11	S061118 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_12	S061097 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S05_01	S041009 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Item (pts)	Country	National Curriculum Coverage										Benchmarking Participants						
		Northern Ireland	Norway	Oman	Poland	Portugal	Qatar	Russian Federation	Saudi Arabia	Serbia	Singapore	Slovak Republic	Slovenia	Spain	Sweden	Turkey	United Arab Emirates	United States
S01_01	S041010 (1)	●	●	●	●	●	●	●	○	○	○	●	●	●	●	●	○	●
S01_02	S041034 (1)	●	●	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●
S01_03	S041017 (1)	○	●	●	●	●	●	●	○	●	●	○	○	●	●	●	○	●
S01_04	S041124 (1)	●	●	●	●	●	●	●	○	●	○	○	○	●	●	●	○	●
S01_05	S041186 (1)	○	●	●	●	●	●	●	●	○	●	●	●	●	●	●	○	●
S01_06	S041037 (2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S01_07	S041119 (1)	●	○	●	○	●	●	●	○	○	●	○	●	●	●	●	○	●
S01_08	S041105 (1)	●	●	●	○	○	●	●	○	●	○	○	○	●	●	●	●	●
S01_10Z	S041149Z (2)	○	○	●	●	●	●	●	○	○	●	○	○	○	●	●	○	●
S01_11	S041032 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	○	●
S01_12	S041068 (1)	○	●	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●
S01_13	S041303 (1)	○	●	●	○	●	●	●	○	●	●	○	●	●	●	●	●	●
S02_01	S061105 (1)	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●
S02_02	S061010 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_03	S061028 (1)	○	○	●	○	●	●	●	●	○	○	●	●	●	●	●	●	●
S02_04	S061065 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_05	S061130 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	○	●
S02_06	S061081 (1)	○	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S02_07	S061060 (1)	●	●	●	●	○	●	●	●	○	●	●	●	●	●	●	●	●
S02_08	S061075 (1)	●	○	○	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S02_09	S061031 (1)	●	○	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●
S02_10A	S061049A (1)	●	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S02_10B	S061049B (1)	●	○	○	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S02_11	S061098 (1)	○	●	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●
S02_12	S061172 (1)	○	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S03_01	S051041 (1)	○	○	●	●	●	●	●	●	○	○	●	●	●	●	●	○	●
S03_02	S051037 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_03	S051008 (1)	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S03_04	S051004 (1)	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S03_05Z	S051026Z (1)	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S03_06	S051130 (1)	●	●	●	●	○	●	●	●	○	●	●	●	●	●	●	●	●
S03_07	S051114 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_08Z	S051121Z (1)	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●
S03_09	S051147 (1)	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S03_10	S051105 (1)	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S03_11	S051110 (1)	●	●	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●
S03_12	S051111 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_01	S061135 (1)	●	○	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S04_02	S061069 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_03	S061134 (1)	○	○	○	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S04_04	S061140 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_05	S061019 (1)	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_06	S061022 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_07	S061036 (1)	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_08	S061160 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_09	S061159 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_10	S061091 (2)	●	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_11	S061118 (1)	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S04_12	S061097 (1)	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S05_01	S041009 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Item (pts)	Country	National Curriculum Coverage																												
		Australia	Bahrain	Belgium (Flemish)	Bulgaria	Canada	Chile	Chinese Taipei	Croatia	Cyprus	Czech Republic	Denmark	England	Finland	France	Georgia	Germany	Hong Kong SAR	Hungary	Indonesia	Iran, Islamic Rep. of	Ireland	Italy	Japan	Kazakhstan	Korea, Rep. of	Kuwait	Lithuania	Morocco	Netherlands
S05_02	S041223 (1)	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_03	S041026 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_04	S041177 (2)	●	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_05	S041183 (2)	●	●	●	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_06	S041008 (1)	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_08	S041195 (1)	○	●	○	○	○	○	○	●	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_09A	S041134A (1)	○	●	○	●	○	○	○	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_09B	S041134B (1)	○	●	○	●	○	○	○	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_09C	S041134C (1)	○	●	○	●	○	○	○	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_10	S041191 (1)	●	●	○	●	○	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_11	S041107 (2)	○	●	●	●	●	○	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S05_12	S041113 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S06_01	S051185 (1)	●	●	●	●	○	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_02	S051048 (2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_03	S051164 (1)	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_04	S051186 (1)	○	●	○	●	●	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_05	S051137 (1)	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_06	S051007 (1)	●	●	●	●	●	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_07	S051087 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_08Z	S051188Z (1)	○	●	○	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_10	S051201 (1)	●	●	○	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	
S06_11	S051102 (1)	●	●	●	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_12	S051095 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_01	S041027 (1)	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_02	S041043 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_03	S041050 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_04	S041070 (1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_05	S041006 (2)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_06	S041052 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_07	S041301 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_09	S041033 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_11	S041077 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_12	S041209 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_13	S041081 (2)	○	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_14	S041102 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_01	S061141 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_02	S061023 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_03	S061054 (2)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_04	S061007 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_05	S061006 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_06	S061108 (1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_07	S061109 (1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_08	S061080 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_09	S061088 (1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_10	S061151 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_11	S061150 (1)	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_12	S061169 (1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S09_01	S051044 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S09_03	S051003 (1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S09_04	S051168 (1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Item (pts)	Country	National Curriculum Coverage										Benchmarking Participants						
		Northern Ireland	Norway	Oman	Poland	Portugal	Qatar	Russian Federation	Saudi Arabia	Serbia	Singapore	Slovak Republic	Slovenia	Spain	Sweden	Turkey	United Arab Emirates	United States
S05_02	S041223 (1)	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●
S05_03	S041026 (1)	○	●	●	○	●	●	●	○	○	●	●	●	●	●	○	●	●
S05_04	S041177 (2)	●	○	●	●	●	●	●	●	●	○	○	●	●	●	●	●	○
S05_05	S041183 (2)	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●
S05_06	S041008 (1)	●	○	●	●	●	●	●	●	○	○	●	●	●	●	●	●	●
S05_08	S041195 (1)	●	○	●	○	●	●	●	●	●	○	●	●	○	○	●	●	●
S05_09A	S041134A (1)	●	○	●	●	●	●	●	○	○	●	●	●	●	●	●	●	●
S05_09B	S041134B (1)	●	○	●	●	●	●	●	○	○	●	●	●	●	●	●	●	●
S05_09C	S041134C (1)	●	○	●	●	●	●	●	○	○	●	●	●	●	●	●	●	●
S05_10	S041191 (1)	○	○	●	○	●	●	●	○	○	●	●	●	●	●	●	●	●
S05_11	S041107 (2)	●	●	●	○	●	●	●	○	○	○	●	●	●	●	●	●	●
S05_12	S041113 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_01	S051185 (1)	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_02	S051048 (2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S06_03	S051164 (1)	○	○	●	○	●	●	●	○	●	●	●	●	●	●	●	●	●
S06_04	S051186 (1)	●	○	●	●	●	●	●	●	○	●	○	○	●	●	●	●	●
S06_05	S051137 (1)	●	●	●	●	●	●	●	●	○	●	○	●	●	●	●	●	●
S06_06	S051007 (1)	●	○	●	●	●	●	●	○	○	●	●	●	●	●	●	●	●
S06_07	S051087 (1)	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●
S06_08Z	S051188Z (1)	●	●	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●
S06_10	S051201 (1)	○	○	●	○	●	●	●	○	○	●	●	●	●	●	●	●	●
S06_11	S051102 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S06_12	S051095 (1)	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●
S07_01	S041027 (1)	●	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S07_02	S041043 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S07_03	S041050 (1)	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S07_04	S041070 (1)	●	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●
S07_05	S041006 (2)	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_06	S041052 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_07	S041301 (1)	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_09	S041033 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S07_11	S041077 (1)	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S07_12	S041209 (1)	○	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S07_13	S041081 (2)	○	●	○	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S07_14	S041102 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S08_01	S061141 (1)	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●
S08_02	S061023 (1)	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S08_03	S061054 (2)	●	○	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●
S08_04	S061007 (1)	○	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S08_05	S061006 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_06	S061108 (1)	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_07	S061109 (1)	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_08	S061080 (1)	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●
S08_09	S061088 (1)	●	○	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S08_10	S061151 (1)	●	●	○	○	●	●	●	●	○	●	●	●	●	●	●	●	●
S08_11	S061150 (1)	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●
S08_12	S061169 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S09_01	S051044 (1)	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S09_03	S051003 (1)	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S09_04	S051168 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Item (pts)	Country	National Curriculum Coverage																														
		Australia	Bahrain	Belgium (Flemish)	Bulgaria	Canada	Chile	Chinese Taipei	Croatia	Cyprus	Czech Republic	Denmark	England	Finland	France	Georgia	Germany	Hong Kong SAR	Hungary	Indonesia	Iran, Islamic Rep. of	Ireland	Italy	Japan	Kazakhstan	Korea, Rep. of	Kuwait	Lithuania	Morocco	Netherlands	New Zealand	
S09_05	S051010	(1)	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
S09_06	S051035	(1)	●	●	●	●	●	●	○	○	●	●	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●			
S09_07	S051059	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
S09_08	S051142	(1)	●	●	●	○	○	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
S09_09A	S051131A	(1)	○	●	○	○	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
S09_09B	S051131B	(1)	○	●	●	○	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
S09_10	S051151	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
S09_11	S051157	(1)	●	●	○	○	○	○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
S10_01	S061071	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
S10_02	S061138	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
S10_03A	S061016A	(1)	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
S10_03B	S061016B	(1)	○	●	●	●	●	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
S10_04	S061011	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_06	S061083	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_07	S061034	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_08	S061044	(1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_09A	S061142A	(1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_09B	S061142B	(1)	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_10A	S061115A	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_10B	S061115B	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_01	S051161	(1)	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_02	S051051	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_03Z	S051138Z	(1)	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_04	S051194	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_05	S051029	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_06	S051077	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_07	S051200	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_08	S051075	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_09	S051065	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_10	S051191	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_11	S051099	(1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_12	S051175	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_01	S061132	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_02	S061120	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_03	S061025	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_04A	S061133A	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_04B	S061133B	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_05	S061074	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_06	S061093	(2)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_07	S061161	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_08A	S061042A	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S12_08B	S061042B	(1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_09A	S061041A	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_09B	S061041B	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_10	S061155	(1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S13_01	S051054	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_02	S051024	(1)	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_03A	S051132A	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_03B	S051132B	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_04	S051040	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Item (pts)	Country	National Curriculum Coverage										Benchmarking Participants							
		Northern Ireland	Norway	Oman	Poland	Portugal	Qatar	Russian Federation	Saudi Arabia	Serbia	Singapore	Slovak Republic	Slovenia	Spain	Sweden	Turkey	United Arab Emirates	United States	
S09_05	S051010 (1)	●	●	●	●	●	●	○	○	○	●	●	●	●	●	●	○	●	
S09_06	S051035 (1)	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	
S09_07	S051059 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S09_08	S051142 (1)	●	●	●	●	●	●	●	○	○	●	●	●	●	●	●	○	○	
S09_09A	S051131A (1)	●	○	○	○	●	●	○	●	●	●	●	●	●	●	●	●	●	
S09_09B	S051131B (1)	●	○	○	○	●	●	○	●	●	●	●	●	●	●	●	●	●	
S09_10	S051151 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	○	●	
S09_11	S051157 (1)	●	●	○	○	●	●	●	○	●	○	○	○	●	●	●	●	●	
S10_01	S061071 (1)	○	○	●	○	●	●	●	○	○	○	●	●	●	●	●	○	●	
S10_02	S061138 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	
S10_03A	S061016A (1)	●	○	●	●	●	●	●	●	○	●	○	○	●	●	●	○	●	
S10_03B	S061016B (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_04	S061011 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_06	S061083 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_07	S061034 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	
S10_08	S061044 (1)	○	●	●	○	●	●	●	○	○	●	○	●	●	●	●	○	●	
S10_09A	S061142A (1)	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	
S10_09B	S061142B (1)	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	
S10_10A	S061115A (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S10_10B	S061115B (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	
S11_01	S051161 (1)	●	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●	
S11_02	S051051 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_03Z	S051138Z (1)	○	○	●	○	●	●	●	○	○	○	○	●	●	●	●	○	●	
S11_04	S051194 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_05	S051029 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_06	S051077 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	
S11_07	S051200 (1)	○	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	
S11_08	S051075 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_09	S051065 (1)	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	
S11_10	S051191 (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S11_11	S051099 (1)	○	●	●	○	●	●	●	○	○	●	●	●	●	●	●	●	●	
S11_12	S051175 (1)	○	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	
S12_01	S061132 (1)	○	●	○	○	●	●	●	●	○	○	○	○	●	●	●	○	●	
S12_02	S061120 (1)	○	●	●	○	●	●	●	●	○	○	○	○	●	●	●	○	●	
S12_03	S061025 (1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	
S12_04A	S061133A (1)	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_04B	S061133B (1)	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_05	S061074 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_06	S061093 (2)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	
S12_07	S061161 (1)	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	
S12_08A	S061042A (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_08B	S061042B (1)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_09A	S061041A (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_09B	S061041B (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S12_10	S061155 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S13_01	S051054 (1)	○	○	●	○	●	●	●	●	○	○	○	○	●	●	●	●	●	
S13_02	S051024 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S13_03A	S051132A (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
S13_03B	S051132B (1)	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	
S13_04	S051040 (1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Item (pts)	Country	National Curriculum Coverage																											
		Australia	Bahrain	Belgium (Flemish)	Bulgaria	Canada	Chile	Chinese Taipei	Croatia	Cyprus	Czech Republic	Denmark	England	Finland	France	Georgia	Germany	Hong Kong SAR	Hungary	Indonesia	Iran, Islamic Rep. of	Ireland	Italy	Japan	Kazakhstan	Korea, Rep. of	Kuwait	Lithuania	Morocco
S13_05	S051193	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_06	S051063	(1)	○	●	●	●	●	○	●	○	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●
S13_07	S051012	(1)	●	●	○	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_08	S051115	(1)	●	●	●	●	○	●	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_09	S051180	(1)	●	●	○	○	○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_10	S051106	(1)	●	●	○	○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_11	S051148	(1)	○	●	○	●	○	●	○	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●
S14_02	S061014	(2)	●	○	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_03	S061056	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_04	S061015	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_05	S061113	(1)	○	○	○	○	○	○	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_06	S061107	(1)	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_07	S061046	(1)	○	●	○	●	○	●	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_08	S061047	(1)	○	●	○	○	○	○	○	●	●	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_09	S061048	(1)	●	●	○	●	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_10	S061096	(1)	●	●	○	○	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_11	S061124	(1)	●	●	○	○	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_12	S061116	(1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Item (pts)	Country	● Item covered in national curriculum										○ Item not covered in national curriculum										Benchmarking Participants
		Northern Ireland	Norway	Oman	Poland	Portugal	Qatar	Russian Federation	Saudi Arabia	Serbia	Singapore	Slovak Republic	Slovenia	Spain	Sweden	Turkey	United Arab Emirates	United States				
S13_05	S051193	(1)	●	●	●	●	●	●	●	○	●	●	●	●	●	●	○	●	●	●	●	●
S13_06	S051063	(1)	●	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S13_07	S051012	(1)	○	●	●	○	●	●	●	○	●	●	●	●	●	●	○	●	●	●	●	●
S13_08	S051115	(1)	○	○	●	○	●	●	●	○	●	●	●	●	●	●	○	●	●	●	●	●
S13_09	S051180	(1)	●	●	●	○	●	●	●	○	●	●	●	●	●	●	●	○	●	●	●	●
S13_10	S051106	(1)	○	●	●	○	●	●	●	○	●	○	○	○	●	●	●	●	○	●	●	●
S13_11	S051148	(1)	○	●	●	○	●	●	●	○	○	○	●	●	●	●	●	●	●	●	●	●
S14_02	S061014	(2)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●
S14_03	S061056	(1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●
S14_04	S061015	(1)	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●
S14_05	S061113	(1)	○	○	●	●	●	●	●	○	○	●	○	●	●	●	●	●	●	●	●	●
S14_06	S061107	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_07	S061046	(1)	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_08	S061047	(1)	●	○	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●
S14_09	S061048	(1)	●	○	●	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●
S14_10	S061096	(1)	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_11	S061124	(1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S14_12	S061116	(1)	○	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●