

Mathematics: Number / Applying  
A\_MD1\_01 ME71018: Seeds left over - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	45.6	20.9	22.6	44.8	9.9	1.5	0.2	45.4	45.8
	2023	1984	41.3	21.0	24.7	39.9	11.1	1.5	1.7	40.4	42.0
Chile	2019	581	36.2	27.2	23.0	35.1	11.6	2.1	0.9	36.8	35.6
	2023	649	26.8	31.2	26.8	25.6	11.8	1.4	3.1	29.6	24.6
Chinese Taipei	2019	536	78.8	4.1	16.4	78.8	0.6	0.0	0.0	79.0	78.7
	2023	1067	84.9	2.8	11.1	84.8	1.1	0.2	0.0	83.1	86.5
Czech Republic	2019	662	66.3	11.1	17.9	66.0	4.5	0.5	0.0	65.7	66.9
	2023	997	66.9	11.3	15.1	65.7	6.1	1.5	0.2	67.4	66.3
Denmark	2019	463	52.3	18.1	20.3	51.1	8.2	2.1	0.2	54.7	50.4
	2023	753	39.7	21.9	27.2	38.1	8.8	1.7	2.2	39.3	40.1
England	2019	483	58.6	14.3	21.9	58.3	4.8	0.6	0.0	58.8	58.5
	2023	600	60.7	11.8	20.0	60.0	7.2	1.0	0.0	59.8	62.2
Finland	2019	680	59.5	11.1	22.0	59.0	7.1	0.9	0.0	56.6	61.8
	2023	860	55.0	12.4	25.9	53.7	5.7	1.9	0.4	50.5	59.5
France	2019	589	45.4	18.4	22.2	44.4	12.9	2.2	0.0	44.8	45.9
	2023	678	44.2	18.6	22.8	40.8	10.2	4.4	3.2	40.0	48.3
Georgia	2019	541	48.9	25.5	20.0	47.9	4.5	2.1	0.0	55.7	42.8
	2023	652	48.7	19.8	21.3	44.7	5.8	3.9	4.4	52.6	45.2
Germany	2019	482	62.8	10.4	18.3	62.5	8.3	0.5	0.0	65.9	59.9
	2023	644	52.9	16.5	18.3	51.8	11.4	2.1	0.0	51.6	54.0
Hong Kong SAR	2019	430	80.9	6.1	11.8	80.7	1.2	0.2	0.0	85.2	76.9
	2023	607	80.7	4.9	11.4	80.4	3.0	0.4	0.0	80.5	80.8
Hungary	2019	663	57.1	16.0	17.1	56.5	9.3	1.0	0.0	58.8	55.6
	2023	763	54.4	17.7	21.1	53.7	6.2	1.0	0.2	49.4	59.4
Italy	2019	528	49.8	12.4	28.6	49.0	8.4	1.4	0.3	47.4	52.3
	2023	661	52.8	16.7	21.2	50.8	7.6	1.9	1.9	49.7	55.5
Korea, Rep. of	2019	564	72.2	7.4	18.4	72.2	2.0	0.0	0.0	73.1	71.1
	2023	871	79.6	4.6	12.2	79.0	3.5	0.7	0.1	79.0	80.0
Lithuania	2019	527	55.5	13.9	22.3	54.7	7.7	1.4	0.0	52.9	57.8
	2023	657	63.6	7.5	24.5	63.4	4.3	0.4	0.0	61.2	66.2
Netherlands	2019	478	64.1	6.8	24.7	63.4	4.0	0.9	0.2	65.4	62.8
	2023	508	63.4	7.9	23.5	62.3	4.5	1.2	0.6	66.2	59.7
Norway (5)	2019	571	58.5	12.7	22.5	57.5	5.5	1.7	0.1	63.1	53.9
	2023	784	53.8	16.6	21.9	51.4	5.6	1.8	2.6	54.3	53.2
Portugal	2019	626	50.0	14.7	30.5	49.7	4.5	0.5	0.1	47.4	52.3
	2023	750	45.2	20.2	25.3	43.8	7.6	1.8	1.3	40.2	50.4
Qatar	2019	705	36.7	28.2	22.3	35.8	11.4	2.2	0.1	40.9	32.5
	2023	936	39.3	27.6	22.6	38.2	8.8	1.5	1.3	42.7	36.2
Singapore	2019	849	86.4	4.8	7.4	86.4	1.4	0.0	0.0	86.4	86.4
	2023	1276	83.6	4.8	8.9	83.4	2.6	0.2	0.0	83.9	83.3
Slovak Republic	2019	606	47.0	18.8	24.6	46.4	8.9	1.2	0.0	50.0	43.8
	2023	693	44.9	19.3	29.0	44.1	5.9	1.4	0.3	48.2	42.2
Spain	2019	1349	33.8	20.5	31.7	33.6	13.5	0.7	0.0	34.1	33.6
	2023	1479	37.3	23.3	24.7	36.0	12.6	1.6	1.9	35.6	38.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying  
A\_MD1\_01 ME71018: Seeds left over - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	47.6	19.4	24.9	46.4	6.8	2.1	0.5	49.6	45.7
	2023	743	52.8	16.5	23.8	50.5	4.9	1.8	2.6	50.1	56.0
United Arab Emirates	2019	3649	42.0	27.3	20.6	41.5	9.5	1.0	0.1	40.9	43.2
	2023	4333	46.2	23.0	19.8	44.9	9.5	1.0	1.7	44.8	47.5
United States	2019	1248	59.0	12.1	22.2	58.8	6.6	0.4	0.0	59.2	58.8
	2023	1258	57.0	13.1	22.3	55.6	6.5	0.9	1.5	54.2	59.6
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International Avg. (25)	2019	20331	55.8	15.3	21.4	55.2	6.9	1.1	0.1	56.7	54.9
	2023	25203	55.0	15.6	21.0	53.7	6.9	1.5	1.3	54.2	55.9
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Abu Dhabi, UAE	2019	1271	30.9	36.9	21.5	30.6	9.9	1.0	0.1	31.0	31.1
	2023	1074	35.7	30.4	21.1	34.6	10.7	0.8	2.4	38.3	32.9
Dubai, UAE	2019	1027	58.2	13.4	19.4	57.7	8.7	0.7	0.0	58.3	58.1
	2023	1367	59.0	14.4	18.3	58.2	7.7	0.5	0.9	56.8	61.0
Ontario, Canada	2019	547	43.0	23.0	23.0	42.2	9.9	1.6	0.2	43.0	42.9
	2023	609	41.9	21.7	22.3	40.6	12.4	1.7	1.3	39.6	44.0
Quebec, Canada	2019	544	49.4	18.4	24.2	48.9	7.4	1.0	0.1	49.8	49.4
	2023	560	39.3	22.0	30.5	38.0	6.3	1.3	1.9	40.7	37.7
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DIFF = Percent correct  
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Mathematics: Number / Applying  
A\_MD1\_02 ME71009: Number added to 73 with sum of 1068 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	36.2	59.7	33.8	6.3	0.3	31.6	40.2
	2023	1984	32.9	61.3	30.1	6.3	2.3	30.8	35.3
Chile	2019	581	21.4	69.4	18.9	10.8	0.9	22.1	20.8
	2023	649	18.1	69.1	15.3	11.9	3.8	18.7	17.6
Chinese Taipei	2019	537	80.2	19.7	79.7	0.6	0.0	82.3	78.2
	2023	1067	80.9	19.0	80.5	0.5	0.0	78.8	82.7
Czech Republic	2019	662	59.8	37.2	55.3	7.5	0.0	52.8	66.5
	2023	997	50.8	45.5	47.0	7.1	0.4	48.6	53.4
Denmark	2019	463	34.3	56.3	29.4	13.6	0.6	30.8	36.9
	2023	752	26.7	61.5	22.4	12.6	3.4	19.5	33.5
England	2019	483	57.8	40.4	55.4	4.3	0.0	59.0	56.7
	2023	600	53.7	44.0	51.1	4.8	0.1	52.1	55.4
Finland	2019	680	47.3	48.0	43.1	9.0	0.0	35.4	56.7
	2023	859	41.3	53.3	37.6	8.3	0.8	33.9	48.6
France	2019	589	40.4	50.9	34.5	14.5	0.0	35.1	44.9
	2023	677	34.3	52.1	27.3	16.1	4.5	25.2	43.2
Georgia	2019	541	60.9	36.5	56.8	6.6	0.0	64.1	58.0
	2023	652	55.7	37.6	47.2	8.7	6.5	54.6	56.6
Germany	2019	482	47.1	44.8	39.8	15.4	0.0	43.1	50.4
	2023	644	39.5	50.7	33.1	15.9	0.3	34.4	44.3
Hong Kong SAR	2019	430	61.9	37.1	60.2	2.8	0.0	66.1	58.0
	2023	606	62.0	36.6	59.8	3.5	0.0	60.1	63.9
Hungary	2019	663	56.5	42.5	55.2	2.0	0.2	52.8	59.7
	2023	763	51.3	47.3	49.8	2.6	0.3	41.5	61.2
Italy	2019	528	47.8	45.3	41.5	12.9	0.3	44.2	51.6
	2023	661	46.0	44.2	37.6	16.2	2.0	42.0	49.3
Korea, Rep. of	2019	564	76.9	22.7	75.6	1.7	0.0	77.5	76.2
	2023	871	74.8	24.6	73.0	2.4	0.1	75.6	74.1
Lithuania	2019	527	67.0	31.7	64.4	3.9	0.0	64.6	69.2
	2023	657	71.3	27.9	69.3	2.8	0.0	69.6	73.1
Netherlands	2019	477	50.2	47.1	47.6	5.1	0.2	47.6	52.7
	2023	508	51.4	44.7	47.2	7.4	0.7	48.9	54.6
Norway (5)	2019	571	53.6	41.2	47.6	11.1	0.1	49.4	57.6
	2023	784	41.8	49.6	35.6	11.9	2.8	35.6	48.0
Portugal	2019	626	45.1	50.1	41.3	8.5	0.1	44.6	45.7
	2023	750	42.6	50.9	37.8	9.5	1.9	35.1	50.2
Qatar	2019	705	26.2	69.4	24.6	5.8	0.1	25.7	26.7
	2023	936	25.8	68.2	23.7	6.1	2.0	20.3	30.6
Singapore	2019	849	74.3	25.6	74.1	0.3	0.0	75.2	73.4
	2023	1276	69.7	30.1	69.3	0.6	0.0	71.6	68.0
Slovak Republic	2019	606	52.9	44.7	50.1	5.3	0.0	48.5	57.5
	2023	694	51.1	45.4	47.4	6.3	0.8	47.7	53.9
Spain	2019	1349	49.2	45.9	44.4	9.7	0.0	49.1	49.2
	2023	1479	42.1	48.8	35.5	13.5	2.2	37.9	46.1

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Mathematics: Number / Applying

A\_MD1\_02 ME71009: Number added to 73 with sum of 1068 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	48.0	44.3	40.9	14.3	0.5	42.4	53.2
	2023	742	46.2	45.5	39.1	12.6	2.9	45.3	47.5
United Arab Emirates	2019	3650	33.4	64.3	32.2	3.4	0.2	31.6	35.2
	2023	4332	39.3	57.0	37.0	3.9	2.2	35.9	42.7
United States	2019	1248	46.6	52.3	45.6	2.0	0.0	44.7	48.3
	2023	1257	41.4	55.2	39.0	3.9	1.9	37.9	44.5
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International Avg. (25)	2019	20332	51.0	45.1	47.7	7.1	0.1	48.8	52.9
	2023	25197	47.6	46.8	43.7	7.8	1.7	44.1	51.1
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Abu Dhabi, UAE	2019	1271	22.6	74.3	21.6	4.0	0.1	20.5	25.1
	2023	1074	26.6	69.0	25.0	3.4	2.6	24.1	29.3
Dubai, UAE	2019	1027	54.5	44.1	52.9	2.9	0.1	55.7	53.4
	2023	1367	51.3	46.8	49.4	2.8	1.0	48.8	53.8
Ontario, Canada	2019	547	30.1	65.8	28.3	5.7	0.2	24.8	35.0
	2023	609	28.6	65.2	26.1	6.7	2.0	25.8	31.5
Quebec, Canada	2019	544	54.0	43.2	50.6	6.2	0.1	52.7	54.4
	2023	560	42.0	53.6	38.7	5.4	2.3	42.0	42.6
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD1\_03 ME71037: Make the number sentence true -  $A \times B = 13 - C$  - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	42.9	54.7	41.2	3.8	0.3	40.7	44.9
	2023	1984	45.2	52.0	42.9	1.9	3.2	42.7	47.9
Chile	2019	581	30.0	66.3	28.4	3.8	1.6	26.7	33.0
	2023	649	32.9	60.1	29.4	4.5	5.9	32.3	33.3
Chinese Taipei	2019	537	70.7	29.3	70.7	0.0	0.0	68.9	72.3
	2023	1067	68.8	31.1	68.4	0.5	0.0	66.4	70.8
Czech Republic	2019	662	58.4	39.8	55.9	4.3	0.0	57.9	59.0
	2023	997	55.1	42.9	52.6	3.9	0.6	52.7	57.8
Denmark	2019	463	44.2	52.9	42.0	4.3	0.8	44.9	43.7
	2023	753	43.5	50.1	38.6	5.0	6.4	42.7	44.2
England	2019	483	61.2	37.6	59.3	3.0	0.0	60.9	61.4
	2023	600	67.7	31.4	65.9	2.3	0.4	66.7	69.0
Finland	2019	680	54.0	43.1	50.7	6.1	0.0	52.1	55.6
	2023	860	51.8	45.9	49.2	4.0	1.0	52.8	50.7
France	2019	589	41.3	54.7	38.5	6.8	0.0	43.3	39.4
	2023	678	36.9	56.5	33.0	5.6	4.9	31.9	41.9
Georgia	2019	541	62.5	34.7	57.8	7.4	0.1	66.3	59.3
	2023	652	62.8	31.7	53.6	7.1	7.6	64.7	61.2
Germany	2019	482	50.2	47.2	47.6	5.0	0.1	48.2	52.7
	2023	644	45.3	51.5	42.7	4.9	0.9	42.1	48.4
Hong Kong SAR	2019	430	79.4	20.6	79.4	0.0	0.0	82.0	77.0
	2023	607	79.1	20.9	78.9	0.2	0.0	75.7	82.4
Hungary	2019	663	58.5	40.1	56.6	3.1	0.2	53.2	63.1
	2023	763	52.0	47.5	51.5	0.7	0.3	49.4	54.6
Italy	2019	528	50.2	47.4	47.8	4.3	0.6	48.3	52.2
	2023	661	50.6	44.8	46.0	6.7	2.6	45.6	54.7
Korea, Rep. of	2019	564	71.1	28.6	70.5	0.8	0.0	69.8	73.0
	2023	871	74.8	25.0	74.0	0.9	0.2	71.3	77.7
Lithuania	2019	527	63.1	36.1	61.8	2.2	0.0	59.1	66.7
	2023	657	69.3	30.3	68.2	1.4	0.1	66.7	72.1
Netherlands	2019	478	43.6	55.1	42.7	1.9	0.3	44.6	42.7
	2023	508	45.7	51.1	42.9	4.9	1.1	43.6	46.6
Norway (5)	2019	571	54.7	44.1	53.1	2.6	0.2	53.8	55.6
	2023	784	51.8	44.9	48.3	3.1	3.7	50.5	53.1
Portugal	2019	626	57.7	41.1	56.1	2.7	0.1	55.9	59.4
	2023	750	50.6	45.8	47.0	4.0	3.3	46.0	55.2
Qatar	2019	705	42.3	55.7	40.9	3.1	0.4	40.2	44.4
	2023	936	50.1	47.2	47.4	2.3	3.0	48.0	52.0
Singapore	2019	849	79.3	20.7	79.0	0.3	0.0	76.2	82.3
	2023	1276	77.7	22.3	77.5	0.2	0.0	78.1	77.3
Slovak Republic	2019	606	55.7	42.3	53.2	4.4	0.0	54.6	56.8
	2023	694	56.5	41.2	53.5	3.9	1.4	55.7	57.1
Spain	2019	1349	42.0	56.1	40.6	3.1	0.3	32.6	50.0
	2023	1479	45.2	50.0	41.2	5.2	3.6	42.1	48.1

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD1\_03 ME71037: Make the number sentence true -  $A \times B = 13 - C$  - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	57.3	40.5	54.3	4.2	0.9	56.4	58.1
	2023	743	56.6	39.5	51.5	5.2	3.9	56.9	56.7
United Arab Emirates	2019	3654	52.7	46.1	51.4	2.3	0.3	48.7	56.8
	2023	4333	57.1	40.9	54.4	1.7	3.1	54.6	59.5
United States	2019	1248	50.3	49.0	49.5	1.1	0.4	47.6	52.7
	2023	1258	54.7	43.4	52.5	1.0	3.1	51.6	57.5
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International Avg. (25)	2019	20337	54.9	43.4	53.2	3.2	0.3	53.3	56.5
	2023	25204	55.3	41.9	52.4	3.2	2.4	53.2	57.2
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Abu Dhabi, UAE	2019	1272	43.9	55.2	43.2	1.4	0.2	41.2	47.1
	2023	1074	45.2	52.2	43.1	1.4	3.4	43.1	47.4
Dubai, UAE	2019	1027	63.1	35.8	61.2	2.8	0.2	58.6	67.4
	2023	1367	65.9	33.1	64.1	1.3	1.5	62.6	69.2
Ontario, Canada	2019	547	46.4	51.5	44.5	3.8	0.2	42.3	49.9
	2023	609	45.1	51.8	42.6	2.9	2.7	44.7	45.4
Quebec, Canada	2019	544	41.9	55.8	40.2	3.9	0.1	42.4	41.2
	2023	560	47.9	49.8	45.7	1.3	3.2	41.5	55.2
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DIFF = Percent correct  
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Mathematics: Number / Applying

A\_MD1\_04 ME71051: Amount of time practicing piano - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	16.7	80.2	16.1	2.9	0.8	14.1	19.1
	2023	1984	22.3	73.1	21.0	2.5	3.5	18.2	26.4
Chile	2019	581	4.0	91.1	3.8	3.2	1.9	3.0	4.9
	2023	649	7.7	81.4	6.8	4.4	7.5	3.0	11.6
Chinese Taipei	2019	537	37.0	62.7	36.8	0.5	0.0	35.3	38.6
	2023	1067	39.8	60.0	39.7	0.3	0.0	33.8	45.1
Czech Republic	2019	662	29.2	69.4	28.6	2.0	0.0	26.7	31.6
	2023	997	31.8	66.2	30.9	2.2	0.6	29.2	35.0
Denmark	2019	463	22.0	73.9	20.8	4.5	0.8	14.2	28.3
	2023	753	23.1	68.5	20.6	3.4	7.6	18.7	27.4
England	2019	483	36.4	62.1	35.5	2.4	0.0	39.6	33.4
	2023	600	37.1	61.8	36.5	1.3	0.4	35.9	38.8
Finland	2019	680	30.7	66.6	29.5	3.9	0.0	23.7	36.2
	2023	859	34.7	62.3	33.1	3.1	1.5	29.1	40.4
France	2019	588	11.0	83.3	10.3	6.4	0.0	8.7	13.2
	2023	674	15.1	73.8	13.1	6.5	6.6	6.3	23.8
Georgia	2019	541	24.6	72.6	23.6	3.7	0.1	25.9	23.3
	2023	651	23.8	64.2	20.0	6.2	9.6	22.6	24.9
Germany	2019	482	31.1	67.2	30.3	2.3	0.1	27.7	34.2
	2023	644	33.1	64.2	31.7	2.6	1.5	24.7	40.8
Hong Kong SAR	2019	430	29.8	70.0	29.7	0.2	0.0	30.8	28.9
	2023	607	39.5	59.8	39.1	1.1	0.0	33.4	45.6
Hungary	2019	663	25.9	73.1	25.6	1.1	0.2	20.6	30.6
	2023	763	27.5	71.4	27.1	1.2	0.3	20.3	34.6
Italy	2019	528	13.9	81.5	13.2	4.6	0.7	10.2	17.8
	2023	661	15.5	77.4	14.2	4.9	3.4	13.4	17.2
Korea, Rep. of	2019	564	32.4	67.3	32.2	0.5	0.0	27.0	37.8
	2023	871	42.9	56.4	42.5	0.7	0.4	31.7	52.7
Lithuania	2019	527	24.5	73.5	23.8	2.7	0.0	18.1	30.0
	2023	657	35.2	62.9	34.1	2.9	0.1	31.1	39.6
Netherlands	2019	478	39.2	60.0	38.7	1.0	0.3	39.1	39.2
	2023	508	38.9	58.2	37.0	3.5	1.3	33.5	44.3
Norway (5)	2019	571	33.2	64.5	32.1	3.2	0.2	30.4	36.0
	2023	784	38.3	57.4	35.6	2.7	4.2	36.7	40.0
Portugal	2019	626	23.8	74.4	23.3	2.2	0.1	18.2	29.0
	2023	750	29.6	65.6	27.6	2.8	4.0	23.4	35.9
Qatar	2019	705	8.3	87.6	8.0	3.8	0.7	6.7	9.9
	2023	936	9.8	85.2	9.3	2.2	3.3	8.0	11.4
Singapore	2019	849	42.6	56.9	42.3	0.8	0.0	38.4	46.9
	2023	1276	45.4	54.3	45.0	0.6	0.1	38.9	51.6
Slovak Republic	2019	606	17.6	81.1	17.3	1.6	0.0	15.4	19.9
	2023	694	20.9	75.4	20.0	2.9	1.7	16.2	24.9
Spain	2019	1349	7.7	89.4	7.5	2.6	0.5	5.7	9.4
	2023	1479	12.1	78.7	10.8	6.1	4.4	8.0	15.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD1\_04 ME71051: Amount of time practicing piano - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	26.1	71.0	25.1	2.7	1.2	24.4	27.8
	2023	743	39.6	56.2	36.9	2.6	4.4	37.2	42.5
United Arab Emirates	2019	3652	12.4	86.1	12.2	1.4	0.3	11.3	13.6
	2023	4332	20.2	74.8	18.9	2.6	3.7	17.1	23.2
United States	2019	1248	18.9	80.3	18.7	0.7	0.4	18.3	19.4
	2023	1258	25.7	69.7	24.1	2.6	3.6	19.5	31.2
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International Avg. (25)	2019	20334	24.0	73.8	23.4	2.4	0.3	21.3	26.4
	2023	25197	28.4	67.2	27.0	2.9	2.9	23.6	33.0
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Abu Dhabi, UAE	2019	1271	7.7	90.3	7.6	1.9	0.2	6.7	9.0
	2023	1073	13.3	80.7	12.4	3.0	3.9	11.2	15.6
Dubai, UAE	2019	1027	23.6	75.4	23.3	0.9	0.4	22.6	24.5
	2023	1367	30.9	66.8	29.9	1.6	1.6	25.6	36.0
Ontario, Canada	2019	547	17.0	80.1	16.4	2.4	1.1	11.8	21.7
	2023	609	24.5	71.6	23.3	2.1	3.0	21.6	27.3
Quebec, Canada	2019	544	19.5	78.9	19.2	1.7	0.2	19.9	19.3
	2023	560	19.1	76.0	17.9	2.5	3.6	13.4	25.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Number / Knowing

A\_MD1\_05 ME71064: Number equal to 8 tens and 2 tenths - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	44.7	21.8	43.1	25.6	6.1	2.3	1.1	40.8	48.4
	2023	1984	48.0	19.4	44.6	23.9	4.9	2.1	5.2	44.0	52.3
Chile	2019	581	28.5	30.0	27.0	30.2	7.5	2.7	2.7	23.2	33.4
	2023	649	32.4	28.7	28.9	24.2	7.3	2.0	9.0	26.3	37.4
Chinese Taipei	2019	536	59.8	9.0	59.2	25.5	5.3	1.0	0.0	58.6	60.9
	2023	1066	49.2	8.5	49.0	35.4	6.7	0.2	0.2	41.8	55.6
Czech Republic	2019	662	58.9	17.5	57.7	20.0	2.9	1.9	0.0	52.7	64.8
	2023	997	59.3	20.4	58.1	16.3	3.2	1.1	0.9	54.5	65.1
Denmark	2019	463	34.4	32.8	33.2	28.2	2.5	2.0	1.4	32.5	35.9
	2023	753	40.1	32.7	36.0	19.3	1.9	1.2	8.9	37.4	42.7
England	2019	483	46.8	9.6	46.4	31.0	12.3	0.8	0.0	49.8	43.9
	2023	600	52.4	12.2	51.7	27.0	7.7	0.4	0.9	48.2	55.9
Finland	2019	680	53.4	11.5	52.7	28.4	6.1	1.3	0.0	56.5	50.9
	2023	860	48.1	16.8	46.9	28.2	5.7	0.6	1.7	46.9	49.2
France	2019	589	40.4	22.0	38.8	31.5	3.8	3.1	0.9	35.1	45.2
	2023	678	40.3	19.6	36.2	25.2	8.8	1.7	8.4	34.9	45.9
Georgia	2019	541	51.9	23.4	50.2	21.0	2.2	2.5	0.9	48.7	54.6
	2023	652	52.0	22.6	45.4	17.3	2.1	1.6	11.0	48.6	55.0
Germany	2019	482	40.7	26.0	39.0	25.4	5.3	4.1	0.1	36.9	44.5
	2023	644	40.1	25.4	38.0	27.2	4.4	2.9	2.1	33.7	45.8
Hong Kong SAR	2019	430	62.9	5.3	62.8	25.7	6.0	0.2	0.0	64.4	61.6
	2023	607	62.6	5.6	62.0	24.7	6.8	0.9	0.0	58.1	67.0
Hungary	2019	663	61.8	17.1	60.7	16.6	3.8	1.6	0.2	62.0	61.7
	2023	763	66.2	16.0	65.1	14.7	2.5	1.3	0.3	61.2	71.2
Italy	2019	528	63.8	10.0	61.6	21.3	3.6	2.4	1.1	62.7	65.1
	2023	661	61.4	9.0	57.7	24.6	2.7	0.8	5.1	58.4	64.0
Korea, Rep. of	2019	564	57.1	12.1	57.1	23.8	6.9	0.1	0.0	53.7	60.5
	2023	871	59.9	16.9	59.3	17.6	5.1	0.6	0.5	57.5	62.0
Netherlands	2019	478	37.8	38.8	37.1	17.3	4.9	1.4	0.4	38.9	36.9
	2023	508	43.0	25.0	40.7	23.4	5.5	2.2	3.2	44.7	41.7
Norway (5)	2019	571	53.9	22.7	52.8	19.8	2.8	1.5	0.4	46.4	61.4
	2023	784	47.3	28.8	44.4	18.3	2.3	1.3	4.8	40.7	54.2
Portugal	2019	626	53.9	10.6	53.1	32.4	2.4	1.1	0.4	52.6	55.1
	2023	750	57.1	8.4	53.6	28.4	3.4	0.7	5.5	51.5	62.8
Qatar	2019	705	32.2	19.0	31.1	35.2	11.2	2.5	0.9	28.6	35.7
	2023	936	39.6	18.4	37.4	30.1	8.5	1.3	4.3	36.0	42.9
Singapore	2019	849	66.4	2.1	65.9	27.6	3.7	0.7	0.0	65.5	67.3
	2023	1276	65.3	2.0	64.8	28.6	3.9	0.3	0.4	61.1	69.3
Slovak Republic	2019	606	51.7	21.0	50.9	22.1	4.4	1.5	0.1	49.8	53.8
	2023	694	55.6	22.4	52.9	16.3	3.6	2.9	1.9	49.7	60.4
Spain	2019	1349	35.8	21.7	34.9	36.2	4.7	1.7	0.7	27.8	42.7
	2023	1479	38.8	17.2	35.7	34.5	4.6	1.7	6.2	35.3	42.2
Sweden	2019	565	46.0	28.3	44.2	21.2	2.4	1.9	2.0	41.4	50.6
	2023	743	45.8	30.6	42.4	17.3	2.1	2.3	5.2	44.1	48.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MD1\_05 ME71064: Number equal to 8 tens and 2 tenths - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
United Arab Emirates	2019	3648	34.1	18.5	33.5	34.5	11.7	1.2	0.6	32.4	35.8
	2023	4333	42.8	16.2	40.4	29.8	8.0	0.7	5.1	39.7	45.8
United States	2019	1248	32.4	13.4	32.0	38.2	15.1	0.9	0.4	29.4	35.3
	2023	1258	34.8	13.4	32.7	35.1	12.8	0.6	5.3	29.0	39.9
International Avg. (24)	2019	19803	47.9	18.5	46.9	26.6	5.7	1.7	0.6	45.4	50.2
	2023	24546	49.2	18.2	46.8	24.5	5.2	1.3	4.0	45.1	53.2
Abu Dhabi, UAE	2019	1268	28.1	24.2	27.7	34.0	12.7	0.9	0.5	27.8	28.3
	2023	1074	32.8	20.5	30.7	31.5	10.7	1.0	5.5	30.5	35.3
Dubai, UAE	2019	1027	43.5	14.0	42.9	31.9	9.9	0.6	0.6	38.6	48.2
	2023	1367	51.9	13.0	50.2	27.5	6.1	0.2	2.9	47.4	56.2
Ontario, Canada	2019	547	37.3	28.0	35.9	26.1	6.4	2.4	1.2	33.7	40.5
	2023	609	42.9	24.6	39.4	23.1	4.8	3.6	4.5	40.5	45.1
Quebec, Canada	2019	544	63.8	9.4	62.6	21.5	4.6	1.4	0.4	60.8	67.5
	2023	560	60.0	9.8	56.3	23.3	4.4	0.8	5.4	54.8	66.4

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MD1\_06 ME71176: Measure height of doll - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	73.3	18.0	71.1	3.4	4.5	1.9	1.2	73.3	73.3
	2023	1984	67.7	20.1	62.9	4.5	5.4	1.2	5.8	66.1	69.3
Chile	2019	581	56.1	26.2	53.5	8.1	7.6	1.4	3.1	52.6	59.2
	2023	649	53.0	23.3	46.8	8.6	9.6	2.1	9.5	52.7	53.2
Chinese Taipei	2019	537	96.2	2.4	95.9	0.2	1.2	0.3	0.0	96.7	95.7
	2023	1067	94.2	2.9	93.8	0.6	2.2	0.2	0.3	93.9	94.6
Czech Republic	2019	662	90.9	5.9	90.2	1.2	1.9	0.6	0.2	89.9	91.9
	2023	997	89.9	5.8	88.4	1.3	2.8	0.3	1.3	88.1	92.0
Denmark	2019	463	90.9	6.9	88.6	1.2	0.9	1.1	1.4	92.1	89.9
	2023	753	83.2	8.9	74.3	0.9	5.2	1.7	8.9	88.1	78.4
England	2019	483	87.2	6.9	86.8	2.0	3.9	0.5	0.0	85.7	88.7
	2023	600	78.1	15.1	77.3	3.1	3.4	0.2	0.9	81.8	75.5
Finland	2019	680	86.7	10.3	85.5	0.5	2.3	1.4	0.0	86.5	86.9
	2023	860	82.5	9.0	80.8	3.3	4.8	0.2	1.8	82.9	82.1
France	2019	589	86.4	8.8	85.3	2.2	2.4	0.3	0.9	79.7	92.6
	2023	678	79.8	11.7	70.3	2.0	4.1	2.9	9.0	80.3	79.2
Georgia	2019	541	60.0	26.6	58.1	7.0	5.2	2.2	0.9	58.9	60.9
	2023	652	54.1	26.4	46.9	6.7	6.6	1.7	11.7	55.1	53.3
Germany	2019	482	90.0	7.4	89.4	0.7	1.9	0.2	0.5	89.2	90.6
	2023	644	85.5	7.0	81.8	2.3	4.5	1.3	3.0	87.2	84.0
Hong Kong SAR	2019	430	94.6	3.4	94.6	0.4	1.6	0.0	0.0	95.7	93.7
	2023	607	91.8	3.1	91.6	2.3	2.8	0.2	0.0	91.2	92.4
Hungary	2019	663	82.8	11.3	82.4	2.5	3.3	0.3	0.2	80.8	84.6
	2023	763	78.5	11.0	77.5	4.3	5.9	0.7	0.6	75.5	81.5
Italy	2019	528	71.3	19.5	69.1	3.7	4.6	1.6	1.5	67.0	75.7
	2023	661	69.6	19.3	65.0	3.6	5.4	1.5	5.1	68.3	70.8
Korea, Rep. of	2019	564	94.6	3.6	94.6	0.3	1.5	0.0	0.0	96.1	93.2
	2023	871	95.0	3.1	94.3	0.5	1.4	0.2	0.5	94.1	95.7
Lithuania	2019	527	88.8	7.8	88.6	0.9	2.6	0.2	0.0	88.5	88.9
	2023	657	87.9	8.9	87.6	1.4	1.8	0.1	0.3	84.6	91.6
Netherlands	2019	478	88.8	7.5	87.8	0.8	2.7	0.7	0.4	91.0	86.7
	2023	508	80.5	11.6	76.8	2.5	4.6	0.2	4.3	81.3	79.8
Norway (5)	2019	571	91.3	5.4	90.4	0.7	2.5	0.6	0.4	90.0	92.6
	2023	784	81.0	9.0	75.3	4.2	4.4	2.0	5.2	82.4	79.7
Portugal	2019	626	83.6	12.2	82.7	2.0	2.0	0.7	0.4	82.6	84.5
	2023	750	79.5	12.3	73.2	3.6	3.0	2.1	5.9	77.1	82.0
Qatar	2019	705	56.4	25.5	55.2	9.7	7.4	1.1	1.1	51.9	60.7
	2023	936	58.8	20.1	55.4	7.4	11.3	1.2	4.6	54.0	63.1
Singapore	2019	849	90.7	5.9	90.4	1.1	2.2	0.3	0.0	90.9	90.4
	2023	1276	89.0	6.9	88.4	1.4	2.6	0.3	0.4	89.8	88.2
Slovak Republic	2019	606	89.9	6.8	88.3	1.8	1.4	1.6	0.1	87.3	92.7
	2023	694	85.2	8.1	82.8	2.3	3.9	0.6	2.3	84.5	85.9
Spain	2019	1349	73.6	14.7	72.5	5.3	5.9	0.8	0.7	69.9	76.7
	2023	1479	70.9	16.8	64.6	3.1	6.7	2.1	6.7	70.5	71.3

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MD1\_06 ME71176: Measure height of doll - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	81.4	13.8	78.9	1.9	2.4	0.7	2.3	81.9	80.9
	2023	743	78.3	14.8	72.6	1.2	4.1	2.0	5.3	78.0	79.1
United Arab Emirates	2019	3650	62.9	24.2	61.9	6.2	6.2	0.8	0.7	61.3	64.5
	2023	4333	64.3	16.2	60.2	6.4	10.8	1.0	5.4	63.2	65.4
United States	2019	1248	71.5	20.1	70.7	3.6	4.5	0.5	0.6	69.2	73.5
	2023	1258	66.6	20.8	62.1	4.5	5.9	1.1	5.6	64.1	68.8
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International Avg. (25)	2019	20333	81.6	12.0	80.5	2.7	3.3	0.8	0.7	80.4	82.8
	2023	25204	77.8	12.5	74.0	3.3	4.9	1.1	4.2	77.4	78.3
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Abu Dhabi, UAE	2019	1272	55.6	27.6	54.6	7.9	8.0	1.3	0.6	54.6	57.0
	2023	1074	55.7	17.9	51.7	7.6	15.6	1.2	5.9	57.0	54.4
Dubai, UAE	2019	1027	76.5	16.0	75.5	2.9	4.2	0.7	0.6	76.2	76.9
	2023	1367	72.5	14.2	69.7	4.8	7.4	0.8	3.1	71.8	73.3
Ontario, Canada	2019	547	71.9	20.3	69.4	2.9	3.9	2.3	1.2	74.1	70.0
	2023	609	65.2	21.0	60.5	5.4	5.9	1.5	5.8	63.9	66.3
Quebec, Canada	2019	544	83.3	10.0	82.4	3.3	3.4	0.5	0.5	82.1	84.2
	2023	560	75.8	16.4	71.0	3.4	3.0	0.8	5.5	72.9	79.1
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MD1\_07 ME71169: Water drank from water bottle - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	17.9	79.3	17.4	1.7	1.6	13.7	21.9
	2023	1984	21.1	72.0	19.3	2.1	6.7	13.2	29.2
Chile	2019	581	8.7	85.1	8.1	3.2	3.6	4.3	12.7
	2023	649	11.9	74.5	10.1	4.7	10.7	6.7	16.1
Chinese Taipei	2019	537	52.0	48.0	52.0	0.0	0.0	52.9	51.2
	2023	1066	57.0	42.8	56.8	0.1	0.3	54.0	59.6
Czech Republic	2019	662	35.9	62.5	35.0	2.3	0.2	30.6	41.1
	2023	997	39.2	58.4	37.6	2.4	1.6	32.6	47.0
Denmark	2019	463	34.2	63.2	32.9	2.2	1.8	27.6	39.5
	2023	753	32.0	59.7	28.1	1.8	10.5	22.6	40.9
England	2019	483	49.4	49.6	48.5	1.9	0.0	41.9	56.5
	2023	600	49.2	49.8	48.3	1.1	0.9	37.1	60.1
Finland	2019	680	39.6	59.1	38.8	2.1	0.0	31.8	45.7
	2023	860	41.4	56.4	39.9	1.9	1.8	33.7	49.2
France	2019	589	20.0	77.5	19.4	2.2	0.9	11.8	27.6
	2023	677	23.8	64.7	20.2	4.2	10.8	12.5	35.5
Georgia	2019	541	17.2	78.6	16.3	3.9	1.2	11.5	22.3
	2023	651	19.9	66.4	16.5	4.5	12.5	17.2	22.3
Germany	2019	482	41.3	57.8	40.7	1.0	0.5	32.7	49.8
	2023	644	41.9	54.7	39.5	1.8	4.0	34.0	49.2
Hong Kong SAR	2019	430	33.3	66.7	33.3	0.0	0.0	29.1	37.2
	2023	607	46.7	53.3	46.7	0.0	0.0	46.8	46.6
Hungary	2019	663	26.7	72.2	26.3	1.3	0.2	19.9	32.7
	2023	763	28.8	70.4	28.4	0.0	1.2	22.5	35.1
Italy	2019	528	19.1	78.0	18.4	2.2	1.5	12.7	25.7
	2023	660	21.1	70.6	18.9	4.4	6.1	14.3	27.1
Korea, Rep. of	2019	564	53.6	46.3	53.5	0.2	0.0	50.2	56.9
	2023	871	62.6	37.1	62.1	0.3	0.6	54.9	69.3
Lithuania	2019	527	47.1	52.5	46.7	0.8	0.0	40.2	53.2
	2023	657	60.0	39.8	59.6	0.3	0.3	53.3	67.3
Netherlands	2019	478	47.6	51.8	47.1	0.7	0.4	39.8	55.1
	2023	508	56.7	40.6	53.1	1.8	4.6	51.4	62.8
Norway (5)	2019	571	40.4	57.9	39.2	2.2	0.7	28.6	52.5
	2023	784	32.2	60.6	28.8	3.7	6.9	22.7	42.0
Portugal	2019	626	26.2	72.5	25.8	1.1	0.6	23.0	29.2
	2023	750	27.1	66.0	24.5	2.1	7.3	18.5	35.7
Qatar	2019	705	14.6	82.1	14.0	1.9	2.0	8.3	20.6
	2023	936	16.1	77.5	14.9	2.2	5.4	9.6	21.9
Singapore	2019	849	60.7	39.3	60.6	0.1	0.0	58.8	62.6
	2023	1276	63.9	35.8	63.4	0.4	0.4	61.1	66.6
Slovak Republic	2019	606	32.4	66.5	31.8	1.6	0.1	27.2	37.8
	2023	694	32.1	65.0	30.8	1.7	2.5	26.2	37.0
Spain	2019	1349	18.7	79.9	18.3	1.0	0.7	8.9	27.0
	2023	1479	20.0	70.3	17.5	3.7	8.5	13.7	25.8

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MD1\_07 ME71169: Water drank from water bottle - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	34.5	61.6	32.5	3.6	2.3	27.2	41.6
	2023	743	39.5	55.6	36.2	2.3	5.9	33.6	46.0
United Arab Emirates	2019	3653	17.9	80.6	17.6	0.8	0.9	13.3	22.5
	2023	4332	26.3	68.2	24.3	1.2	6.2	22.1	30.4
United States	2019	1248	24.3	74.7	24.0	0.5	0.8	18.8	29.3
	2023	1258	25.2	69.3	23.3	0.9	6.5	17.3	32.1
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International Avg. (25)	2019	20336	32.5	65.7	31.9	1.5	0.8	26.6	38.1
	2023	25199	35.8	59.2	34.0	2.0	4.9	29.3	42.2
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Abu Dhabi, UAE	2019	1271	11.3	87.3	11.1	0.8	0.8	7.6	15.0
	2023	1074	15.1	77.9	13.9	1.2	7.1	11.9	18.5
Dubai, UAE	2019	1027	29.7	69.2	29.3	0.7	0.8	21.8	37.5
	2023	1367	37.6	59.4	35.8	0.8	3.9	30.4	44.5
Ontario, Canada	2019	547	17.6	80.0	17.1	1.0	1.9	13.0	21.8
	2023	609	22.1	70.2	19.9	3.3	6.7	11.7	32.3
Quebec, Canada	2019	544	19.2	78.4	18.6	2.2	0.8	16.2	22.0
	2023	560	21.2	73.5	19.8	0.6	6.2	14.9	28.0
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning

A\_MD1\_08 ME71083: Movie that Terry is available to see - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	52.2	14.0	23.8	49.9	7.9	2.4	2.0	54.4	50.0
	2023	1984	47.4	16.2	25.0	42.0	5.5	4.2	7.1	49.1	45.5
Chile	2019	581	35.4	18.3	27.5	31.5	11.5	6.9	4.3	38.4	32.9
	2023	649	30.2	22.8	24.7	24.5	9.1	6.3	12.5	30.7	29.7
Chinese Taipei	2019	537	61.0	9.4	25.0	60.5	4.2	0.8	0.0	60.5	61.5
	2023	1067	60.8	11.7	22.0	60.2	5.1	0.6	0.3	57.1	64.0
Czech Republic	2019	662	60.7	13.4	18.5	59.2	6.5	2.2	0.3	57.3	63.9
	2023	997	51.5	16.2	23.6	47.3	4.7	5.4	2.8	48.5	55.1
Denmark	2019	463	55.2	9.2	27.2	51.8	5.6	4.0	2.2	51.8	58.1
	2023	753	49.8	14.9	21.4	41.9	5.9	4.4	11.3	47.4	52.1
England	2019	483	66.9	13.5	14.7	65.8	4.3	1.6	0.0	68.9	64.9
	2023	599	60.8	14.8	18.3	58.5	4.5	2.5	1.4	59.5	61.9
Finland	2019	680	60.3	11.6	23.4	59.0	3.8	2.0	0.1	55.8	63.7
	2023	860	55.0	10.7	26.1	52.0	5.8	3.4	2.0	53.4	56.6
France	2019	589	52.0	11.6	26.1	49.1	7.6	4.5	1.1	49.2	54.7
	2023	678	48.7	13.0	20.2	38.7	7.5	8.3	12.4	47.4	50.1
Georgia	2019	541	37.2	23.8	24.2	34.2	9.6	6.7	1.5	43.0	32.4
	2023	652	33.6	20.9	21.6	25.5	7.9	9.9	14.2	38.6	29.5
Germany	2019	482	58.3	12.9	21.7	56.4	5.6	2.5	0.9	63.5	52.6
	2023	644	52.6	16.2	18.6	47.5	8.0	5.4	4.4	53.0	52.2
Hong Kong SAR	2019	430	69.6	8.2	18.4	69.4	3.8	0.4	0.0	68.7	70.4
	2023	607	65.9	13.1	18.3	65.6	2.6	0.4	0.0	62.3	69.4
Hungary	2019	663	50.7	12.9	27.9	50.0	7.9	1.1	0.2	46.4	54.4
	2023	763	48.1	15.2	26.7	46.5	8.4	2.1	1.2	41.8	54.4
Italy	2019	528	41.7	16.8	31.9	39.8	6.9	3.0	1.6	40.3	43.2
	2023	661	45.3	11.5	29.0	39.6	7.4	5.6	7.0	39.9	50.0
Korea, Rep. of	2019	564	71.0	7.7	17.0	70.5	4.1	0.7	0.0	71.9	69.8
	2023	871	69.2	9.2	17.4	68.2	3.7	0.9	0.6	69.8	68.7
Lithuania	2019	527	58.2	15.1	19.7	57.3	6.4	1.5	0.0	57.8	58.5
	2023	657	55.6	16.2	20.0	54.6	7.4	1.4	0.4	59.3	51.6
Netherlands	2019	478	60.8	12.1	21.5	59.3	4.6	2.1	0.4	61.7	59.9
	2023	508	58.9	14.3	19.5	54.5	4.3	2.8	4.7	59.5	57.2
Norway (5)	2019	571	64.9	9.9	19.7	62.7	4.4	2.3	1.1	63.2	66.7
	2023	784	59.2	10.3	20.6	51.6	4.8	4.8	7.8	63.5	54.7
Portugal	2019	626	51.7	17.4	23.3	49.9	5.8	2.8	0.8	53.5	50.0
	2023	750	44.9	16.4	23.8	39.8	8.7	3.6	7.7	42.4	47.5
Qatar	2019	705	30.3	22.2	28.8	28.4	14.2	3.4	3.1	27.6	33.0
	2023	936	33.5	20.6	26.8	29.6	11.5	4.4	7.1	33.6	33.3
Singapore	2019	849	75.1	11.0	10.6	74.6	3.1	0.8	0.0	74.0	76.3
	2023	1276	69.9	12.3	13.7	69.2	3.8	0.4	0.5	70.6	69.2
Slovak Republic	2019	606	51.0	14.9	24.4	49.0	7.7	3.4	0.7	48.7	53.5
	2023	694	48.0	16.6	23.0	44.3	8.5	5.1	2.6	49.6	46.6
Spain	2019	1349	52.2	13.7	26.6	50.9	6.3	1.6	0.7	53.4	51.1
	2023	1479	46.2	14.9	23.0	39.6	8.2	4.7	9.5	47.2	45.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning

A\_MD1\_08 ME71083: Movie that Terry is available to see - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	57.8	10.8	23.0	54.8	6.3	2.7	2.5	59.4	56.2
	2023	742	55.8	14.4	20.0	48.4	4.1	6.5	6.8	55.5	56.4
United Arab Emirates	2019	3644	39.1	23.7	25.1	37.6	10.0	2.6	1.1	37.4	40.9
	2023	4333	44.8	17.8	23.4	40.6	8.7	2.4	7.1	44.4	45.3
United States	2019	1248	55.9	12.1	23.3	54.3	7.5	1.5	1.2	55.3	56.4
	2023	1258	49.3	17.1	22.1	44.9	7.0	1.9	6.9	46.5	51.7
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International Avg. (25)	2019	20327	54.8	13.8	22.9	53.0	6.6	2.5	1.0	54.5	55.0
	2023	25202	51.4	15.1	22.0	47.0	6.5	3.9	5.5	50.8	51.9
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Abu Dhabi, UAE	2019	1266	30.5	28.5	26.8	29.5	11.9	2.3	1.0	31.0	30.6
	2023	1074	35.5	23.5	22.6	31.6	11.4	3.0	7.9	35.4	35.6
Dubai, UAE	2019	1027	52.9	18.2	21.6	51.6	6.1	1.7	0.8	51.1	54.7
	2023	1367	56.9	12.9	21.8	53.2	5.7	1.7	4.7	56.8	57.0
Ontario, Canada	2019	547	55.4	15.1	21.0	52.7	6.3	2.5	2.3	57.8	53.1
	2023	609	45.4	19.0	23.9	39.8	5.1	5.2	7.0	44.3	46.3
Quebec, Canada	2019	544	50.8	11.2	28.0	49.1	8.5	2.0	1.2	52.3	49.0
	2023	560	48.8	13.2	25.8	44.0	7.3	3.4	6.4	51.1	46.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Measurement and Geometry / Reasoning

A\_MD1\_10 ME71184: Length of sides of 6-sided figure - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	31.2	15.1	29.2	26.8	22.6	3.5	2.8	28.5	33.7
	2023	1984	29.4	18.8	25.7	22.3	20.6	4.0	8.5	26.8	32.1
Chinese Taipei	2019	536	50.5	13.2	50.2	12.7	23.2	0.7	0.0	49.3	51.7
	2023	1067	52.0	14.6	51.5	16.1	16.8	0.4	0.5	46.0	57.1
Czech Republic	2019	662	35.0	15.7	32.4	23.5	21.1	6.9	0.3	35.4	34.6
	2023	997	36.7	20.0	32.3	17.1	18.7	7.8	4.0	33.5	40.6
Denmark	2019	463	41.1	14.9	37.8	23.1	16.1	5.4	2.7	38.5	43.2
	2023	753	35.6	18.0	28.7	21.3	12.8	5.5	13.7	35.6	35.5
England	2019	483	39.1	12.0	37.5	25.6	20.9	4.0	0.0	38.7	39.4
	2023	600	40.4	18.2	38.2	21.1	17.0	3.5	2.1	38.0	42.0
Finland	2019	680	39.2	14.4	37.2	26.1	17.2	4.9	0.1	35.9	41.7
	2023	860	39.4	18.6	37.1	23.6	15.1	3.0	2.6	36.5	42.2
France	2019	589	27.3	18.0	24.2	25.1	21.2	9.8	1.6	26.3	28.2
	2023	678	29.9	15.1	22.8	23.3	15.2	9.3	14.3	25.8	33.9
Georgia	2019	541	34.6	24.5	31.9	18.8	16.9	5.2	2.6	38.2	31.3
	2023	652	31.5	19.3	24.9	20.8	14.1	4.9	16.1	30.8	32.1
Germany	2019	482	35.1	16.2	32.6	23.2	21.1	5.5	1.5	33.5	36.4
	2023	644	32.3	18.6	28.3	21.6	19.2	5.8	6.5	28.4	35.8
Hong Kong SAR	2019	430	59.8	13.1	59.6	13.6	13.3	0.5	0.0	58.8	60.8
	2023	607	60.5	10.2	59.9	15.4	13.5	0.5	0.4	61.0	60.0
Hungary	2019	663	28.1	16.3	26.8	24.3	27.8	4.4	0.5	31.7	25.1
	2023	763	29.3	13.4	28.2	27.5	27.3	2.1	1.5	25.4	33.1
Italy	2019	528	31.5	16.5	29.4	20.3	26.9	4.8	2.1	30.7	32.4
	2023	661	33.3	14.6	27.5	19.4	20.9	8.1	9.6	34.3	32.6
Korea, Rep. of	2019	564	57.5	12.9	56.8	12.7	16.4	1.2	0.0	58.6	56.5
	2023	871	62.2	11.6	61.1	11.2	14.4	0.9	0.8	60.7	63.5
Lithuania	2019	527	43.8	14.3	42.3	21.4	18.7	3.4	0.1	38.2	48.5
	2023	657	42.6	19.2	41.6	25.5	11.3	1.9	0.6	39.9	45.5
Netherlands	2019	478	36.6	20.1	35.1	23.4	17.3	3.6	0.5	37.9	35.4
	2023	508	39.8	16.6	35.7	21.2	16.2	4.7	5.6	31.4	47.5
Norway (5)	2019	571	50.9	16.2	47.5	17.5	12.1	5.0	1.6	45.2	56.3
	2023	784	43.4	12.5	35.8	19.4	14.7	7.6	10.0	41.6	45.3
Portugal	2019	626	34.2	11.0	31.9	27.0	23.5	4.8	1.8	35.4	33.1
	2023	750	33.9	13.3	28.5	24.2	18.1	5.5	10.4	31.7	36.1
Qatar	2019	705	29.7	14.9	27.7	24.5	26.3	2.7	3.9	27.6	31.7
	2023	936	28.4	17.7	24.9	24.5	20.5	2.5	9.9	27.0	29.7
Singapore	2019	849	65.5	12.8	64.9	12.4	9.0	0.8	0.1	66.4	64.5
	2023	1276	64.7	11.8	64.1	13.5	9.8	0.3	0.7	65.6	63.8
Slovak Republic	2019	606	28.2	19.4	26.5	23.4	24.5	5.4	0.8	24.5	32.1
	2023	694	30.7	23.9	28.3	19.2	20.8	3.2	4.6	29.6	31.6
Spain	2019	1349	28.8	17.6	27.5	23.9	26.4	3.5	1.1	24.7	32.4
	2023	1479	30.5	15.4	24.5	22.5	17.8	7.2	12.7	28.3	32.5
Sweden	2019	565	40.3	18.6	37.3	20.5	16.2	4.6	2.8	39.6	40.9
	2023	743	39.6	16.0	33.4	20.5	14.4	5.7	9.9	37.9	41.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning

A\_MD1\_10 ME71184: Length of sides of 6-sided figure - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
United Arab Emirates	2019	3649	35.2	16.6	33.9	22.1	23.7	2.0	1.7	33.2	37.2
	2023	4333	37.8	14.9	33.3	20.5	19.5	2.8	9.0	34.3	41.0
United States	2019	1248	38.5	13.5	37.3	22.7	23.3	1.6	1.6	36.0	40.8
	2023	1258	36.9	14.9	32.6	21.5	19.4	2.8	8.8	36.0	37.6
International Avg. (24)	2019	19750	39.2	15.7	37.4	21.4	20.2	3.9	1.3	38.0	40.3
	2023	24555	39.2	16.1	35.4	20.6	17.0	4.2	6.8	36.9	41.4
Abu Dhabi, UAE	2019	1270	30.4	18.1	29.3	24.7	24.4	1.9	1.6	29.5	31.4
	2023	1074	32.3	15.4	28.3	22.6	21.3	2.5	10.0	30.8	33.8
Dubai, UAE	2019	1027	41.6	14.9	40.2	18.6	22.8	2.3	1.2	38.2	44.9
	2023	1367	45.4	12.9	41.5	18.7	18.2	2.1	6.6	40.9	49.6
Ontario, Canada	2019	547	31.2	18.2	29.2	26.3	19.8	3.1	3.4	27.7	34.6
	2023	609	31.1	20.7	26.5	19.8	18.3	5.4	9.3	24.4	37.6
Quebec, Canada	2019	544	25.7	10.2	24.4	31.7	29.0	3.3	1.4	22.9	27.8
	2023	560	26.9	14.2	24.2	27.3	24.3	3.2	6.8	27.9	26.3

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MD1\_11 ME71141: Questions about soccer teams (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	47.4	49.2	44.3	2.6	3.8	46.2	48.4
	2023	1984	40.7	51.1	35.0	3.5	10.4	38.6	43.2
Chile	2019	581	22.4	65.5	18.9	5.6	9.9	20.8	23.9
	2023	649	18.7	64.3	14.8	3.5	17.3	16.3	20.7
Chinese Taipei	2019	536	26.4	72.6	26.1	1.4	0.0	21.5	31.1
	2023	1067	24.7	74.6	24.4	0.3	0.7	20.1	28.6
Czech Republic	2019	662	42.9	54.5	40.9	4.1	0.5	37.8	47.7
	2023	997	36.0	57.2	32.2	4.6	6.0	33.4	39.2
Denmark	2019	463	53.5	42.8	49.3	4.2	3.8	48.8	57.3
	2023	753	47.8	42.2	38.6	3.3	15.8	42.8	52.4
England	2019	483	62.0	36.6	59.5	3.7	0.2	56.3	67.6
	2023	600	58.2	39.6	55.1	2.0	3.4	52.3	64.1
Finland	2019	680	65.0	33.8	62.8	2.6	0.8	61.2	68.0
	2023	860	54.7	42.2	51.1	3.0	3.7	53.2	56.2
France	2019	589	50.9	44.8	46.4	7.1	1.7	49.7	51.9
	2023	678	39.8	45.9	30.3	5.6	18.3	33.3	46.4
Georgia	2019	541	38.7	52.9	33.4	10.6	3.2	43.4	34.5
	2023	652	34.9	47.9	25.6	8.6	17.9	40.4	30.3
Germany	2019	482	63.1	34.5	59.0	4.3	2.2	65.9	60.5
	2023	644	51.1	42.3	44.2	5.0	8.4	46.4	55.4
Hong Kong SAR	2019	430	44.1	55.7	44.0	0.4	0.0	43.6	44.6
	2023	607	40.3	59.2	39.9	0.5	0.4	34.8	45.7
Hungary	2019	663	51.4	47.1	49.9	2.4	0.7	47.6	54.8
	2023	763	41.3	56.1	39.4	1.7	2.8	36.3	46.2
Italy	2019	528	44.4	53.0	42.3	2.1	2.6	41.8	47.1
	2023	661	44.4	45.4	36.3	6.2	12.2	41.9	46.6
Korea, Rep. of	2019	564	55.4	44.5	55.3	0.3	0.0	52.2	58.4
	2023	871	57.4	42.0	56.6	0.5	0.9	57.1	57.6
Lithuania	2019	527	44.8	53.4	43.4	3.0	0.2	41.1	48.0
	2023	657	46.8	51.5	45.4	2.2	1.0	40.5	53.6
Netherlands	2019	478	53.8	44.7	52.0	2.3	1.1	54.5	53.2
	2023	508	49.7	45.3	44.7	2.9	7.1	50.7	48.4
Norway (5)	2019	571	56.2	41.5	53.3	2.7	2.5	54.3	58.1
	2023	784	47.0	44.8	39.7	2.6	12.8	50.7	43.5
Portugal	2019	626	45.1	52.0	42.7	3.2	2.2	43.4	46.7
	2023	750	43.6	47.3	36.5	2.8	13.5	40.8	46.4
Qatar	2019	705	20.7	72.8	19.0	3.5	4.7	16.9	24.4
	2023	936	23.0	66.5	19.8	2.0	11.8	17.4	27.8
Singapore	2019	849	48.1	51.6	47.9	0.5	0.1	45.8	50.5
	2023	1276	45.3	54.2	44.9	0.1	0.8	39.1	51.3
Slovak Republic	2019	606	40.7	56.6	38.8	2.8	1.8	34.0	47.5
	2023	694	35.2	57.9	31.4	5.9	4.8	33.2	36.8
Spain	2019	1349	47.2	50.4	45.0	3.0	1.6	41.9	51.7
	2023	1479	36.8	50.9	29.7	4.0	15.4	32.2	41.1

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MD1\_11 ME71141: Questions about soccer teams (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	52.2	44.1	48.1	4.0	3.7	50.6	53.8
	2023	743	48.2	43.4	40.5	4.6	11.5	48.3	48.5
United Arab Emirates	2019	3647	23.1	72.6	21.8	3.5	2.1	19.9	26.2
	2023	4333	27.0	63.6	23.5	2.2	10.6	22.9	30.9
United States	2019	1248	46.2	52.3	44.8	1.1	1.8	46.3	46.0
	2023	1258	42.3	50.8	37.2	1.1	11.0	36.8	46.8
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International Avg. (25)	2019	20329	45.8	51.2	43.5	3.2	2.0	43.4	48.1
	2023	25204	41.4	51.4	36.7	3.1	8.7	38.4	44.3
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Abu Dhabi, UAE	2019	1268	16.5	79.3	15.7	3.4	1.6	15.1	17.9
	2023	1074	17.9	71.0	15.5	2.2	11.3	18.1	17.8
Dubai, UAE	2019	1027	37.2	60.7	35.9	1.2	2.1	32.6	41.5
	2023	1367	43.0	51.6	38.9	1.5	8.0	37.5	48.2
Ontario, Canada	2019	547	49.6	46.8	46.1	2.3	4.8	54.5	45.0
	2023	609	40.8	50.2	34.6	3.1	12.0	36.4	45.4
Quebec, Canada	2019	544	47.4	50.2	45.1	2.7	2.0	41.0	53.0
	2023	560	37.3	55.3	32.9	3.6	8.3	35.3	40.0
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MD1\_12 ME71194: Graph of weather last month (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	86.7	12.4	81.3	1.9	4.4	87.2	86.2
	2023	1984	82.0	15.5	70.5	1.9	12.1	83.3	80.8
Chile	2019	581	71.4	23.5	58.6	7.5	10.4	75.7	67.7
	2023	649	67.1	25.3	51.7	4.7	18.2	72.2	62.9
Chinese Taipei	2019	537	87.5	12.4	86.9	0.6	0.0	86.9	88.1
	2023	1067	91.1	8.8	90.1	0.4	0.7	92.0	90.4
Czech Republic	2019	662	80.0	19.2	76.7	3.4	0.8	76.9	83.0
	2023	997	76.4	21.1	68.3	3.3	7.2	76.6	76.2
Denmark	2019	463	83.8	14.9	76.9	3.4	4.8	87.0	81.2
	2023	753	82.6	13.9	65.7	3.1	17.2	83.5	81.7
England	2019	483	90.1	9.8	88.5	1.6	0.2	92.4	87.8
	2023	600	86.5	12.4	79.7	3.4	4.5	87.5	86.1
Finland	2019	680	78.4	20.5	74.5	4.1	0.9	80.3	77.0
	2023	860	75.6	22.1	68.6	4.2	5.1	78.5	72.8
France	2019	589	70.1	28.1	66.1	3.7	2.0	72.4	68.1
	2023	678	68.2	23.2	49.8	8.0	19.0	66.9	69.6
Georgia	2019	541	67.0	28.2	57.4	9.3	5.1	72.4	62.2
	2023	652	65.7	24.6	47.2	6.9	21.3	69.2	62.6
Germany	2019	482	81.6	17.1	75.8	4.0	3.1	79.4	83.6
	2023	644	80.4	16.9	69.6	3.1	10.3	79.0	81.7
Hong Kong SAR	2019	430	94.0	6.0	93.8	0.1	0.0	96.0	92.2
	2023	607	94.2	5.7	93.3	0.5	0.4	92.7	95.8
Hungary	2019	663	77.3	22.0	75.0	1.8	1.3	76.1	78.3
	2023	763	72.6	25.8	68.4	2.4	3.4	72.2	73.0
Italy	2019	528	75.8	22.4	69.9	4.7	3.0	79.6	71.7
	2023	661	78.2	17.6	62.8	4.4	15.2	78.7	77.7
Korea, Rep. of	2019	564	91.5	8.5	90.6	1.0	0.0	93.0	89.9
	2023	871	92.9	7.0	91.6	0.3	1.2	93.8	92.1
Lithuania	2019	527	90.3	9.6	89.0	1.2	0.2	90.2	90.4
	2023	656	91.5	8.4	90.0	0.4	1.2	92.8	90.0
Netherlands	2019	478	77.4	21.7	74.5	2.4	1.4	78.9	76.1
	2023	508	79.0	18.9	71.0	2.0	8.1	80.5	77.9
Norway (5)	2019	571	87.1	12.1	81.8	3.3	2.7	89.9	84.3
	2023	784	83.0	14.1	69.2	3.1	13.6	83.9	82.4
Portugal	2019	626	83.3	15.7	78.0	3.0	3.4	84.7	81.9
	2023	750	83.6	13.5	68.6	2.8	15.1	82.2	85.0
Qatar	2019	705	76.7	20.9	68.7	5.5	4.9	79.3	74.2
	2023	936	76.5	20.1	65.6	1.7	12.6	79.2	74.2
Singapore	2019	849	90.7	9.3	90.3	0.3	0.1	91.4	89.9
	2023	1276	91.0	8.9	90.0	0.3	0.8	92.3	89.7
Slovak Republic	2019	606	79.4	19.1	73.6	5.3	2.0	78.2	80.6
	2023	694	79.2	18.4	70.0	4.2	7.4	77.5	80.4
Spain	2019	1349	80.6	18.7	77.4	2.1	1.8	83.1	78.5
	2023	1479	77.4	17.8	61.0	3.6	17.6	77.9	76.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MD1\_12 ME71194: Graph of weather last month (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	83.6	14.6	74.4	6.2	4.8	82.3	85.1
	2023	743	81.4	15.5	67.5	3.7	13.3	83.1	80.1
United Arab Emirates	2019	3653	76.0	22.6	71.7	3.1	2.6	78.8	73.4
	2023	4333	77.4	19.5	66.9	1.6	12.0	78.5	76.4
United States	2019	1248	90.0	9.7	87.0	1.1	2.2	91.4	88.6
	2023	1258	86.9	11.4	75.5	1.4	11.7	87.0	86.8
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International Avg. (25)	2019	20336	82.0	16.7	77.5	3.2	2.5	83.3	80.8
	2023	25203	80.8	16.3	70.9	2.9	10.0	81.6	80.1
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Abu Dhabi, UAE	2019	1271	65.3	32.7	61.5	3.9	1.9	70.1	60.2
	2023	1074	67.6	27.9	58.1	1.3	12.7	71.5	63.4
Dubai, UAE	2019	1027	89.0	10.5	85.1	2.0	2.4	91.1	87.0
	2023	1367	87.6	11.1	78.5	1.4	9.0	87.3	87.8
Ontario, Canada	2019	547	86.5	12.5	80.1	2.1	5.3	87.8	85.3
	2023	609	82.3	15.0	69.9	2.0	13.1	82.0	82.6
Quebec, Canada	2019	544	90.4	9.2	86.9	1.3	2.6	91.4	89.4
	2023	560	84.0	14.0	73.6	2.4	10.1	85.1	83.5
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MD1\_13 ME71193: Birdhouses (DERIVED) - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1956	49.6	39.2	14.6	38.5	2.6	5.1	48.6	50.7
	2023	1980	38.7	45.4	12.2	26.5	2.2	13.7	40.7	37.0
Chile	2019	581	24.0	58.3	8.8	15.4	4.1	13.4	26.4	21.9
	2023	649	24.0	52.4	9.9	13.1	3.7	20.8	25.4	22.8
Chinese Taipei	2019	537	51.6	44.1	8.3	47.3	0.1	0.2	53.2	50.0
	2023	1066	51.9	42.7	9.3	46.4	0.6	1.0	55.5	48.8
Czech Republic	2019	662	33.6	57.0	9.8	26.4	5.2	1.6	30.8	36.3
	2023	997	30.0	54.6	10.6	20.3	5.6	8.8	30.2	29.8
Denmark	2019	463	33.8	51.2	14.8	22.5	6.2	5.2	32.4	34.8
	2023	752	27.8	49.7	7.9	16.7	6.2	19.5	25.4	30.0
England	2019	483	64.9	29.2	9.6	58.2	2.8	0.2	64.2	65.6
	2023	600	55.7	33.1	14.1	43.3	2.7	6.9	53.8	58.0
Finland	2019	680	34.8	52.8	12.5	25.3	8.0	1.4	35.3	34.5
	2023	859	28.4	55.9	13.2	18.2	6.0	6.7	28.3	28.4
France	2019	589	23.6	63.0	8.8	16.4	9.4	2.4	21.7	25.4
	2023	677	20.5	51.8	6.8	10.8	8.1	22.4	17.8	23.6
Georgia	2019	541	34.9	50.2	12.0	24.2	7.2	6.5	44.4	26.2
	2023	651	31.1	43.5	8.1	17.4	7.2	23.7	33.1	29.5
Germany	2019	482	39.7	47.1	13.0	28.7	7.6	3.6	40.6	39.0
	2023	642	33.2	49.4	9.4	22.2	6.7	12.3	33.3	33.1
Hong Kong SAR	2019	430	71.9	24.2	7.5	68.0	0.3	0.0	74.9	69.2
	2023	605	63.8	30.5	10.9	57.9	0.3	0.4	62.6	65.0
Hungary	2019	663	39.7	50.9	14.8	31.0	1.6	1.6	41.7	37.9
	2023	763	33.5	55.8	12.5	25.0	1.8	4.9	31.0	35.9
Italy	2019	528	39.0	49.1	12.2	29.3	4.8	4.6	37.3	41.0
	2023	660	41.1	39.7	8.5	26.4	6.7	18.7	40.9	41.2
Korea, Rep. of	2019	564	63.8	33.4	5.5	61.0	0.2	0.0	70.0	58.1
	2023	871	60.1	35.2	8.3	55.0	0.3	1.2	56.8	62.9
Lithuania	2019	527	55.3	37.4	12.8	47.9	1.7	0.2	52.1	58.1
	2023	656	57.7	35.7	10.3	50.6	1.7	1.6	60.8	54.5
Netherlands	2019	478	45.2	44.7	15.1	35.5	2.5	2.3	48.9	41.7
	2023	508	33.9	47.0	18.7	19.5	5.5	9.2	37.9	29.5
Norway (5)	2019	571	46.7	41.9	13.6	35.9	5.4	3.2	46.4	47.0
	2023	783	36.3	43.8	9.6	22.9	7.4	16.3	36.6	36.1
Portugal	2019	626	55.9	33.5	14.8	44.4	2.7	4.6	55.0	56.7
	2023	749	49.6	33.2	13.9	32.6	3.1	17.1	50.2	49.0
Qatar	2019	705	26.7	59.6	14.4	17.2	1.8	7.0	25.4	27.9
	2023	936	32.0	51.2	11.0	21.2	2.7	13.8	33.4	30.9
Singapore	2019	849	80.0	16.0	7.8	75.9	0.1	0.1	81.1	78.8
	2023	1276	76.2	19.2	8.7	70.9	0.3	0.9	78.3	74.1
Slovak Republic	2019	606	33.8	53.5	16.0	23.4	4.5	2.6	31.2	36.3
	2023	692	28.9	56.1	12.4	19.1	3.3	9.2	29.3	28.5
Spain	2019	1349	38.1	52.1	11.4	29.9	4.2	2.4	38.2	38.0
	2023	1475	29.0	47.0	11.0	15.9	6.3	19.8	26.0	31.6

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MD1\_13 ME71193: Birdhouses (DERIVED) - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	41.8	42.9	16.0	28.6	6.6	5.9	43.6	40.1
	2023	741	41.3	39.1	10.5	25.9	9.3	15.2	41.3	41.3
United Arab Emirates	2019	3654	38.2	51.8	12.8	29.6	2.6	3.2	38.6	37.9
	2023	4331	42.3	43.4	10.6	30.4	2.4	13.2	41.7	42.9
United States	2019	1248	51.9	41.4	10.0	45.1	0.8	2.6	51.6	52.2
	2023	1258	45.9	40.6	11.0	33.7	1.9	12.7	44.0	47.6
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International Avg. (25)	2019	20337	44.7	45.0	11.9	36.2	3.7	3.2	45.4	44.2
	2023	25177	40.5	43.8	10.8	29.7	4.1	11.6	40.6	40.5
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Abu Dhabi, UAE	2019	1273	25.0	64.6	11.4	17.7	3.7	2.6	25.2	25.0
	2023	1073	29.2	54.6	10.6	19.5	1.9	13.5	30.4	28.0
Dubai, UAE	2019	1027	62.2	29.5	13.6	52.9	1.0	3.0	63.5	60.9
	2023	1366	60.8	29.1	10.3	47.8	2.5	10.3	61.5	60.2
Ontario, Canada	2019	547	59.1	29.6	16.4	46.3	1.7	6.1	59.5	58.9
	2023	606	43.2	40.6	13.6	29.3	1.5	15.0	44.2	42.2
Quebec, Canada	2019	544	43.3	46.5	13.5	33.9	2.9	3.2	40.1	46.0
	2023	560	31.8	51.4	11.9	20.8	3.7	12.2	33.1	31.1
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Data / Applying  
A\_MD1\_14 ME71192: Graph of monthly rainfall - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	24.3	63.5	7.7	17.8	4.0	6.9	22.3	26.1
	2023	1984	27.2	52.8	7.9	17.3	5.3	16.8	23.0	31.6
Chile	2019	581	3.0	75.9	2.2	1.2	4.1	16.6	2.6	3.3
	2023	649	9.3	63.4	3.2	5.1	1.9	26.4	10.0	8.8
Chinese Taipei	2019	537	44.5	47.5	15.6	36.6	0.1	0.2	45.3	43.7
	2023	1067	76.8	16.5	12.7	69.4	0.2	1.2	75.8	77.7
Czech Republic	2019	662	17.6	70.4	6.7	12.4	7.0	3.6	12.9	21.9
	2023	997	24.8	57.8	6.5	16.9	5.4	13.3	20.8	29.3
Denmark	2019	463	27.6	56.9	5.8	19.8	7.5	9.9	21.3	32.2
	2023	753	36.4	40.7	5.8	22.0	5.6	25.9	32.5	39.9
England	2019	483	44.1	47.8	12.3	36.4	2.9	0.6	40.7	47.3
	2023	600	45.1	40.4	13.7	32.1	3.4	10.4	42.2	47.1
Finland	2019	680	27.4	61.1	8.6	20.3	5.4	4.5	27.5	27.2
	2023	860	32.3	53.8	8.4	23.5	2.8	11.6	29.3	35.2
France	2019	589	18.5	68.2	5.1	13.6	7.0	6.2	16.6	20.5
	2023	678	28.0	32.0	5.3	10.8	11.4	40.4	20.1	35.2
Georgia	2019	541	10.9	69.1	2.5	7.4	9.4	11.6	14.8	7.5
	2023	652	16.8	46.8	5.1	7.4	5.6	35.0	18.4	15.6
Germany	2019	482	9.9	78.0	2.2	7.5	6.2	6.0	8.5	11.1
	2023	644	20.3	58.2	7.0	12.2	5.4	17.1	13.9	25.9
Hong Kong SAR	2019	430	43.7	49.1	13.8	36.6	0.5	0.0	39.0	48.0
	2023	607	67.4	24.3	11.9	56.8	5.0	2.0	61.9	72.6
Hungary	2019	663	23.5	67.1	8.0	17.9	4.4	2.7	22.9	24.0
	2023	763	25.9	63.1	8.6	19.3	1.9	7.2	21.1	30.5
Italy	2019	528	16.6	64.6	4.9	10.9	10.0	9.7	13.2	20.0
	2023	660	21.2	50.2	7.0	11.0	5.5	26.4	18.0	23.8
Korea, Rep. of	2019	564	68.1	23.7	16.0	59.6	0.7	0.0	65.9	70.7
	2023	871	66.8	25.9	13.2	58.9	0.2	1.9	64.0	69.2
Lithuania	2019	527	24.3	67.5	8.5	18.7	4.2	1.0	20.2	27.9
	2023	657	45.0	46.1	11.0	36.7	2.7	3.6	39.2	51.2
Netherlands	2019	477	38.2	51.5	11.7	29.7	3.2	3.9	38.3	38.2
	2023	508	36.6	45.7	8.1	24.7	3.9	17.6	31.5	40.9
Norway (5)	2019	571	30.8	57.3	7.9	23.3	4.1	7.4	29.6	32.0
	2023	784	28.3	50.4	5.9	18.1	2.9	22.7	29.2	27.5
Portugal	2019	626	13.0	73.4	5.5	8.6	5.5	7.0	12.5	13.4
	2023	750	23.0	53.8	6.0	14.0	3.6	22.6	18.9	26.9
Qatar	2019	705	9.1	78.1	4.7	5.7	2.7	8.8	8.1	10.0
	2023	936	19.6	59.8	6.7	12.1	2.8	18.7	16.9	22.0
Singapore	2019	849	58.5	32.9	16.5	49.7	0.9	0.1	57.7	59.3
	2023	1276	71.4	22.1	12.0	64.2	0.6	1.1	70.7	72.1
Slovak Republic	2019	606	19.7	67.1	6.7	13.9	6.1	6.2	21.1	18.4
	2023	694	23.6	58.6	7.2	15.6	4.6	13.9	19.8	26.3
Spain	2019	1349	11.6	79.7	3.8	8.8	3.7	4.0	7.9	14.6
	2023	1479	23.5	49.6	8.1	12.5	4.2	25.6	18.1	28.2

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MD1\_14 ME71192: Graph of monthly rainfall - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	565	16.7	68.3	4.5	11.9	6.7	8.6	16.8	16.7
	2023	743	39.4	41.4	6.2	25.8	4.5	22.2	41.1	38.0
United Arab Emirates	2019	3654	23.6	66.7	7.3	18.1	3.0	4.9	22.5	24.7
	2023	4332	31.6	51.1	8.0	21.5	2.3	17.2	29.8	33.3
United States	2019	1248	11.9	82.3	4.6	9.2	0.7	3.1	10.2	13.6
	2023	1258	22.9	58.0	6.3	15.1	4.2	16.5	17.7	27.2
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International Avg. (25)	2019	20335	25.5	62.7	7.7	19.8	4.4	5.3	23.9	26.9
	2023	25202	34.5	46.5	8.1	24.9	3.8	16.7	31.4	37.4
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Abu Dhabi, UAE	2019	1274	13.2	78.0	4.6	9.9	2.5	5.0	10.7	15.7
	2023	1074	17.5	63.1	5.3	11.3	2.9	17.3	15.4	19.7
Dubai, UAE	2019	1027	36.5	54.3	10.9	28.9	2.1	3.9	37.3	35.8
	2023	1367	47.9	38.5	10.6	34.9	1.6	14.4	45.9	49.6
Ontario, Canada	2019	547	21.0	65.8	8.1	14.5	3.6	8.0	20.8	21.1
	2023	609	22.6	54.9	7.9	13.3	6.4	17.5	17.3	28.0
Quebec, Canada	2019	543	34.6	55.0	9.5	26.8	3.8	4.9	29.9	38.8
	2023	560	37.3	44.9	10.3	24.6	4.4	15.8	33.5	41.7
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MD2\_01 ME61275: 3126 + 845 + 72 = - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1935	62.4	11.4	61.3	11.9	13.7	1.5	0.2	63.1	61.5
	2023	1996	55.7	14.8	55.0	11.8	17.2	0.8	0.3	56.5	54.7
Chile	2019	578	58.0	12.7	55.9	13.1	14.7	2.4	1.1	62.4	54.1
	2023	657	50.4	15.0	49.4	16.5	17.0	0.9	1.2	54.5	47.1
Chinese Taipei	2019	537	96.1	1.7	95.6	1.4	0.7	0.5	0.0	95.0	97.2
	2023	1073	88.1	3.8	88.0	4.1	4.0	0.1	0.0	92.9	83.7
Czech Republic	2019	650	69.3	11.5	68.6	7.6	11.1	1.0	0.1	72.1	66.4
	2023	991	69.1	11.1	68.5	7.9	11.5	0.8	0.2	70.7	67.7
Denmark	2019	461	69.4	13.8	67.7	7.8	8.2	1.8	0.7	73.3	66.3
	2023	759	57.1	16.7	55.6	12.7	12.4	1.4	1.2	58.6	55.6
England	2019	478	77.6	7.8	76.8	6.8	7.7	0.9	0.0	82.0	73.5
	2023	596	70.2	10.1	69.2	8.8	10.4	1.4	0.0	72.3	67.5
Finland	2019	674	54.4	15.3	53.1	12.8	16.4	2.0	0.5	51.7	56.7
	2023	850	48.3	20.8	47.7	15.5	14.8	1.0	0.2	47.9	48.6
France	2019	596	70.5	10.0	68.7	8.6	10.2	2.5	0.0	72.9	67.7
	2023	684	58.1	14.8	56.6	11.3	14.7	2.1	0.5	58.1	58.1
Georgia	2019	536	80.0	8.1	78.6	4.8	6.7	1.7	0.1	77.3	82.4
	2023	641	78.2	9.4	77.6	4.9	7.3	0.7	0.1	78.4	78.0
Germany	2019	488	70.2	9.9	69.3	7.5	12.0	1.3	0.0	76.6	63.2
	2023	652	57.4	13.5	55.9	12.9	15.2	2.6	0.0	54.4	60.4
Hong Kong SAR	2019	422	86.4	5.5	86.1	4.3	3.7	0.3	0.0	93.5	80.5
	2023	603	86.3	5.0	86.3	4.6	4.1	0.0	0.0	88.3	84.4
Hungary	2019	653	74.5	7.2	74.2	8.8	9.4	0.3	0.1	78.0	71.6
	2023	767	66.8	11.7	66.6	8.2	13.2	0.0	0.2	70.2	63.2
Italy	2019	529	80.2	8.9	76.7	4.7	5.3	4.4	0.0	82.0	78.6
	2023	645	73.8	10.1	72.4	8.6	7.0	0.8	1.0	74.3	73.3
Korea, Rep. of	2019	558	87.8	2.8	87.3	3.5	5.9	0.5	0.0	89.8	85.9
	2023	864	84.8	4.2	84.6	4.5	6.5	0.0	0.2	85.9	83.8
Lithuania	2019	541	80.5	5.6	80.4	4.8	9.2	0.0	0.0	83.4	77.9
	2023	651	83.5	5.1	83.0	4.8	6.6	0.6	0.0	85.0	81.8
Netherlands	2019	474	66.5	13.4	65.1	8.4	11.1	2.1	0.0	69.9	63.4
	2023	528	59.9	12.4	58.3	11.9	14.8	1.6	1.0	58.4	61.4
Norway (5)	2019	565	72.8	7.1	70.6	10.6	8.7	2.3	0.7	79.1	66.4
	2023	777	64.0	14.1	62.9	12.7	8.7	1.4	0.2	66.1	61.8
Portugal	2019	626	78.7	7.1	78.1	6.3	7.7	0.7	0.2	80.6	77.1
	2023	762	73.6	7.1	72.7	8.9	10.1	0.7	0.5	77.1	69.9
Qatar	2019	709	63.2	10.9	61.8	11.9	13.3	2.2	0.0	65.8	60.5
	2023	932	65.4	11.3	64.2	10.2	12.4	0.8	1.1	69.9	60.7
Singapore	2019	850	92.8	2.8	92.7	2.2	2.2	0.1	0.0	93.8	91.7
	2023	1278	91.1	3.6	90.9	2.5	2.7	0.1	0.1	91.8	90.4
Slovak Republic	2019	608	69.6	10.2	68.3	8.4	11.3	1.5	0.3	69.1	70.0
	2023	706	63.8	12.7	63.1	11.1	11.9	1.1	0.0	63.5	64.1
Spain	2019	1351	78.8	9.6	77.5	4.9	6.3	1.4	0.3	81.8	76.2
	2023	1476	68.9	10.5	67.6	8.1	12.0	1.5	0.3	69.1	68.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MD2\_01 ME61275: 3126 + 845 + 72 = - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	564	65.4	14.2	62.7	9.6	9.4	2.6	1.5	66.3	64.4
	2023	740	63.3	13.3	62.5	12.1	10.9	1.1	0.1	64.4	62.2
United Arab Emirates	2019	3706	68.2	10.2	67.2	9.3	11.9	1.3	0.2	70.6	65.8
	2023	4339	70.4	9.9	70.0	8.9	10.6	0.3	0.2	71.0	69.7
United States	2019	1248	78.3	8.7	77.8	6.2	6.7	0.5	0.2	83.5	73.6
	2023	1272	76.6	9.0	75.4	6.1	8.0	0.9	0.7	78.1	75.1
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International Avg. (25)	2019	20337	74.1	9.1	72.9	7.4	8.9	1.4	0.2	76.5	71.7
	2023	25239	69.0	10.8	68.2	9.2	10.6	0.9	0.4	70.3	67.7
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Abu Dhabi, UAE	2019	1289	56.9	13.9	56.1	12.0	16.5	1.3	0.1	59.2	54.4
	2023	1081	63.1	12.2	62.4	11.5	12.8	0.6	0.5	66.8	59.6
Dubai, UAE	2019	1054	83.5	5.7	82.5	4.8	5.9	1.2	0.0	84.8	82.2
	2023	1358	79.1	6.7	79.0	7.5	6.6	0.2	0.0	77.5	80.8
Ontario, Canada	2019	539	57.1	12.2	56.2	14.3	15.7	1.6	0.1	56.1	58.1
	2023	629	51.1	17.4	50.2	11.6	19.1	1.1	0.5	50.9	51.1
Quebec, Canada	2019	537	75.8	8.6	74.5	6.8	8.5	1.2	0.4	77.2	73.9
	2023	558	61.3	12.1	61.2	10.0	16.5	0.1	0.1	64.1	58.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD2\_02 ME61027: Sara's 4-digit password - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1935	62.5	37.0	61.5	1.2	0.3	63.2	61.7
	2023	1996	68.6	30.8	67.3	1.5	0.4	69.4	67.8
Chile	2019	578	45.0	51.6	42.2	4.4	1.7	49.8	40.7
	2023	657	43.2	44.0	41.0	3.7	1.4	45.8	41.1
Chinese Taipei	2019	537	72.9	26.9	72.3	0.8	0.0	72.7	73.1
	2023	1073	77.0	23.0	77.0	0.0	0.0	79.7	74.6
Czech Republic	2019	650	65.4	33.7	63.6	2.4	0.2	68.9	61.5
	2023	991	67.4	32.3	66.6	0.9	0.2	70.2	64.8
Denmark	2019	461	61.8	36.4	58.8	3.0	1.7	60.9	62.4
	2023	759	67.3	31.5	64.8	2.1	1.6	65.4	69.1
England	2019	478	64.8	35.0	64.4	0.5	0.0	66.9	62.9
	2023	596	77.3	22.5	76.4	1.1	0.0	81.0	72.6
Finland	2019	674	60.9	37.4	58.3	3.2	1.0	65.9	56.6
	2023	850	67.9	31.7	67.0	1.0	0.2	70.9	64.9
France	2019	596	68.6	30.5	66.5	2.7	0.3	71.3	65.6
	2023	684	65.8	33.1	63.6	2.3	0.9	64.5	67.1
Georgia	2019	536	51.9	45.9	49.6	4.5	0.1	58.1	46.7
	2023	641	57.3	41.5	55.7	2.8	0.1	58.3	56.3
Germany	2019	488	73.2	26.1	71.4	2.4	0.0	74.6	71.5
	2023	652	77.1	22.5	75.6	1.9	0.0	80.3	74.0
Hong Kong SAR	2019	422	73.4	26.5	73.1	0.3	0.0	71.0	75.4
	2023	603	77.3	22.7	77.1	0.2	0.0	74.1	80.1
Hungary	2019	653	75.6	24.2	74.9	0.8	0.1	79.8	72.2
	2023	767	72.1	27.8	71.9	0.1	0.2	69.7	74.6
Italy	2019	529	68.3	30.6	66.0	3.0	0.3	73.3	64.2
	2023	645	70.4	28.8	68.3	1.8	1.2	73.7	67.4
Korea, Rep. of	2019	558	62.2	37.6	62.1	0.3	0.0	64.2	60.4
	2023	864	65.9	34.0	65.8	0.0	0.2	64.9	66.8
Lithuania	2019	541	57.0	42.5	56.4	1.1	0.0	60.0	54.4
	2023	651	69.3	30.0	67.6	2.4	0.0	69.7	68.8
Netherlands	2019	474	62.0	37.5	61.2	1.3	0.0	67.9	56.8
	2023	528	71.1	28.4	69.8	0.5	1.4	74.9	66.7
Norway (5)	2019	565	75.5	23.8	73.5	1.9	0.8	78.1	73.0
	2023	777	73.6	26.2	73.1	0.5	0.3	74.6	72.7
Portugal	2019	626	71.6	27.7	69.8	2.3	0.2	74.2	69.2
	2023	763	71.2	28.4	70.2	0.9	0.5	73.0	69.3
Qatar	2019	709	44.1	54.7	43.2	1.7	0.4	47.3	40.9
	2023	932	52.6	46.4	51.4	1.1	1.1	52.8	52.3
Singapore	2019	850	84.3	15.6	83.5	0.8	0.1	86.3	82.1
	2023	1278	83.7	16.3	83.6	0.1	0.1	84.8	82.6
Slovak Republic	2019	608	80.6	19.1	79.5	1.1	0.3	81.6	79.7
	2023	706	78.3	21.3	76.9	1.4	0.4	79.5	77.2
Spain	2019	1350	53.4	44.4	50.9	4.0	0.7	53.3	53.5
	2023	1476	47.4	50.3	45.4	3.9	0.4	45.7	49.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD2\_02 ME61027: Sara's 4-digit password - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	564	75.4	23.4	71.8	3.0	1.8	80.2	70.6
	2023	740	79.8	19.9	78.8	0.9	0.4	84.9	74.5
United Arab Emirates	2019	3712	56.0	43.1	54.9	1.8	0.3	58.8	53.4
	2023	4337	61.8	37.7	61.1	1.0	0.2	63.1	60.7
United States	2019	1248	69.1	30.4	68.0	1.2	0.4	68.9	69.4
	2023	1271	71.3	28.3	70.3	0.4	1.0	73.9	68.7
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International Avg. (25)	2019	20342	65.4	33.7	63.9	2.0	0.4	67.9	63.1
	2023	25237	68.6	30.8	67.5	1.3	0.5	69.8	67.4
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Abu Dhabi, UAE	2019	1292	45.6	53.6	45.0	1.2	0.1	48.7	42.8
	2023	1081	52.1	47.2	51.2	0.9	0.7	52.1	52.0
Dubai, UAE	2019	1054	73.4	26.3	72.4	1.3	0.0	76.3	70.4
	2023	1357	76.3	23.6	75.8	0.6	0.0	78.0	74.7
Ontario, Canada	2019	539	56.6	42.9	55.9	1.1	0.1	58.3	54.7
	2023	629	66.3	33.1	64.9	1.3	0.7	69.3	63.4
Quebec, Canada	2019	537	76.8	22.9	75.6	0.9	0.6	75.7	77.8
	2023	558	74.8	24.8	73.7	1.4	0.1	74.9	74.6
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_MD2\_03 ME61255: Game in Zedland buying bicycles and scooters - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1935	32.5	53.4	20.4	20.4	5.2	0.5	29.1	36.0
	2023	1994	30.4	55.2	21.3	18.2	4.6	0.7	27.3	33.5
Chile	2019	578	18.7	63.6	12.8	9.7	11.9	2.0	17.6	19.6
	2023	656	19.0	64.3	15.5	9.1	9.3	1.8	17.3	20.4
Chinese Taipei	2019	537	45.4	42.0	22.0	33.0	2.9	0.0	43.0	47.5
	2023	1070	51.9	35.0	24.1	38.7	2.2	0.0	47.6	55.8
Czech Republic	2019	650	44.0	39.8	23.5	28.7	7.9	0.2	43.8	44.1
	2023	991	38.7	44.0	24.8	23.2	7.8	0.2	34.8	42.0
Denmark	2019	461	48.3	33.6	25.9	30.6	8.1	1.7	47.6	48.9
	2023	759	44.2	38.6	24.0	28.1	7.5	1.8	40.2	48.0
England	2019	478	49.4	36.3	21.1	35.1	7.5	0.0	46.4	52.1
	2023	596	43.1	42.8	23.4	29.6	4.2	0.0	40.3	46.3
Finland	2019	674	39.8	42.9	21.4	24.8	9.9	1.0	37.0	42.2
	2023	850	38.1	43.8	25.4	22.1	8.4	0.2	36.3	40.0
France	2019	596	27.5	52.7	17.4	14.6	14.9	0.4	25.8	29.3
	2023	684	27.4	52.9	18.8	14.2	13.1	1.0	21.9	33.2
Georgia	2019	536	31.4	52.4	10.0	21.3	16.3	0.1	34.6	28.7
	2023	641	37.1	44.8	15.5	23.2	15.6	0.9	39.2	35.1
Germany	2019	488	45.2	39.7	23.9	30.6	5.6	0.3	45.1	45.8
	2023	652	39.7	44.1	23.6	25.0	7.3	0.0	35.4	44.1
Hong Kong SAR	2019	421	55.7	32.9	21.2	44.0	1.9	0.0	50.8	59.8
	2023	601	56.5	33.0	18.9	45.6	2.6	0.0	54.3	58.4
Hungary	2019	653	37.0	49.2	21.8	24.3	4.4	0.1	33.1	40.1
	2023	767	28.4	61.6	16.5	19.5	2.1	0.2	24.5	32.6
Italy	2019	529	33.8	49.1	18.8	20.4	11.2	0.5	29.4	37.3
	2023	645	31.4	53.3	16.7	19.9	8.9	1.2	28.2	34.0
Korea, Rep. of	2019	558	59.6	28.5	20.6	47.0	3.9	0.0	56.7	62.4
	2023	864	60.9	29.0	17.7	50.0	3.1	0.2	54.6	66.1
Lithuania	2019	541	29.2	55.7	16.5	18.1	9.7	0.0	29.1	29.3
	2023	651	33.9	51.0	20.1	21.2	7.7	0.0	32.6	35.2
Netherlands	2019	474	41.9	38.2	31.0	23.2	7.6	0.0	41.6	42.1
	2023	528	38.9	45.2	24.0	24.4	5.1	1.4	34.4	44.1
Norway (5)	2019	565	41.4	39.8	26.2	24.3	8.4	1.3	45.6	37.2
	2023	777	40.2	44.0	23.0	25.7	6.9	0.4	38.1	42.2
Portugal	2019	626	32.3	55.3	15.7	22.3	6.3	0.4	30.8	33.6
	2023	763	33.8	52.3	17.6	22.4	7.1	0.5	31.2	36.4
Qatar	2019	709	17.0	70.5	11.1	10.0	7.8	0.6	13.6	20.3
	2023	932	22.3	66.2	13.2	14.2	5.1	1.2	17.0	27.7
Singapore	2019	850	66.9	24.3	17.0	57.7	0.8	0.1	64.3	69.7
	2023	1278	59.5	30.3	19.7	49.2	0.7	0.1	58.3	60.7
Slovak Republic	2019	608	42.6	41.7	23.8	27.9	6.1	0.4	36.4	48.3
	2023	706	36.0	48.9	24.0	22.2	4.6	0.4	32.6	39.4
Spain	2019	1351	29.1	54.2	19.1	16.7	9.2	0.8	25.0	32.6
	2023	1475	26.1	58.4	16.4	15.3	9.1	0.7	20.8	31.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_MD2\_03 ME61255: Game in Zedland buying bicycles and scooters - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	564	39.5	42.1	22.3	23.7	9.6	2.3	42.5	36.6
	2023	740	44.3	40.3	22.3	29.7	7.3	0.4	42.9	45.7
United Arab Emirates	2019	3712	26.1	63.0	14.5	17.6	4.6	0.4	24.6	27.6
	2023	4339	35.3	53.7	16.4	25.6	3.9	0.4	33.2	37.3
United States	2019	1248	35.9	50.4	24.2	22.9	2.0	0.5	30.9	40.5
	2023	1272	36.4	51.4	19.0	25.3	3.2	1.2	34.6	38.2
-----										
International Avg. (25)	2019	20342	38.8	46.0	20.1	26.0	7.3	0.5	37.0	40.5
	2023	25231	38.1	47.4	20.1	25.7	6.3	0.6	35.1	41.1
-----										
Abu Dhabi, UAE	2019	1291	19.0	71.3	13.4	11.6	3.7	0.1	18.3	19.6
	2023	1081	24.6	65.6	13.0	17.1	3.5	0.8	22.0	27.0
Dubai, UAE	2019	1054	40.8	47.7	19.1	30.0	3.2	0.0	38.4	43.2
	2023	1358	47.5	41.0	20.5	36.0	2.2	0.3	43.5	51.3
Ontario, Canada	2019	539	30.2	57.0	18.5	19.4	5.0	0.1	26.8	33.6
	2023	628	31.2	53.0	22.6	17.9	5.8	0.7	31.1	31.3
Quebec, Canada	2019	537	38.0	46.4	23.8	23.9	5.4	0.6	34.8	40.9
	2023	557	30.4	57.4	19.1	19.7	3.2	0.5	27.4	33.5
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Number / Knowing

A\_MD2\_05 ME61043: Difference between Ana and Rui's diving scores - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1935	34.8	62.4	33.4	2.2	1.9	30.6	39.0
	2023	1995	29.6	68.1	28.6	1.4	2.0	23.5	35.5
Chile	2019	578	13.0	78.2	11.6	5.3	4.9	10.5	15.1
	2023	656	14.3	79.3	13.2	4.9	2.6	12.7	15.6
Chinese Taipei	2019	537	89.4	10.5	89.2	0.3	0.0	87.7	91.0
	2023	1072	87.3	12.7	87.2	0.1	0.0	89.3	85.6
Czech Republic	2019	650	36.9	61.1	35.7	2.2	1.1	29.4	45.0
	2023	990	32.5	65.1	31.3	3.2	0.3	22.8	41.2
Denmark	2019	461	37.5	57.5	34.4	4.6	3.5	27.0	45.8
	2023	758	34.8	61.7	33.0	2.3	3.1	24.1	45.2
England	2019	478	54.3	43.6	51.9	3.6	0.9	48.1	60.0
	2023	596	53.4	45.8	52.4	1.4	0.3	51.6	55.3
Finland	2019	674	48.2	48.8	45.4	4.4	1.5	44.6	51.3
	2023	850	41.8	56.5	40.6	2.5	0.4	34.1	49.5
France	2019	596	20.4	71.1	18.3	9.0	1.7	11.5	30.1
	2023	681	23.2	69.2	20.9	7.0	3.0	15.3	31.4
Georgia	2019	535	33.2	61.4	30.5	7.5	0.5	30.6	35.4
	2023	641	37.0	58.5	34.3	4.1	3.1	34.5	39.5
Germany	2019	488	48.5	48.9	46.0	4.0	1.0	39.4	57.2
	2023	652	42.7	55.8	41.5	2.4	0.4	36.1	49.3
Hong Kong SAR	2019	422	64.8	35.0	64.4	0.5	0.0	59.9	68.9
	2023	603	78.2	21.7	77.6	0.3	0.4	77.9	78.4
Hungary	2019	653	38.0	61.0	37.4	1.1	0.6	29.5	44.8
	2023	767	35.1	64.1	34.7	0.9	0.3	27.7	43.0
Italy	2019	529	40.5	54.1	36.9	6.8	2.2	39.1	41.6
	2023	645	37.6	58.5	35.3	4.8	1.5	31.6	42.9
Korea, Rep. of	2019	558	80.7	19.3	80.7	0.0	0.0	81.3	80.2
	2023	864	80.9	19.0	80.5	0.1	0.4	80.7	81.1
Lithuania	2019	541	55.3	42.9	53.1	3.9	0.1	54.0	56.4
	2023	651	62.3	37.3	61.7	0.7	0.3	62.8	61.9
Netherlands	2019	474	52.4	46.4	51.0	1.9	0.8	45.8	58.2
	2023	527	49.2	48.6	47.2	2.2	2.0	36.2	63.4
Norway (5)	2019	565	46.1	50.1	42.8	3.4	3.7	40.0	52.1
	2023	777	39.6	58.3	38.2	2.3	1.2	31.9	46.8
Portugal	2019	626	41.0	57.5	39.9	1.6	1.1	36.6	45.0
	2023	763	40.9	57.2	39.5	1.7	1.6	36.3	45.8
Qatar	2019	709	24.2	72.2	23.0	3.5	1.3	24.5	23.8
	2023	932	26.6	70.3	25.5	2.4	1.7	24.1	29.3
Singapore	2019	850	85.6	14.3	84.9	0.5	0.3	85.3	85.9
	2023	1278	81.8	18.2	81.7	0.0	0.1	81.5	82.1
Slovak Republic	2019	608	32.7	64.0	31.0	3.8	1.1	24.5	40.2
	2023	706	30.8	66.1	29.4	4.0	0.4	24.2	37.6
Spain	2019	1351	42.3	54.9	40.2	3.6	1.4	41.9	42.6
	2023	1475	34.7	62.3	33.1	2.6	2.0	32.7	36.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MD2\_05 ME61043: Difference between Ana and Rui's diving scores - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	564	33.0	59.4	29.2	6.4	5.0	24.5	41.1
	2023	740	37.6	59.2	35.7	3.3	1.9	25.4	49.6
United Arab Emirates	2019	3712	30.9	66.5	29.8	2.8	0.9	29.5	32.5
	2023	4336	39.1	59.3	38.1	1.3	1.3	36.6	41.4
United States	2019	1248	43.7	54.8	42.5	1.4	1.3	41.8	45.3
	2023	1271	40.8	56.7	39.1	1.7	2.5	37.0	44.5
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International Avg. (25)	2019	20342	45.1	51.8	43.3	3.4	1.5	40.7	49.1
	2023	25226	44.5	53.2	43.2	2.3	1.3	39.6	49.3
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Abu Dhabi, UAE	2019	1292	18.3	79.2	17.7	2.6	0.4	15.8	21.0
	2023	1079	26.6	71.4	25.9	1.2	1.5	23.7	29.3
Dubai, UAE	2019	1054	52.5	46.1	50.9	2.4	0.5	50.5	54.3
	2023	1358	54.3	44.9	53.3	0.8	1.1	51.3	57.2
Ontario, Canada	2019	539	27.6	69.6	26.5	2.1	1.8	23.6	31.5
	2023	629	23.0	74.1	22.2	1.2	2.4	16.8	28.9
Quebec, Canada	2019	537	55.8	42.8	54.1	2.2	1.0	53.1	58.2
	2023	557	40.8	58.3	40.2	0.3	1.2	38.8	43.1
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD2\_06 ME61151: Expression to represent Pat's pencils - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1935	48.7	13.9	20.5	14.6	46.6	2.2	2.2	48.0	49.4
	2023	1996	52.3	13.9	20.1	12.2	50.6	1.2	2.1	51.5	53.0
Chile	2019	578	36.4	13.1	20.7	23.2	32.5	4.3	6.2	37.8	35.2
	2023	657	35.4	13.8	25.8	20.6	33.0	3.5	3.3	33.7	36.8
Chinese Taipei	2019	537	84.5	2.1	10.5	2.8	84.4	0.2	0.0	85.1	84.1
	2023	1073	83.4	1.8	11.6	3.1	83.2	0.2	0.2	82.1	84.6
Czech Republic	2019	650	65.8	6.0	14.6	12.5	63.7	2.0	1.2	64.7	66.9
	2023	991	59.0	7.9	20.9	11.6	58.2	1.0	0.4	57.1	60.7
Denmark	2019	461	51.1	10.0	18.6	15.1	45.8	5.8	4.7	50.2	51.8
	2023	759	48.7	12.8	18.1	16.4	45.0	4.1	3.7	47.6	49.8
England	2019	478	63.3	11.1	15.1	9.1	61.1	2.7	0.9	62.2	64.3
	2023	596	62.9	10.2	15.6	11.0	62.2	0.4	0.6	60.0	65.8
Finland	2019	674	66.3	5.3	19.4	7.3	63.0	3.4	1.6	64.4	68.0
	2023	850	60.3	7.6	21.6	9.9	59.3	1.1	0.6	56.5	64.2
France	2019	595	54.8	11.0	18.8	12.1	50.8	5.4	1.9	57.6	51.6
	2023	684	54.3	12.5	19.8	10.2	50.6	2.5	4.4	53.0	55.8
Georgia	2019	534	56.7	11.9	18.8	10.7	54.4	3.5	0.7	60.1	53.8
	2023	641	57.3	8.9	19.8	11.4	53.9	2.3	3.8	58.4	56.3
Germany	2019	488	57.3	6.7	20.7	13.4	54.7	3.1	1.3	58.3	56.4
	2023	652	55.4	9.5	21.7	12.3	54.2	1.9	0.4	55.6	55.2
Hong Kong SAR	2019	422	84.9	1.8	6.9	6.3	84.4	0.6	0.0	84.7	85.1
	2023	603	84.4	3.6	9.3	2.7	83.7	0.4	0.4	85.2	83.7
Hungary	2019	653	65.4	9.1	13.2	11.4	63.7	1.8	0.7	64.2	66.3
	2023	767	59.1	10.3	14.9	15.2	58.5	0.6	0.4	60.0	58.2
Italy	2019	529	60.1	10.1	16.0	11.0	55.8	4.4	2.6	63.0	57.5
	2023	645	57.6	11.7	17.6	11.4	55.2	2.5	1.6	54.9	60.0
Korea, Rep. of	2019	558	83.3	6.5	3.5	6.6	83.0	0.4	0.0	84.1	82.7
	2023	864	81.9	6.0	4.2	7.7	81.1	0.5	0.4	79.8	83.7
Lithuania	2019	541	69.2	8.7	14.7	7.1	68.5	0.7	0.3	67.1	71.2
	2023	651	77.1	5.1	9.5	8.2	76.8	0.1	0.3	76.1	78.1
Netherlands	2019	474	63.9	7.1	20.2	7.5	61.7	2.8	0.8	59.7	67.6
	2023	528	56.3	10.1	24.1	8.1	54.5	1.3	2.0	56.3	56.2
Norway (5)	2019	565	58.7	8.7	19.8	9.9	54.5	3.0	4.1	60.2	57.2
	2023	777	55.9	8.5	22.8	11.5	54.2	1.4	1.7	55.8	55.9
Portugal	2019	626	56.1	10.8	18.9	12.8	54.2	2.3	1.1	56.3	55.8
	2023	763	57.4	7.9	20.5	12.8	55.7	1.4	1.6	52.0	63.4
Qatar	2019	709	42.9	14.0	20.6	20.2	41.2	2.6	1.4	41.8	44.1
	2023	932	51.6	11.9	18.2	16.8	49.9	1.1	2.1	47.9	55.4
Singapore	2019	850	84.0	3.8	7.8	4.2	83.1	0.6	0.4	81.0	87.3
	2023	1278	80.0	4.4	10.7	4.9	79.8	0.2	0.1	80.0	80.0
Slovak Republic	2019	608	63.1	8.9	16.2	10.2	60.5	2.3	1.8	60.9	65.2
	2023	706	57.1	11.9	16.8	13.8	56.3	0.9	0.4	58.8	55.3
Spain	2019	1351	60.7	6.4	19.3	12.4	59.0	1.3	1.5	59.6	61.7
	2023	1476	53.0	10.4	21.6	12.8	50.5	2.6	2.1	48.6	57.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD2\_06 ME61151: Expression to represent Pat's pencils - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	564	55.9	10.9	15.6	14.1	51.3	1.9	6.2	57.9	53.9
	2023	740	61.9	7.8	17.2	11.5	59.4	2.2	2.0	56.3	67.6
United Arab Emirates	2019	3707	53.0	12.9	17.5	15.4	51.5	1.6	1.1	52.3	53.7
	2023	4339	59.5	10.4	16.7	12.5	58.1	0.8	1.6	58.9	60.1
United States	2019	1248	71.6	7.2	11.4	8.9	69.5	1.3	1.7	72.2	71.1
	2023	1272	70.5	8.0	13.5	6.7	67.4	1.2	3.2	69.6	71.4
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International Avg. (25)	2019	20335	62.3	8.7	16.0	11.2	60.0	2.4	1.8	62.1	62.5
	2023	25240	61.3	9.1	17.3	11.0	59.6	1.4	1.6	59.8	62.7
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Abu Dhabi, UAE	2019	1290	41.8	16.1	22.4	18.2	40.7	2.0	0.7	44.0	39.2
	2023	1081	50.0	13.2	18.5	17.2	48.9	0.6	1.7	49.2	50.8
Dubai, UAE	2019	1054	70.4	6.6	13.3	9.2	69.0	1.1	0.9	69.2	71.5
	2023	1358	72.6	6.2	12.9	7.8	71.4	0.6	1.1	69.7	75.5
Ontario, Canada	2019	539	45.8	13.4	22.5	16.1	43.8	2.3	2.0	44.1	47.5
	2023	629	50.9	14.1	21.3	11.9	49.0	1.2	2.5	51.7	50.3
Quebec, Canada	2019	537	58.4	11.1	17.9	11.2	56.5	2.1	1.2	57.7	58.8
	2023	558	54.0	14.2	21.6	9.1	52.8	0.9	1.4	53.4	54.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD2\_07 ME61172: Find value of p in number sentence - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1935	28.0	26.2	26.5	31.5	9.3	4.0	2.4	24.6	31.5
	2023	1996	28.4	27.2	31.8	28.4	8.1	2.3	2.2	23.1	33.6
Chile	2019	578	18.9	15.9	22.8	32.4	13.0	9.4	6.6	18.5	19.2
	2023	657	15.0	13.3	23.1	40.0	12.7	7.0	3.9	14.1	15.7
Chinese Taipei	2019	537	49.5	49.1	25.2	20.4	4.6	0.7	0.0	50.1	48.9
	2023	1073	52.6	52.2	22.0	20.3	4.8	0.5	0.2	51.2	53.9
Czech Republic	2019	650	40.2	37.8	28.4	22.9	5.0	4.7	1.2	41.5	38.8
	2023	991	31.6	30.3	33.7	25.3	6.5	3.8	0.4	28.8	34.2
Denmark	2019	461	35.3	31.2	21.8	25.2	10.0	6.7	5.1	31.4	38.3
	2023	759	35.6	32.9	24.3	26.9	8.4	3.0	4.4	29.1	41.6
England	2019	478	42.1	39.6	20.9	25.1	8.3	4.8	1.3	42.1	42.2
	2023	596	43.4	42.1	26.8	22.5	5.6	2.3	0.6	43.5	42.7
Finland	2019	674	38.4	35.8	17.8	29.6	10.0	5.1	1.7	38.9	38.0
	2023	850	31.2	30.3	24.0	32.0	10.8	1.9	1.0	32.0	30.4
France	2019	595	20.7	17.8	36.2	24.8	7.0	11.7	2.6	21.0	20.4
	2023	684	19.6	17.6	39.2	25.9	7.0	5.4	4.9	18.5	20.9
Georgia	2019	536	46.0	43.1	24.8	21.7	4.2	4.9	1.3	49.3	43.0
	2023	641	46.6	43.3	27.2	17.7	4.7	2.5	4.7	46.7	46.6
Germany	2019	488	26.5	24.2	27.1	32.8	7.5	7.0	1.3	23.3	29.9
	2023	652	26.7	24.8	25.9	31.4	10.9	6.1	0.9	24.7	28.4
Hong Kong SAR	2019	422	68.2	67.7	11.2	17.5	2.8	0.8	0.0	63.3	72.3
	2023	603	66.9	66.1	13.7	16.1	3.0	0.7	0.4	60.6	72.5
Hungary	2019	653	44.4	43.0	23.8	23.8	6.3	1.9	1.3	44.0	44.7
	2023	767	39.7	39.1	28.1	22.7	8.6	1.1	0.4	41.0	38.3
Italy	2019	529	25.3	22.1	34.5	25.7	5.0	9.7	3.0	22.2	28.0
	2023	645	22.3	20.6	40.2	25.3	6.2	5.7	1.9	20.9	23.5
Korea, Rep. of	2019	558	56.9	55.8	13.1	21.7	7.5	1.8	0.0	54.4	59.2
	2023	864	54.6	53.9	15.9	25.1	3.8	0.9	0.4	49.9	58.6
Lithuania	2019	541	54.0	52.4	19.6	19.2	5.7	2.8	0.3	52.5	55.4
	2023	651	56.3	55.5	19.2	18.9	5.1	0.9	0.4	58.0	54.4
Netherlands	2019	474	30.2	28.4	19.3	36.2	10.0	5.2	0.9	24.3	35.6
	2023	528	24.8	23.2	22.6	38.3	9.7	3.8	2.5	19.6	30.5
Norway (5)	2019	565	39.0	35.0	19.3	30.4	5.1	6.2	4.1	37.0	40.9
	2023	777	41.2	39.3	23.9	27.3	4.7	2.6	2.2	36.0	46.4
Portugal	2019	626	25.2	23.7	35.8	27.5	6.9	4.7	1.3	26.6	24.1
	2023	763	24.2	22.8	36.8	28.7	6.1	3.9	1.7	22.3	26.1
Qatar	2019	709	21.2	20.0	32.4	27.2	14.9	3.6	1.7	20.7	21.6
	2023	932	25.4	24.2	29.3	31.2	10.4	2.6	2.4	22.0	29.0
Singapore	2019	850	73.5	72.8	13.2	10.0	3.1	0.4	0.4	72.4	74.6
	2023	1278	65.5	65.3	15.2	15.7	3.5	0.2	0.1	64.1	66.8
Slovak Republic	2019	608	39.9	36.9	23.9	24.6	7.2	5.5	2.0	36.4	43.1
	2023	706	37.8	36.9	29.5	24.9	6.3	2.0	0.4	38.7	36.8
Spain	2019	1351	26.7	25.0	28.3	31.6	8.6	4.6	1.8	22.2	30.6
	2023	1476	22.9	20.8	32.5	29.5	7.9	6.3	3.1	18.7	26.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MD2\_07 ME61172: Find value of p in number sentence - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	564	39.4	34.7	23.0	21.6	8.7	5.5	6.5	37.8	41.0
	2023	740	43.0	40.6	22.0	25.0	6.8	2.6	2.9	37.8	48.1
United Arab Emirates	2019	3704	30.5	29.2	26.3	28.4	11.8	3.0	1.3	29.8	31.3
	2023	4339	37.8	36.6	25.8	25.7	8.7	1.3	1.9	37.1	38.5
United States	2019	1248	34.8	33.8	25.2	30.7	7.5	1.0	1.9	33.7	35.8
	2023	1272	34.3	32.5	28.1	26.7	7.6	1.2	3.8	30.6	37.9
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International Avg. (25)	2019	20334	38.2	36.0	24.0	25.7	7.6	4.6	2.0	36.7	39.5
	2023	25240	37.1	35.7	26.4	26.1	7.1	2.8	1.9	34.8	39.3
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Abu Dhabi, UAE	2019	1288	23.0	22.1	27.9	31.9	14.1	3.2	0.8	23.3	22.9
	2023	1081	25.5	24.8	31.2	27.9	13.3	0.9	1.9	23.9	26.9
Dubai, UAE	2019	1054	40.7	39.5	24.0	24.4	9.1	1.9	1.2	39.2	42.2
	2023	1358	51.6	50.3	21.4	20.5	5.2	1.3	1.3	50.2	53.0
Ontario, Canada	2019	539	31.7	29.9	21.1	32.2	10.9	3.7	2.2	26.9	36.2
	2023	629	27.4	26.2	32.7	27.7	8.9	1.7	2.7	23.1	31.6
Quebec, Canada	2019	537	28.2	26.8	33.2	29.6	5.2	4.0	1.3	25.3	31.5
	2023	558	28.9	27.9	34.2	28.4	5.9	2.3	1.4	24.2	33.6
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MD2\_08 ME61223: Joan and Cliff meet halfway on number line - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1935	69.5	4.0	20.2	66.2	4.8	1.9	2.8	70.0	69.3
	2023	1996	66.4	3.0	24.6	63.4	4.5	1.8	2.7	66.8	66.0
Chile	2019	578	51.6	5.3	30.4	45.4	6.8	3.9	8.2	54.5	49.2
	2023	657	49.7	5.6	35.3	46.5	6.3	1.8	4.6	49.2	50.0
Chinese Taipei	2019	537	83.0	3.5	10.0	81.9	3.3	1.4	0.0	84.6	81.6
	2023	1073	80.0	4.2	12.6	79.9	3.2	0.0	0.2	80.8	79.2
Czech Republic	2019	650	74.5	2.4	20.2	72.5	2.2	1.3	1.3	76.5	72.3
	2023	991	72.7	2.5	20.6	72.0	3.9	0.6	0.4	72.7	72.7
Denmark	2019	461	75.4	4.3	16.4	68.6	1.7	2.8	6.3	82.1	70.2
	2023	759	74.0	5.5	17.5	69.8	1.6	1.1	4.6	72.8	75.2
England	2019	478	71.9	4.2	19.5	67.9	2.9	3.6	1.9	68.1	75.2
	2023	596	74.2	3.6	20.4	72.3	1.2	1.6	1.0	75.5	73.0
Finland	2019	674	72.6	5.0	19.6	69.8	1.7	2.1	1.8	72.1	73.1
	2023	850	73.0	5.2	19.0	71.6	2.2	1.0	1.0	76.2	69.8
France	2019	596	58.0	3.6	28.3	52.8	6.3	6.4	2.6	59.2	56.7
	2023	684	60.3	3.8	26.6	54.8	5.7	3.7	5.4	59.6	61.0
Georgia	2019	534	57.2	6.2	28.0	51.1	3.9	9.2	1.6	61.5	53.7
	2023	641	62.1	4.6	24.5	55.9	5.1	4.4	5.5	64.5	59.6
Germany	2019	488	70.3	2.7	22.7	65.9	2.3	4.7	1.7	69.6	70.8
	2023	652	64.7	3.6	27.1	62.8	3.5	1.9	1.0	65.8	63.5
Hong Kong SAR	2019	422	77.2	1.9	17.6	76.4	3.1	1.0	0.0	77.6	76.9
	2023	603	76.9	3.7	15.5	76.3	3.8	0.4	0.4	77.1	76.8
Hungary	2019	653	67.6	4.8	23.0	65.0	3.4	2.4	1.4	70.0	65.7
	2023	767	62.1	4.5	27.6	61.4	5.5	0.4	0.7	59.3	65.1
Italy	2019	529	65.6	6.3	21.1	60.8	4.5	3.6	3.7	67.7	63.7
	2023	645	63.5	3.5	25.9	61.4	5.9	1.3	1.9	65.3	61.8
Korea, Rep. of	2019	558	87.8	1.4	10.0	86.6	0.6	1.4	0.0	90.0	85.8
	2023	864	82.5	2.6	14.0	81.8	0.8	0.4	0.4	82.5	82.5
Lithuania	2019	541	65.7	5.7	22.9	64.2	4.9	2.0	0.3	65.9	65.6
	2023	651	64.3	6.1	21.7	63.4	7.4	0.8	0.5	65.4	63.1
Netherlands	2019	474	71.7	4.2	22.0	69.4	1.2	2.3	0.9	72.9	70.6
	2023	528	65.0	2.3	30.3	62.7	1.3	1.0	2.5	64.8	66.4
Norway (5)	2019	565	79.3	3.1	14.8	73.3	1.2	2.5	5.2	84.6	74.3
	2023	777	77.7	3.5	16.1	75.2	2.0	0.5	2.6	77.2	78.1
Portugal	2019	626	68.0	4.0	19.6	65.1	7.1	1.9	2.4	73.0	63.6
	2023	763	65.7	3.9	22.3	63.4	7.0	1.4	2.1	65.8	65.5
Qatar	2019	709	46.7	6.1	35.0	44.5	9.6	2.9	1.9	48.2	45.3
	2023	932	52.8	4.4	33.1	50.7	7.8	1.0	3.0	53.0	52.6
Singapore	2019	850	82.6	3.6	11.7	81.9	1.9	0.5	0.4	84.0	81.2
	2023	1278	79.3	4.1	14.7	78.9	1.9	0.3	0.1	78.5	80.0
Slovak Republic	2019	608	70.1	2.6	21.9	66.5	3.9	2.9	2.1	70.8	69.3
	2023	706	62.7	7.7	24.6	61.3	4.2	1.8	0.4	62.7	62.7
Spain	2019	1351	65.0	4.4	23.2	61.8	5.6	2.9	2.0	72.8	58.3
	2023	1476	65.6	3.5	21.2	60.9	7.2	3.3	3.8	67.9	63.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MD2\_08 ME61223: Joan and Cliff meet halfway on number line - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	564	81.2	3.3	11.4	71.3	1.7	4.9	7.3	82.7	79.7
	2023	740	76.5	3.3	16.1	72.4	3.0	2.3	3.0	79.9	72.9
United Arab Emirates	2019	3707	57.0	5.1	27.3	55.1	9.2	1.8	1.6	56.8	57.1
	2023	4339	59.1	4.6	28.5	57.4	6.6	0.6	2.3	59.6	58.6
United States	2019	1248	71.0	3.2	20.3	69.0	4.6	0.8	2.0	69.5	72.4
	2023	1272	65.7	4.0	24.6	62.3	3.9	1.0	4.1	67.8	63.8
-----											
International Avg. (25)	2019	20336	69.6	4.0	20.7	66.1	3.9	2.8	2.4	71.4	68.1
	2023	25240	67.8	4.1	22.6	65.5	4.2	1.4	2.2	68.4	67.3
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Abu Dhabi, UAE	2019	1291	45.8	5.9	35.1	44.4	11.5	2.0	1.1	43.9	47.3
	2023	1081	49.8	5.0	34.1	48.4	9.6	0.5	2.3	47.6	52.0
Dubai, UAE	2019	1054	73.6	4.3	16.6	71.6	4.8	1.3	1.3	72.1	75.0
	2023	1358	71.5	4.0	20.4	69.9	3.5	0.7	1.5	70.6	72.4
Ontario, Canada	2019	539	71.9	4.8	18.7	68.9	3.5	1.5	2.6	71.2	72.5
	2023	629	65.1	2.2	25.9	61.6	5.0	2.2	3.1	64.0	66.0
Quebec, Canada	2019	537	70.5	3.5	17.3	67.7	7.6	2.0	2.0	71.8	70.1
	2023	558	68.3	3.7	22.6	66.2	4.4	1.1	2.0	68.1	68.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Measurement and Geometry / Applying

A\_MD2\_09 ME61269: Identify solid with top and bottom shown above - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1935	72.1	6.2	15.2	5.3	69.2	1.0	3.0	73.2	71.0
	2023	1996	69.2	8.1	15.1	6.5	66.4	0.8	3.2	70.9	67.4
Chile	2019	578	64.5	8.5	16.1	7.0	57.4	1.8	9.2	66.5	62.9
	2023	657	66.4	10.6	14.9	5.9	62.0	1.8	4.9	67.0	65.8
Chinese Taipei	2019	536	88.6	3.8	6.1	1.4	88.0	0.7	0.0	90.0	87.4
	2023	1073	85.9	4.8	6.3	3.0	85.7	0.1	0.2	85.5	86.2
Czech Republic	2019	650	67.2	6.8	15.4	9.4	64.7	2.3	1.5	70.7	63.4
	2023	991	63.0	8.9	19.4	8.0	61.7	1.7	0.4	59.4	66.2
Denmark	2019	461	77.2	6.5	9.8	4.8	71.3	1.0	6.7	81.9	73.6
	2023	759	75.1	8.3	11.0	4.3	70.9	0.9	4.6	77.6	72.5
England	2019	478	72.7	8.0	12.2	6.4	70.9	0.6	1.9	75.2	70.5
	2023	596	75.0	8.3	12.2	4.0	73.9	0.4	1.1	75.5	74.2
Finland	2019	674	76.8	6.4	12.4	3.6	74.5	1.3	1.8	80.1	74.0
	2023	850	76.5	5.9	11.7	5.5	75.2	0.6	1.1	77.9	75.1
France	2019	596	57.4	14.2	16.6	9.6	54.5	1.8	3.2	58.8	55.8
	2023	684	58.0	11.6	18.2	9.1	53.8	1.4	5.8	57.2	59.0
Georgia	2019	535	64.8	9.1	14.8	9.5	61.4	1.8	3.4	69.9	60.2
	2023	641	71.1	8.8	13.4	4.7	66.2	1.3	5.6	70.3	71.9
Germany	2019	488	72.0	5.0	17.1	4.8	69.2	1.8	2.1	76.6	66.8
	2023	652	68.9	6.9	17.4	6.3	67.8	0.5	1.2	74.1	63.6
Hong Kong SAR	2019	422	89.2	1.4	7.5	1.9	88.7	0.6	0.0	89.5	88.9
	2023	603	86.0	2.7	9.0	2.2	85.5	0.2	0.4	84.1	87.6
Hungary	2019	653	74.8	6.7	14.1	3.6	72.4	0.9	2.3	75.5	74.3
	2023	767	76.2	5.2	13.1	5.2	75.5	0.2	0.8	72.3	80.4
Italy	2019	529	55.8	10.1	22.5	8.7	52.1	2.8	3.8	61.2	51.0
	2023	645	53.5	10.6	24.3	10.1	51.7	1.0	2.3	58.9	48.7
Korea, Rep. of	2019	558	89.3	2.4	7.5	0.7	88.5	0.8	0.1	93.3	85.4
	2023	864	90.6	2.8	5.5	1.0	90.1	0.1	0.6	92.0	89.4
Lithuania	2019	541	74.6	8.0	13.0	4.1	74.1	0.4	0.3	75.5	73.9
	2023	651	70.7	8.9	13.0	7.1	70.2	0.0	0.7	73.4	67.9
Netherlands	2019	474	81.1	3.6	10.0	4.9	79.3	0.7	1.5	81.6	80.7
	2023	528	83.3	4.2	9.2	2.6	80.0	1.1	2.9	83.6	82.8
Norway (5)	2019	565	74.5	7.5	11.3	5.0	69.7	1.4	5.2	73.7	75.4
	2023	777	76.3	6.0	10.6	6.4	73.8	0.4	2.9	77.2	75.4
Portugal	2019	626	55.8	7.8	23.6	11.1	53.7	1.1	2.6	53.9	57.5
	2023	763	55.5	9.4	22.9	11.1	54.2	0.2	2.3	55.5	55.5
Qatar	2019	709	47.8	20.3	15.6	14.4	46.1	1.3	2.3	53.7	42.0
	2023	932	55.6	15.6	14.3	12.9	53.5	0.5	3.2	59.2	51.9
Singapore	2019	850	88.9	2.9	6.1	2.0	87.7	0.9	0.4	89.6	88.1
	2023	1278	87.8	3.3	7.0	1.8	87.4	0.1	0.3	88.1	87.5
Slovak Republic	2019	608	83.7	4.9	5.2	5.6	80.4	1.5	2.4	84.2	83.2
	2023	706	76.8	6.3	11.3	5.3	75.5	0.9	0.8	76.4	77.2
Spain	2019	1351	57.7	8.1	23.1	9.7	55.8	1.0	2.3	57.3	58.0
	2023	1476	56.2	10.5	21.6	9.2	53.0	1.0	4.8	53.8	58.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying

A\_MD2\_09 ME61269: Identify solid with top and bottom shown above - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	564	75.4	4.8	11.5	6.1	68.5	1.5	7.7	79.2	71.6
	2023	740	77.2	5.1	11.2	5.4	73.3	1.8	3.2	79.0	75.4
United Arab Emirates	2019	3708	60.1	13.2	14.4	11.1	58.2	1.4	1.7	61.2	59.1
	2023	4339	67.0	10.3	12.4	9.3	65.1	0.4	2.5	68.9	65.4
United States	2019	1248	76.5	6.8	8.7	7.4	74.6	0.5	2.1	78.5	74.8
	2023	1272	74.3	8.0	8.8	7.6	70.4	0.8	4.5	77.2	71.5
-----											
International Avg. (25)	2019	20337	71.9	7.3	13.2	6.3	69.2	1.2	2.7	74.0	70.0
	2023	25240	71.8	7.6	13.3	6.2	69.7	0.7	2.4	72.6	71.1
-----											
Abu Dhabi, UAE	2019	1290	48.9	17.3	17.8	14.0	46.9	2.7	1.2	49.7	47.8
	2023	1081	60.4	12.1	13.6	12.8	58.7	0.3	2.5	63.1	57.9
Dubai, UAE	2019	1054	74.6	8.3	10.5	6.0	72.9	0.8	1.5	74.8	74.4
	2023	1358	78.9	5.8	10.3	4.5	77.3	0.4	1.7	80.2	77.7
Ontario, Canada	2019	539	75.6	5.2	13.2	5.2	72.9	0.7	2.9	74.4	76.7
	2023	629	70.0	9.0	13.4	6.3	67.0	0.5	3.8	71.0	69.2
Quebec, Canada	2019	537	71.2	6.3	16.6	4.9	68.9	1.3	2.0	74.6	67.7
	2023	558	67.4	8.3	17.6	5.6	65.2	1.0	2.3	68.9	65.7
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MM2\_01 ME71013: 1000 - 403 = - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	55.8	54.9	14.6	10.8	18.1	1.4	0.2	52.2	58.8
	2023	1994	56.5	56.1	12.9	11.5	18.7	0.5	0.3	54.2	59.2
Chile	2019	588	49.3	47.8	22.3	9.9	17.0	1.8	1.2	50.1	48.6
	2023	654	53.5	52.1	18.4	11.9	14.9	1.6	1.1	53.6	53.5
Chinese Taipei	2019	545	97.0	97.0	0.4	1.3	1.2	0.0	0.0	96.7	97.3
	2023	768	94.2	94.2	0.2	1.3	4.4	0.0	0.0	94.9	93.6
Czech Republic	2019	672	76.8	76.7	4.2	7.5	11.4	0.1	0.0	72.8	80.1
	2023	971	72.0	71.8	4.8	10.2	13.0	0.2	0.1	64.3	79.0
Denmark	2019	447	60.2	59.2	11.4	11.5	16.3	1.7	0.0	50.5	70.9
	2023	739	62.6	61.6	13.1	11.0	12.6	0.6	1.1	51.6	74.7
England	2019	490	69.1	68.0	9.6	8.6	12.2	1.5	0.0	72.5	65.5
	2023	582	72.1	71.4	7.5	7.9	12.2	0.9	0.0	70.5	73.8
Finland	2019	665	75.2	74.9	3.7	10.6	10.3	0.5	0.0	67.9	81.9
	2023	832	74.0	73.3	4.4	8.8	12.5	1.0	0.0	70.6	77.1
France	2019	596	57.4	56.2	11.8	9.6	20.3	2.0	0.1	52.8	61.8
	2023	668	53.9	52.5	17.5	11.2	16.3	2.1	0.5	51.6	56.3
Georgia	2019	542	74.8	73.9	4.7	6.6	13.6	1.2	0.0	69.8	79.4
	2023	623	70.1	68.8	7.3	7.5	14.5	0.2	1.6	66.3	73.6
Germany	2019	492	72.4	71.4	4.9	6.8	15.5	1.4	0.0	66.0	79.1
	2023	630	71.3	71.3	7.2	8.3	13.1	0.1	0.0	64.6	79.0
Hong Kong SAR	2019	407	84.5	84.5	1.8	5.2	8.5	0.0	0.0	84.0	84.9
	2023	596	87.3	87.2	3.2	2.7	6.9	0.1	0.0	86.1	88.3
Hungary	2019	654	75.4	75.2	3.8	10.1	10.6	0.3	0.0	74.1	76.6
	2023	741	74.9	74.7	7.1	8.5	9.5	0.2	0.0	73.1	76.7
Italy	2019	536	72.7	72.0	8.5	5.4	13.2	0.8	0.1	72.8	72.5
	2023	640	70.1	69.4	8.1	8.8	12.8	0.7	0.2	70.4	69.8
Korea, Rep. of	2019	555	81.3	81.3	2.4	9.0	7.3	0.0	0.0	77.7	84.2
	2023	632	75.9	75.9	2.2	12.7	9.1	0.0	0.0	68.0	82.8
Lithuania	2019	535	78.5	78.5	3.4	5.4	12.7	0.1	0.0	77.7	79.4
	2023	647	83.3	83.3	2.7	5.7	8.3	0.0	0.0	82.7	83.9
Netherlands	2019	480	81.5	80.3	4.1	5.1	9.0	1.2	0.2	78.1	85.2
	2023	515	80.9	80.1	5.1	4.8	9.0	0.5	0.4	76.9	85.6
Norway (5)	2019	565	64.1	63.8	8.7	9.9	17.1	0.3	0.2	59.6	68.7
	2023	761	64.9	64.1	7.1	10.8	16.8	0.9	0.3	56.4	72.8
Portugal	2019	611	59.7	58.9	10.2	14.9	14.8	0.7	0.6	61.3	58.0
	2023	757	63.0	62.9	9.9	13.5	13.6	0.1	0.1	58.6	67.7
Qatar	2019	700	56.5	55.8	18.9	10.1	13.9	1.0	0.2	58.3	54.8
	2023	919	55.0	54.2	20.1	10.0	14.3	0.5	0.9	51.0	59.1
Singapore	2019	850	93.7	93.7	0.8	1.9	3.6	0.0	0.0	94.0	93.4
	2023	935	91.7	91.6	1.1	2.7	4.5	0.1	0.0	91.6	91.7
Slovak Republic	2019	600	65.7	64.5	8.5	9.8	15.4	1.8	0.0	56.8	73.7
	2023	686	64.0	63.7	7.9	10.8	17.2	0.3	0.1	60.2	67.9
Spain	2019	1351	68.4	67.5	7.1	11.5	12.6	1.1	0.3	68.4	68.5
	2023	1458	61.5	60.9	9.4	11.8	16.8	0.8	0.2	61.5	61.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MM2\_01 ME71013: 1000 - 403 = - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	70.7	69.5	6.4	8.0	14.4	1.3	0.5	68.0	73.7
	2023	739	68.7	67.7	10.5	11.1	9.3	1.1	0.3	61.9	74.7
United Arab Emirates	2019	3668	59.7	58.8	15.0	10.0	14.8	1.0	0.4	60.8	58.6
	2023	4986	63.8	63.3	14.5	7.9	13.4	0.3	0.5	62.4	65.2
United States	2019	1271	74.1	73.1	5.8	10.3	9.5	0.6	0.7	72.1	75.9
	2023	1293	68.8	68.2	10.0	11.4	9.6	0.4	0.4	67.8	69.7
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International Avg. (25)	2019	20338	71.0	70.3	7.7	8.4	12.5	0.9	0.2	68.6	73.3
	2023	24766	70.2	69.6	8.5	8.9	12.1	0.5	0.3	66.8	73.5
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Abu Dhabi, UAE	2019	1284	51.6	50.8	20.4	11.6	15.7	1.1	0.4	54.4	48.8
	2023	1793	54.8	54.2	19.6	9.8	15.3	0.4	0.7	52.6	56.9
Dubai, UAE	2019	1025	70.6	70.1	9.2	8.2	11.9	0.5	0.1	69.2	71.7
	2023	1338	74.6	74.3	7.9	6.3	11.1	0.3	0.2	75.2	74.1
Ontario, Canada	2019	548	50.3	49.8	17.2	12.9	19.0	1.0	0.1	43.8	56.3
	2023	627	51.0	50.5	16.4	12.4	19.8	0.3	0.6	45.7	57.4
Quebec, Canada	2019	555	67.9	66.4	9.5	7.2	14.8	2.1	0.1	73.7	63.1
	2023	555	65.9	65.7	6.8	10.6	16.6	0.3	0.0	70.6	61.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_MM2\_02 ME71026: Number that makes three sentences true - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	44.2	52.6	41.7	5.4	0.4	38.7	49.0
	2023	1994	46.2	51.5	44.2	4.0	0.4	41.6	50.5
Chile	2019	588	17.6	68.5	14.7	15.2	1.7	16.6	18.6
	2023	652	22.9	66.3	19.7	12.6	1.4	17.3	27.2
Chinese Taipei	2019	545	61.3	37.9	60.2	1.9	0.0	61.6	61.1
	2023	768	70.7	29.1	70.3	0.6	0.0	73.3	68.5
Czech Republic	2019	672	60.7	36.0	55.5	8.5	0.0	62.3	59.5
	2023	971	60.3	37.4	56.8	5.8	0.1	58.3	62.2
Denmark	2019	447	42.7	49.3	36.7	14.0	0.0	43.7	41.6
	2023	739	43.8	51.4	40.1	7.5	1.1	46.1	41.3
England	2019	490	70.0	28.1	65.4	6.5	0.0	67.3	72.8
	2023	582	71.6	27.1	68.4	4.5	0.0	69.7	73.3
Finland	2019	665	46.9	49.2	43.4	7.4	0.0	44.8	48.7
	2023	832	50.0	47.2	47.2	5.1	0.5	47.8	52.1
France	2019	597	38.7	46.4	29.3	24.1	0.1	34.1	43.0
	2023	667	35.1	52.7	28.4	18.2	0.7	28.7	41.2
Georgia	2019	542	28.2	55.4	21.7	22.9	0.0	29.0	27.5
	2023	623	42.4	46.0	33.9	18.4	1.6	40.6	44.1
Germany	2019	492	64.7	31.7	58.2	10.2	0.0	61.2	68.3
	2023	630	62.8	33.6	56.7	9.7	0.0	58.8	67.1
Hong Kong SAR	2019	407	80.3	19.6	79.9	0.5	0.0	77.5	82.6
	2023	596	79.0	20.6	77.7	1.6	0.0	78.6	79.4
Hungary	2019	654	62.0	35.8	58.2	6.0	0.0	59.8	64.0
	2023	740	57.4	41.6	56.1	2.3	0.0	56.9	58.0
Italy	2019	536	51.2	43.1	45.2	11.2	0.4	47.1	55.9
	2023	640	53.8	41.1	47.8	10.9	0.2	48.6	58.7
Korea, Rep. of	2019	555	62.0	36.3	59.3	4.4	0.0	62.9	61.4
	2023	632	63.3	35.2	60.7	4.1	0.0	57.4	68.4
Lithuania	2019	535	49.7	45.4	45.0	9.6	0.0	50.4	49.0
	2023	647	57.1	41.0	54.6	4.4	0.0	57.9	56.3
Netherlands	2019	480	32.1	62.0	29.3	8.4	0.2	31.7	32.5
	2023	515	47.3	48.7	43.7	7.2	0.4	46.2	48.7
Norway (5)	2019	565	70.6	27.1	65.1	7.7	0.2	70.5	70.6
	2023	760	70.7	27.7	67.1	4.9	0.3	68.8	72.6
Portugal	2019	611	66.8	31.4	63.2	4.9	0.6	64.6	69.1
	2023	757	64.8	33.4	61.5	4.9	0.1	63.4	66.3
Qatar	2019	700	32.2	63.3	30.1	6.1	0.4	34.3	30.2
	2023	917	41.3	56.5	39.7	2.8	1.0	40.5	42.1
Singapore	2019	850	85.1	14.8	84.5	0.7	0.0	85.3	85.0
	2023	935	84.4	15.5	84.1	0.3	0.0	85.1	83.8
Slovak Republic	2019	600	60.5	37.8	57.7	4.5	0.0	60.8	60.1
	2023	685	58.6	39.7	56.2	4.0	0.1	59.0	58.3
Spain	2019	1351	37.6	55.4	33.5	10.7	0.4	33.0	42.3
	2023	1456	38.6	52.7	33.2	13.7	0.5	36.0	40.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_MM2\_02 ME71026: Number that makes three sentences true - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	60.9	36.7	57.2	5.5	0.5	62.2	59.5
	2023	738	61.7	35.6	57.2	6.9	0.4	57.9	65.0
United Arab Emirates	2019	3674	42.6	55.2	40.9	3.4	0.5	41.3	44.0
	2023	4986	49.6	49.0	48.3	2.1	0.6	48.8	50.4
United States	2019	1271	58.8	39.9	57.0	2.3	0.8	57.9	59.8
	2023	1291	54.8	44.1	53.4	1.9	0.7	53.9	55.7
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International Avg. (25)	2019	20345	53.1	42.3	49.3	8.1	0.2	51.9	54.2
	2023	24753	55.5	41.0	52.3	6.3	0.4	53.6	57.3
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Abu Dhabi, UAE	2019	1286	29.2	67.6	27.9	4.1	0.4	28.8	29.7
	2023	1793	34.0	63.8	32.9	2.3	0.9	33.7	34.3
Dubai, UAE	2019	1025	65.0	34.3	63.7	1.9	0.1	63.9	65.9
	2023	1338	69.4	30.2	68.3	1.3	0.2	68.3	70.3
Ontario, Canada	2019	548	37.7	59.7	36.2	3.9	0.2	35.4	39.8
	2023	627	41.3	55.4	39.0	5.0	0.6	39.3	42.7
Quebec, Canada	2019	555	55.2	41.3	51.0	7.6	0.1	46.9	61.5
	2023	555	49.8	48.1	47.8	4.0	0.1	44.5	55.0
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM2\_03 ME71036: Make two number sentences true (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	65.0	34.2	63.6	1.2	1.0	65.7	64.5
	2023	1994	63.7	36.1	63.3	0.2	0.5	63.0	64.2
Chile	2019	588	50.7	47.4	48.7	1.3	2.5	51.9	49.6
	2023	654	44.0	54.6	43.0	0.6	1.8	44.9	43.3
Chinese Taipei	2019	545	79.3	20.7	79.3	0.0	0.0	80.9	78.0
	2023	768	75.4	24.6	75.4	0.0	0.0	74.3	76.4
Czech Republic	2019	672	78.4	21.5	77.9	0.6	0.0	79.3	77.6
	2023	971	72.3	27.6	71.8	0.5	0.1	71.3	73.2
Denmark	2019	447	70.9	29.0	70.6	0.0	0.5	73.7	67.8
	2023	739	64.5	34.8	63.3	0.5	1.5	65.3	63.7
England	2019	490	70.2	29.5	69.6	0.9	0.0	70.9	69.5
	2023	582	72.9	27.0	72.4	0.6	0.0	72.0	74.2
Finland	2019	665	78.2	21.8	78.0	0.1	0.0	82.7	74.1
	2023	832	74.2	25.4	73.3	0.8	0.5	77.2	71.5
France	2019	597	37.6	61.1	36.9	1.7	0.3	34.0	41.1
	2023	668	38.6	60.2	37.9	1.2	0.8	33.2	44.3
Georgia	2019	542	68.2	30.6	65.5	3.2	0.7	65.7	70.5
	2023	623	63.3	35.4	61.2	0.3	3.1	64.4	62.3
Germany	2019	492	78.5	21.3	77.7	0.8	0.2	80.6	76.2
	2023	630	76.0	23.9	75.9	0.2	0.0	76.6	75.4
Hong Kong SAR	2019	407	89.1	10.9	89.1	0.0	0.0	91.1	87.3
	2023	596	87.8	12.2	87.8	0.0	0.0	86.8	88.6
Hungary	2019	654	72.2	27.6	71.6	0.7	0.0	72.6	71.8
	2023	741	69.5	30.5	69.5	0.0	0.0	69.2	69.9
Italy	2019	536	66.8	32.3	65.2	1.9	0.6	66.0	67.9
	2023	640	55.8	43.6	55.0	1.2	0.2	59.6	52.3
Korea, Rep. of	2019	555	87.3	12.6	87.2	0.0	0.2	88.0	86.9
	2023	632	88.3	11.6	88.3	0.1	0.0	89.8	87.1
Lithuania	2019	535	69.0	30.6	68.3	0.8	0.3	69.2	68.9
	2023	647	77.6	22.4	77.6	0.0	0.0	76.1	79.1
Netherlands	2019	480	72.7	27.1	72.2	0.4	0.2	74.1	71.2
	2023	515	71.8	28.1	71.6	0.0	0.4	69.8	74.0
Norway (5)	2019	565	74.4	25.3	73.7	0.8	0.2	75.1	73.7
	2023	761	75.6	24.2	75.1	0.3	0.4	76.6	74.7
Portugal	2019	611	61.0	38.4	60.1	0.9	0.6	58.5	63.8
	2023	757	59.3	40.6	59.1	0.0	0.3	58.6	60.1
Qatar	2019	700	37.8	61.1	37.1	0.9	0.9	40.2	35.4
	2023	919	40.8	58.3	40.2	0.4	1.0	41.2	40.5
Singapore	2019	850	83.4	16.6	83.4	0.0	0.0	83.7	83.2
	2023	935	83.5	16.5	83.4	0.0	0.1	82.4	84.4
Slovak Republic	2019	600	72.5	27.1	71.6	1.3	0.0	72.7	72.4
	2023	686	69.0	30.8	68.6	0.4	0.2	71.2	66.8
Spain	2019	1351	59.5	40.1	58.8	0.5	0.6	56.5	62.5
	2023	1458	54.5	45.0	53.8	0.3	0.9	52.7	56.1

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM2\_03 ME71036: Make two number sentences true (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	76.7	23.0	75.9	0.2	0.8	77.5	75.8
	2023	739	73.6	26.0	72.5	0.9	0.7	73.0	74.2
United Arab Emirates	2019	3669	51.3	47.7	50.3	1.2	0.8	50.7	52.0
	2023	4986	56.6	42.9	55.9	0.3	0.9	56.3	56.9
United States	2019	1271	71.7	27.9	70.7	0.3	1.1	67.3	75.8
	2023	1293	67.6	32.0	66.9	0.2	0.9	68.4	66.9
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International Avg. (25)	2019	20340	68.9	30.6	68.1	0.8	0.5	69.1	68.7
	2023	24766	67.1	32.6	66.5	0.4	0.6	67.0	67.2
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Abu Dhabi, UAE	2019	1283	40.2	58.8	39.5	0.9	0.7	42.5	37.9
	2023	1793	45.4	53.7	44.6	0.4	1.3	45.0	45.7
Dubai, UAE	2019	1025	71.9	27.8	71.1	0.9	0.2	72.4	71.4
	2023	1338	75.0	24.9	74.7	0.0	0.3	74.4	75.5
Ontario, Canada	2019	548	67.6	31.7	66.0	1.1	1.2	66.8	68.3
	2023	627	66.4	33.3	65.9	0.0	0.8	66.4	66.1
Quebec, Canada	2019	555	61.5	37.7	60.3	1.5	0.6	65.3	58.7
	2023	555	57.0	42.8	56.9	0.2	0.1	57.8	56.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Number / Applying

A\_MM2\_04 ME71040: Expression for total bags for tennis and soccer balls - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	34.8	23.6	19.9	18.0	32.8	4.6	1.1	34.1	35.4
	2023	1994	31.4	24.5	22.5	19.2	30.3	3.1	0.5	30.8	31.7
Chile	2019	588	22.4	32.6	18.4	19.1	20.2	6.7	3.0	24.6	20.3
	2023	654	20.0	29.6	21.2	21.8	18.2	7.2	2.0	19.7	20.2
Chinese Taipei	2019	545	66.7	10.6	12.7	9.6	66.0	1.1	0.0	70.1	63.8
	2023	768	67.1	12.4	12.2	8.3	67.0	0.1	0.0	66.2	67.8
Czech Republic	2019	672	53.3	21.2	11.0	11.5	49.9	6.3	0.0	51.1	55.0
	2023	971	43.0	25.4	14.5	14.8	41.3	3.3	0.6	43.4	42.7
Denmark	2019	447	34.0	23.9	16.2	19.1	30.5	9.7	0.5	32.2	35.9
	2023	739	29.8	26.6	15.4	23.2	27.7	5.7	1.5	33.7	25.6
England	2019	490	47.1	21.9	15.3	13.4	45.1	4.4	0.0	47.5	46.8
	2023	582	49.3	17.4	16.0	15.7	47.8	3.1	0.0	49.7	49.1
Finland	2019	665	44.1	26.5	16.2	11.1	42.5	3.7	0.0	45.6	42.8
	2023	832	34.1	27.0	19.0	16.8	32.6	4.1	0.5	35.0	33.4
France	2019	597	24.5	30.0	19.2	16.7	21.3	12.3	0.5	23.5	25.4
	2023	668	28.2	22.6	19.6	23.0	25.6	8.4	0.8	24.7	31.8
Georgia	2019	542	43.7	22.5	13.8	15.9	40.5	6.4	0.9	47.6	40.3
	2023	623	45.1	22.7	16.0	11.4	41.2	5.2	3.4	44.5	45.7
Germany	2019	492	42.2	23.4	15.4	15.3	39.4	6.3	0.2	42.7	41.6
	2023	630	39.2	24.5	16.4	16.3	36.9	5.9	0.0	38.4	40.2
Hong Kong SAR	2019	407	69.1	7.1	15.0	8.7	68.9	0.3	0.0	66.4	71.5
	2023	596	67.6	6.1	15.6	10.6	67.5	0.1	0.0	70.9	64.7
Hungary	2019	654	45.3	24.1	16.8	12.7	44.4	2.0	0.0	46.1	44.6
	2023	741	43.6	24.4	15.3	15.9	43.1	1.3	0.0	38.9	48.8
Italy	2019	536	42.0	20.8	20.0	13.2	39.1	5.9	1.1	38.9	45.8
	2023	640	38.1	22.7	18.5	17.1	35.9	5.7	0.2	37.6	38.6
Korea, Rep. of	2019	555	59.7	11.0	10.9	17.4	58.2	2.3	0.2	61.8	58.0
	2023	632	58.2	10.6	14.9	15.9	57.5	1.2	0.0	57.6	58.7
Lithuania	2019	535	58.4	17.1	14.1	9.6	57.2	1.7	0.3	59.0	57.5
	2023	647	58.5	17.0	14.2	10.1	58.1	0.6	0.0	57.0	59.9
Netherlands	2019	480	48.6	18.7	15.1	15.4	46.5	4.1	0.2	50.6	46.5
	2023	515	47.5	18.8	14.7	16.0	44.9	5.2	0.4	43.1	52.2
Norway (5)	2019	565	42.4	22.3	20.3	12.3	40.3	4.5	0.3	44.2	40.5
	2023	761	42.1	17.2	22.0	16.7	40.6	3.1	0.5	41.8	42.3
Portugal	2019	611	41.4	19.6	19.8	16.5	39.6	3.8	0.7	38.7	44.3
	2023	757	37.0	19.0	22.8	18.8	35.5	3.6	0.3	34.7	39.4
Qatar	2019	700	28.2	28.2	19.7	20.6	26.9	3.6	1.0	26.7	29.6
	2023	919	33.5	24.6	20.9	18.9	32.5	1.9	1.2	32.3	34.8
Singapore	2019	850	72.5	9.3	9.7	8.4	72.2	0.4	0.0	71.5	73.6
	2023	935	63.4	11.1	13.1	12.3	63.3	0.0	0.1	61.1	65.6
Slovak Republic	2019	600	44.7	25.0	14.1	12.7	41.8	6.5	0.0	42.6	46.5
	2023	686	41.7	23.3	16.9	16.7	40.7	2.2	0.2	43.6	39.8
Spain	2019	1351	37.8	21.6	20.3	16.5	35.5	5.4	0.7	39.5	36.0
	2023	1458	31.7	27.1	17.4	18.8	29.3	6.5	0.9	30.9	32.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM2\_04 ME71040: Expression for total bags for tennis and soccer balls - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	36.4	25.6	17.5	15.1	33.2	7.8	0.8	40.6	31.8
	2023	739	36.1	22.7	16.0	20.9	33.7	6.0	0.7	33.7	38.1
United Arab Emirates	2019	3664	33.9	26.2	21.5	16.0	32.7	2.7	0.9	30.4	37.4
	2023	4986	40.7	20.9	18.3	18.6	39.7	1.5	1.1	39.8	41.6
United States	2019	1271	52.7	17.3	15.3	13.5	51.5	1.2	1.1	54.5	51.1
	2023	1293	49.3	17.2	15.0	17.1	48.0	1.6	1.0	47.2	51.2
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International Avg. (25)	2019	20335	45.0	21.2	16.3	14.3	43.1	4.5	0.5	45.2	44.9
	2023	24766	43.0	20.6	17.1	16.6	41.5	3.5	0.6	42.3	43.8
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Abu Dhabi, UAE	2019	1282	27.1	28.6	23.1	18.9	26.3	2.3	0.7	26.8	27.6
	2023	1793	31.0	24.8	19.4	22.6	30.1	1.5	1.6	30.4	31.6
Dubai, UAE	2019	1025	47.7	20.8	17.7	12.6	46.6	2.0	0.3	43.7	50.9
	2023	1338	55.4	16.1	13.2	14.5	54.3	1.5	0.3	54.8	55.8
Ontario, Canada	2019	548	33.2	22.7	20.6	19.8	31.3	4.3	1.3	33.4	33.0
	2023	627	30.6	26.1	23.2	17.4	29.3	3.1	0.8	30.9	29.3
Quebec, Canada	2019	555	41.0	20.3	18.4	16.7	38.5	5.3	0.7	40.0	41.7
	2023	555	35.4	20.8	20.6	21.3	34.3	3.0	0.1	36.7	34.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MM2\_05 ME71068: Estimate height of Building B - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	45.8	18.2	24.3	44.7	10.4	1.0	1.4	44.5	47.1
	2023	1994	45.8	18.2	24.9	44.9	10.2	0.7	1.2	43.5	48.4
Chile	2019	588	33.0	29.7	20.6	30.5	11.5	3.7	4.0	33.1	33.0
	2023	654	36.8	29.3	22.9	35.6	8.9	0.5	2.8	37.6	36.2
Chinese Taipei	2019	545	61.6	12.7	20.9	61.3	4.5	0.6	0.0	63.5	60.0
	2023	768	66.9	7.4	22.0	66.8	3.6	0.1	0.0	64.7	68.8
Czech Republic	2019	672	44.4	15.5	35.6	44.1	4.3	0.6	0.0	41.7	46.6
	2023	971	50.6	13.7	29.6	50.1	5.6	0.2	0.7	49.6	51.5
Denmark	2019	447	51.3	16.0	24.8	48.8	5.6	3.7	1.1	46.1	56.7
	2023	738	46.0	19.2	27.2	44.4	5.8	1.3	2.1	40.8	51.6
England	2019	490	46.3	18.6	26.4	45.8	8.2	0.6	0.4	43.8	48.9
	2023	582	49.3	15.0	28.0	49.0	7.5	0.6	0.0	46.5	51.9
Finland	2019	665	48.8	13.7	31.8	48.7	5.6	0.3	0.0	49.6	48.1
	2023	832	52.1	9.8	30.9	51.3	6.7	0.9	0.5	49.0	54.9
France	2019	597	42.2	24.8	24.8	40.3	5.7	3.5	0.9	37.4	46.7
	2023	668	35.7	24.0	28.7	34.6	9.7	1.5	1.5	33.4	38.0
Georgia	2019	542	35.0	35.6	20.3	33.1	5.5	3.8	1.7	34.3	35.6
	2023	623	37.1	31.0	22.5	34.8	5.6	1.7	4.4	36.9	37.2
Germany	2019	492	51.1	10.6	30.1	50.6	7.8	0.8	0.2	50.6	51.6
	2023	630	52.4	12.6	26.8	52.2	8.2	0.2	0.0	52.4	52.3
Hong Kong SAR	2019	406	67.6	7.7	19.6	67.0	4.8	1.0	0.0	66.3	68.8
	2023	596	62.4	7.4	24.1	62.3	6.0	0.2	0.0	62.2	62.6
Hungary	2019	654	44.6	18.6	27.4	44.4	9.0	0.6	0.0	44.6	44.7
	2023	741	49.2	14.0	27.6	48.9	8.8	0.6	0.1	48.3	50.2
Italy	2019	536	44.0	26.2	20.7	42.4	7.1	2.3	1.2	42.3	46.0
	2023	640	41.3	26.6	24.4	40.6	6.7	1.2	0.5	40.4	42.1
Korea, Rep. of	2019	555	62.3	8.2	26.9	61.8	2.4	0.5	0.2	68.5	57.3
	2023	632	62.8	8.4	25.7	62.8	3.0	0.1	0.0	63.7	62.0
Lithuania	2019	535	58.1	20.4	16.1	57.6	4.9	0.6	0.3	55.5	61.2
	2023	647	61.0	14.6	18.8	60.8	5.4	0.3	0.0	58.1	63.9
Netherlands	2019	480	52.8	14.6	24.6	52.6	7.9	0.1	0.2	52.8	52.7
	2023	515	57.1	11.1	25.5	56.4	5.9	0.6	0.5	57.5	56.2
Norway (5)	2019	565	51.4	13.4	31.2	50.8	3.5	0.3	0.8	49.3	53.5
	2023	761	53.1	12.4	30.0	52.7	4.3	0.2	0.5	52.3	53.8
Portugal	2019	611	49.6	21.6	20.7	48.6	7.0	1.0	1.0	50.6	48.6
	2023	757	44.9	21.1	25.4	44.3	7.8	0.8	0.7	44.0	45.9
Qatar	2019	700	37.6	29.8	23.1	36.1	7.0	2.2	1.8	38.6	36.6
	2023	919	39.6	26.8	24.1	38.7	8.1	0.8	1.5	34.2	45.4
Singapore	2019	850	52.3	10.7	29.1	51.9	7.6	0.7	0.0	52.6	52.0
	2023	935	55.0	10.7	28.0	54.9	6.2	0.1	0.1	52.8	57.0
Slovak Republic	2019	600	42.3	23.3	27.4	41.9	6.6	0.9	0.0	32.7	51.1
	2023	686	44.2	21.0	26.5	43.9	8.0	0.3	0.2	40.5	48.0
Spain	2019	1351	41.3	25.1	26.1	40.6	6.5	1.0	0.7	41.0	41.5
	2023	1458	44.7	22.5	24.4	43.3	6.7	1.5	1.6	45.0	44.4

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MM2\_05 ME71068: Estimate height of Building B - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	48.4	14.7	26.6	47.5	9.2	0.9	1.1	45.8	51.4
	2023	739	50.1	14.7	29.3	48.8	4.7	1.0	1.5	47.4	52.6
United Arab Emirates	2019	3668	42.3	24.9	22.4	41.2	8.9	1.1	1.5	40.4	44.3
	2023	4986	45.9	21.6	23.6	44.9	7.7	0.5	1.6	43.4	48.2
United States	2019	1271	53.2	18.5	18.7	52.1	8.7	0.9	1.2	52.2	54.2
	2023	1293	49.4	18.8	22.8	48.3	8.0	0.4	1.8	46.7	52.0
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International Avg. (25)	2019	20338	48.3	18.9	24.8	47.4	6.8	1.3	0.8	47.1	49.5
	2023	24765	49.3	17.3	25.7	48.6	6.8	0.7	1.0	47.6	51.0
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Abu Dhabi, UAE	2019	1283	40.1	25.6	21.6	39.1	11.1	1.5	1.1	39.7	40.8
	2023	1793	40.6	23.6	24.7	39.3	9.2	0.8	2.4	38.3	42.8
Dubai, UAE	2019	1025	49.1	21.6	23.1	48.6	5.6	0.2	0.8	43.9	53.5
	2023	1338	53.1	16.2	25.8	52.9	4.6	0.0	0.5	51.8	54.3
Ontario, Canada	2019	548	44.3	16.6	25.1	43.1	12.5	1.2	1.5	41.4	47.0
	2023	627	43.9	17.7	25.7	42.7	11.2	1.1	1.6	43.2	45.2
Quebec, Canada	2019	555	51.4	16.9	22.0	50.9	9.2	0.2	0.9	52.7	50.9
	2023	555	49.1	17.2	23.2	48.9	10.1	0.1	0.5	47.4	50.9
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM2\_06A ME71075A: Steps across classroom - length - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	25.1	70.1	23.5	4.7	1.6	17.9	31.3
	2023	1994	23.9	71.6	22.5	4.3	1.6	14.9	32.5
Chile	2019	588	11.0	75.2	9.3	11.1	4.4	8.3	13.4
	2023	654	14.3	75.6	12.6	8.8	3.0	10.5	17.0
Chinese Taipei	2019	545	77.4	22.6	77.3	0.2	0.0	81.0	74.3
	2023	768	78.6	21.3	78.3	0.4	0.0	77.6	79.4
Czech Republic	2019	672	50.5	45.5	46.4	8.1	0.0	45.9	54.3
	2023	971	49.6	46.8	46.0	6.5	0.7	38.7	59.1
Denmark	2019	447	36.3	54.5	31.1	12.8	1.6	32.7	39.9
	2023	739	39.2	53.3	34.3	9.8	2.5	32.1	46.8
England	2019	490	41.4	56.4	39.8	3.3	0.4	31.7	51.5
	2023	582	46.1	52.1	44.6	3.2	0.0	37.5	55.4
Finland	2019	665	41.7	54.0	38.6	7.4	0.0	35.5	47.4
	2023	831	44.6	51.7	41.6	6.1	0.5	33.6	55.0
France	2019	597	33.7	56.4	28.6	14.1	0.9	29.4	37.7
	2023	659	26.4	63.9	22.9	11.4	1.8	22.6	30.4
Georgia	2019	542	46.7	46.5	40.7	11.1	1.7	44.0	49.1
	2023	623	46.3	44.5	38.3	12.5	4.7	40.1	51.9
Germany	2019	492	49.6	46.7	45.9	7.2	0.2	45.0	54.4
	2023	630	50.3	46.3	46.9	6.8	0.0	41.6	60.2
Hong Kong SAR	2019	407	75.6	24.0	74.5	1.3	0.2	71.5	79.3
	2023	594	77.0	22.9	76.6	0.5	0.0	77.4	76.6
Hungary	2019	654	46.4	51.3	44.5	4.2	0.0	43.4	49.1
	2023	741	42.4	56.2	41.4	2.2	0.2	39.4	45.7
Italy	2019	536	37.4	56.0	33.4	9.0	1.6	32.2	43.3
	2023	639	39.4	55.2	35.8	8.4	0.5	33.4	44.7
Korea, Rep. of	2019	555	62.9	36.5	61.8	1.6	0.2	57.9	66.9
	2023	632	63.6	35.9	62.8	1.3	0.1	55.2	70.8
Lithuania	2019	535	57.0	41.4	54.9	3.4	0.3	53.9	60.6
	2023	647	63.1	36.2	62.0	1.8	0.0	57.5	68.9
Netherlands	2019	480	58.2	40.1	55.9	3.8	0.2	51.0	65.9
	2023	515	52.1	44.2	48.0	6.9	0.9	44.2	59.7
Norway (5)	2019	565	41.1	52.8	36.9	9.5	0.8	39.4	42.9
	2023	761	43.7	51.4	39.8	8.3	0.5	37.1	49.7
Portugal	2019	611	43.3	54.2	41.4	3.4	1.1	39.0	47.7
	2023	757	45.4	51.2	42.5	5.2	1.1	42.7	48.1
Qatar	2019	700	22.5	69.5	20.2	8.1	2.2	21.0	24.0
	2023	918	25.6	70.9	24.4	2.8	2.0	17.0	34.6
Singapore	2019	850	70.1	29.7	69.7	0.6	0.0	68.0	72.1
	2023	935	66.4	33.5	66.2	0.2	0.1	62.8	69.7
Slovak Republic	2019	600	33.2	61.7	30.7	7.6	0.0	25.2	40.2
	2023	686	28.7	66.9	26.9	6.0	0.2	22.2	34.8
Spain	2019	1351	37.5	57.4	34.4	7.5	0.8	34.1	41.0
	2023	1457	35.3	58.3	31.7	8.3	1.8	29.2	40.8

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM2\_06A ME71075A: Steps across classroom - length - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	39.5	54.8	35.7	7.7	1.8	26.9	52.7
	2023	739	47.4	47.7	43.0	7.4	1.9	40.1	54.0
United Arab Emirates	2019	3675	27.9	68.0	26.3	4.1	1.7	25.2	30.6
	2023	4985	34.4	62.4	32.7	3.0	1.9	31.0	37.4
United States	2019	1271	41.9	56.4	40.8	1.6	1.3	37.4	46.2
	2023	1293	41.2	56.5	39.5	2.1	1.9	36.4	45.8
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International Avg. (25)	2019	20346	44.3	51.3	41.7	6.1	0.9	39.9	48.6
	2023	24750	45.0	51.1	42.5	5.4	1.1	39.0	50.8
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Abu Dhabi, UAE	2019	1287	18.9	76.8	17.9	4.0	1.3	17.6	20.2
	2023	1792	22.9	72.7	21.6	2.8	2.8	19.6	26.0
Dubai, UAE	2019	1025	43.9	54.0	42.3	2.9	0.8	38.3	48.6
	2023	1338	49.2	49.3	47.7	2.5	0.5	45.9	52.1
Ontario, Canada	2019	548	26.9	70.2	25.9	2.2	1.7	19.3	34.1
	2023	627	24.2	70.5	22.5	4.5	2.4	15.6	32.5
Quebec, Canada	2019	555	25.7	68.2	23.6	7.3	0.9	17.2	31.6
	2023	555	21.5	74.7	20.5	4.4	0.5	12.4	30.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM2\_06B ME71075B: Steps across classroom - width - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	22.5	68.5	19.8	9.4	2.3	15.3	28.6
	2023	1994	18.9	70.9	16.5	10.5	2.1	12.8	24.5
Chile	2019	588	5.3	72.3	4.1	18.0	5.7	3.9	6.6
	2023	654	5.1	74.0	4.0	17.9	4.1	2.5	7.0
Chinese Taipei	2019	545	63.1	36.3	61.9	1.8	0.0	66.0	60.5
	2023	768	72.7	26.8	71.4	1.8	0.0	73.0	72.5
Czech Republic	2019	672	27.0	58.8	21.8	19.2	0.3	22.1	31.0
	2023	971	21.5	61.9	16.9	20.4	0.8	12.3	28.8
Denmark	2019	447	22.9	59.4	17.6	20.4	2.6	19.4	26.1
	2023	739	25.6	61.0	20.9	14.6	3.5	20.4	30.7
England	2019	490	30.9	62.4	27.9	9.3	0.4	28.0	34.0
	2023	582	30.4	63.2	27.5	9.2	0.1	23.4	37.6
Finland	2019	665	18.0	69.3	15.2	15.4	0.1	9.7	25.1
	2023	829	17.9	70.4	15.3	13.7	0.5	13.0	22.4
France	2019	597	18.9	59.0	13.8	26.0	1.1	10.5	26.8
	2023	668	16.2	59.4	11.5	26.2	2.8	10.1	22.7
Georgia	2019	542	37.9	50.3	30.7	17.1	1.9	36.8	38.8
	2023	623	40.5	43.2	29.5	21.6	5.7	36.0	44.3
Germany	2019	492	30.8	55.8	24.9	19.0	0.4	23.6	37.8
	2023	630	20.9	63.3	16.8	19.6	0.2	12.9	29.3
Hong Kong SAR	2019	407	65.8	33.3	63.9	2.6	0.2	64.2	67.2
	2023	593	73.0	26.3	71.3	2.4	0.0	73.0	73.1
Hungary	2019	654	21.9	70.6	19.8	9.3	0.4	19.6	23.9
	2023	740	22.8	69.2	20.4	9.7	0.7	15.5	30.6
Italy	2019	536	30.0	56.9	24.4	16.7	2.0	23.0	37.9
	2023	640	27.4	56.2	21.2	21.8	0.9	21.0	32.8
Korea, Rep. of	2019	555	47.8	49.4	45.2	5.3	0.2	46.1	49.1
	2023	632	49.1	48.4	46.7	4.6	0.3	41.8	55.2
Lithuania	2019	535	43.7	51.5	39.9	8.2	0.3	42.5	45.0
	2023	647	58.8	39.1	56.0	4.9	0.0	54.4	63.3
Netherlands	2019	480	32.0	62.2	29.2	8.1	0.5	28.8	35.2
	2023	515	32.5	58.9	28.4	11.2	1.5	25.1	39.8
Norway (5)	2019	565	21.0	64.6	17.2	17.1	1.0	18.4	23.5
	2023	761	25.7	60.4	20.9	17.6	1.1	16.0	34.0
Portugal	2019	611	31.1	61.7	27.9	9.2	1.3	26.0	36.3
	2023	757	27.7	60.7	23.3	14.0	2.1	21.2	34.2
Qatar	2019	700	12.1	77.1	10.7	7.8	4.5	8.9	15.4
	2023	919	14.3	75.9	12.7	9.2	2.2	8.9	20.1
Singapore	2019	850	52.4	46.9	51.6	1.4	0.1	46.0	58.7
	2023	935	51.1	48.3	50.5	1.1	0.1	47.1	54.8
Slovak Republic	2019	600	19.6	66.9	16.3	16.0	0.7	13.2	25.2
	2023	686	19.3	67.1	16.0	16.4	0.5	16.7	21.6
Spain	2019	1351	19.2	68.3	16.2	14.7	0.8	13.3	25.0
	2023	1458	17.0	66.3	13.6	18.0	2.0	10.4	23.2

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM2\_06B ME71075B: Steps across classroom - width - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	18.9	67.5	15.7	14.7	2.1	10.8	27.1
	2023	739	21.8	65.5	18.3	13.2	3.0	16.4	26.2
United Arab Emirates	2019	3674	19.1	73.3	17.3	7.3	2.1	15.2	22.7
	2023	4985	27.3	65.2	24.5	7.7	2.6	23.2	31.0
United States	2019	1271	27.6	68.5	26.1	3.8	1.6	27.2	27.9
	2023	1293	23.3	71.8	21.8	3.9	2.6	16.9	29.5
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International Avg. (25)	2019	20345	29.6	60.4	26.4	11.9	1.3	25.5	33.4
	2023	24758	30.4	58.9	27.0	12.4	1.6	25.0	35.6
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Abu Dhabi, UAE	2019	1286	12.9	80.4	11.9	6.1	1.6	10.1	15.4
	2023	1793	17.2	73.3	15.3	7.9	3.5	14.0	20.3
Dubai, UAE	2019	1025	29.4	65.3	27.2	6.2	1.2	24.8	33.3
	2023	1338	40.1	55.3	37.0	6.8	0.9	33.8	45.7
Ontario, Canada	2019	548	25.8	67.8	23.5	6.7	2.0	20.0	31.1
	2023	627	22.3	67.1	19.3	10.8	2.8	14.4	29.5
Quebec, Canada	2019	555	20.8	67.4	17.7	13.2	1.7	11.3	27.4
	2023	555	12.5	76.5	10.9	11.5	1.1	8.5	16.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Measurement and Geometry / Reasoning  
A\_MM2\_07 ME71080: Weight of watermelon - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	40.4	16.9	22.9	17.3	38.6	1.5	2.8	37.6	42.8
	2023	1994	39.2	20.6	22.3	15.6	37.6	1.3	2.7	36.8	41.3
Chile	2019	588	35.5	23.2	19.1	15.4	31.8	4.0	6.5	32.8	38.0
	2023	654	33.8	26.0	19.1	16.2	31.4	2.0	5.3	31.7	35.5
Chinese Taipei	2019	545	72.0	8.3	11.2	8.3	71.6	0.6	0.0	70.7	73.2
	2023	768	76.1	5.3	10.0	8.5	75.8	0.4	0.0	75.2	76.8
Czech Republic	2019	672	60.0	8.9	19.5	11.0	59.2	0.9	0.4	52.1	66.4
	2023	971	56.3	14.7	16.2	12.0	55.4	0.8	0.8	53.4	59.0
Denmark	2019	447	50.3	17.9	19.3	9.9	47.7	2.0	3.3	46.7	54.3
	2023	739	53.0	16.1	16.8	10.9	49.4	1.6	5.3	44.1	62.4
England	2019	490	42.0	18.9	21.0	17.4	41.6	0.6	0.4	34.5	50.1
	2023	582	48.4	14.4	23.0	13.9	48.3	0.2	0.1	44.7	52.6
Finland	2019	665	62.7	10.3	15.6	10.2	60.5	2.6	0.8	58.0	67.0
	2023	832	64.5	10.6	17.0	7.4	63.8	0.4	0.8	57.5	71.0
France	2019	597	47.8	17.9	19.9	12.6	46.1	1.7	1.8	46.8	48.6
	2023	668	43.4	18.7	20.1	14.8	41.0	1.8	3.7	39.5	47.4
Georgia	2019	542	58.8	18.2	10.6	9.9	55.2	3.4	2.7	58.5	59.0
	2023	623	58.4	13.3	12.0	12.6	53.3	1.4	7.3	58.9	58.0
Germany	2019	492	52.4	15.4	18.7	12.6	51.4	1.1	0.8	45.4	59.8
	2023	630	53.6	16.7	18.1	10.9	52.9	0.8	0.5	51.1	56.5
Hong Kong SAR	2019	407	78.4	6.2	9.0	6.2	78.0	0.4	0.2	72.3	83.9
	2023	596	77.5	5.5	10.4	6.6	77.5	0.0	0.0	75.8	78.9
Hungary	2019	654	54.4	15.7	15.4	13.8	53.7	0.9	0.6	53.0	55.8
	2023	741	52.7	14.8	18.5	13.4	52.1	0.2	1.0	47.5	58.3
Italy	2019	536	44.3	23.3	17.0	11.4	41.1	4.0	3.3	37.8	51.7
	2023	640	35.9	27.1	20.2	14.1	34.3	1.5	2.8	32.9	38.6
Korea, Rep. of	2019	555	74.7	4.3	14.0	6.8	73.9	0.8	0.2	73.1	75.9
	2023	632	76.9	5.9	12.1	5.1	76.4	0.3	0.3	73.7	79.6
Lithuania	2019	535	62.5	14.3	13.6	9.4	62.1	0.4	0.3	55.2	71.0
	2023	647	71.1	10.4	13.5	4.9	70.9	0.3	0.0	62.9	79.4
Netherlands	2019	480	51.4	12.6	22.4	13.1	50.8	0.6	0.5	52.0	50.7
	2023	515	53.1	15.5	20.4	10.0	52.1	0.5	1.5	43.9	62.6
Norway (5)	2019	565	53.7	14.1	17.3	13.6	52.2	0.8	2.0	48.6	58.9
	2023	761	61.4	14.8	16.2	6.9	60.3	0.1	1.7	53.9	68.6
Portugal	2019	611	50.0	15.6	19.4	13.7	48.7	0.7	2.0	44.7	55.6
	2023	757	47.6	18.3	17.5	14.4	45.5	0.9	3.4	43.5	51.9
Qatar	2019	700	41.0	18.5	18.4	17.7	38.0	2.5	4.9	43.8	38.3
	2023	919	38.8	24.3	18.9	15.6	37.3	0.4	3.6	32.7	45.5
Singapore	2019	850	81.4	3.0	8.8	6.7	80.7	0.6	0.1	78.2	84.4
	2023	935	77.4	5.7	8.8	8.1	77.2	0.1	0.1	73.5	81.0
Slovak Republic	2019	600	55.6	13.2	17.0	13.3	54.5	1.1	0.9	48.4	62.1
	2023	686	55.5	14.5	17.0	11.8	54.1	1.6	1.0	53.5	57.5
Spain	2019	1351	39.6	23.7	20.2	15.2	38.8	0.8	1.2	30.8	48.6
	2023	1458	43.9	20.3	22.8	11.0	42.4	1.2	2.3	35.2	52.0

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning  
A\_MM2\_07 ME71080: Weight of watermelon - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	61.1	10.4	16.8	10.2	58.9	1.2	2.5	53.1	70.1
	2023	739	64.0	12.8	12.5	9.0	61.1	1.1	3.4	60.1	67.6
United Arab Emirates	2019	3669	43.5	19.8	18.4	15.7	41.6	2.0	2.5	41.5	45.5
	2023	4986	46.1	20.5	18.8	12.5	44.3	0.7	3.2	42.4	49.5
United States	2019	1271	47.7	14.8	20.7	15.0	46.0	1.0	2.4	48.6	46.8
	2023	1293	43.6	17.8	22.2	14.4	42.0	0.7	3.0	43.7	43.5
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International Avg. (25)	2019	20340	54.5	14.6	17.0	12.3	52.9	1.4	1.7	50.6	58.3
	2023	24766	54.9	15.4	17.0	11.2	53.5	0.8	2.1	50.7	59.0
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Abu Dhabi, UAE	2019	1285	38.7	19.9	20.0	19.0	37.2	2.1	1.7	38.5	38.8
	2023	1793	39.8	23.4	20.1	13.8	37.9	0.7	4.0	35.3	44.0
Dubai, UAE	2019	1025	50.5	17.0	17.5	13.2	48.8	1.3	2.1	45.9	54.4
	2023	1338	58.9	14.2	16.8	9.4	57.7	0.2	1.7	55.2	62.1
Ontario, Canada	2019	548	40.1	17.1	24.1	16.7	38.7	1.1	2.2	38.7	41.4
	2023	627	39.4	19.7	22.6	15.6	37.7	1.4	3.1	39.1	39.0
Quebec, Canada	2019	555	44.6	16.4	22.0	14.8	42.8	1.6	2.5	39.7	48.5
	2023	555	35.7	23.5	22.1	16.5	34.6	1.1	2.1	33.2	38.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM2\_08 ME71211: Path parallel to Mary's path - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1947	40.0	56.8	38.0	2.0	3.2	40.1	40.0
	2023	1994	33.2	64.2	32.0	0.7	3.1	31.1	35.0
Chile	2019	588	11.0	79.5	9.8	3.1	7.7	10.9	11.0
	2023	654	7.1	85.3	6.6	2.0	6.1	6.8	7.4
Chinese Taipei	2019	545	63.4	36.6	63.4	0.0	0.0	66.9	60.2
	2023	768	59.1	40.7	58.8	0.4	0.1	56.7	61.1
Czech Republic	2019	672	67.2	32.0	65.7	1.9	0.4	69.5	65.4
	2023	969	52.2	47.1	51.4	0.6	0.9	49.2	54.9
Denmark	2019	447	63.9	34.2	60.5	1.3	4.1	63.3	64.6
	2023	739	49.5	46.7	45.8	1.6	6.0	52.7	46.2
England	2019	490	55.0	44.2	54.1	1.3	0.4	54.2	55.9
	2023	582	42.7	57.0	42.5	0.4	0.1	40.6	44.8
Finland	2019	665	45.8	52.5	44.5	2.2	0.8	50.2	41.9
	2023	832	42.0	55.8	40.4	3.1	0.8	43.6	40.5
France	2019	597	48.8	49.4	47.1	1.7	1.8	48.7	48.9
	2023	668	36.8	57.6	33.5	4.1	4.7	34.5	39.2
Georgia	2019	542	54.7	40.6	49.0	7.7	2.7	56.8	52.7
	2023	623	46.9	47.1	41.7	3.3	8.0	48.6	45.4
Germany	2019	492	42.1	55.8	40.7	2.5	1.0	43.8	40.4
	2023	630	41.7	57.2	41.0	1.1	0.7	39.0	44.8
Hong Kong SAR	2019	407	47.9	51.9	47.7	0.3	0.2	46.6	49.0
	2023	596	46.8	52.9	46.5	0.7	0.0	39.2	53.5
Hungary	2019	654	51.4	48.2	51.0	0.3	0.6	50.2	52.5
	2023	741	44.8	54.3	44.1	0.5	1.1	43.6	46.1
Italy	2019	536	51.5	45.5	48.2	2.1	4.3	51.3	51.6
	2023	640	41.9	54.2	39.0	3.7	3.0	38.4	45.1
Korea, Rep. of	2019	555	65.3	34.3	64.7	0.8	0.2	69.6	61.9
	2023	632	49.8	49.9	49.4	0.2	0.5	49.1	50.3
Lithuania	2019	535	33.6	64.2	32.5	3.0	0.3	35.2	31.7
	2023	646	28.3	71.2	28.1	0.7	0.0	27.4	29.1
Netherlands	2019	480	22.0	76.1	21.5	1.7	0.6	22.6	21.5
	2023	515	20.8	76.5	20.1	1.6	1.7	22.0	19.9
Norway (5)	2019	565	61.1	37.5	58.9	1.4	2.2	62.5	59.6
	2023	761	43.5	54.1	41.7	2.3	1.8	41.3	45.6
Portugal	2019	611	49.2	49.0	47.5	1.5	2.0	48.2	50.2
	2023	757	42.8	54.7	40.9	0.6	3.9	42.9	42.6
Qatar	2019	700	42.2	53.4	39.0	2.3	5.3	47.5	37.1
	2023	918	24.1	71.5	22.7	2.1	3.7	22.4	25.9
Singapore	2019	850	82.0	17.8	81.3	0.8	0.1	84.0	80.1
	2023	935	74.3	25.7	74.2	0.0	0.1	72.3	76.1
Slovak Republic	2019	600	40.6	57.2	39.1	2.5	1.2	38.3	42.7
	2023	686	32.9	65.7	32.2	0.6	1.4	34.9	30.9
Spain	2019	1351	48.7	50.1	47.5	1.0	1.4	49.4	47.9
	2023	1458	42.4	55.1	40.5	1.5	2.8	42.7	42.1

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM2\_08 ME71211: Path parallel to Mary's path - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	49.8	46.3	46.0	5.0	2.6	48.2	51.6
	2023	739	42.0	53.6	38.8	3.9	3.6	44.9	39.4
United Arab Emirates	2019	3672	35.3	61.0	33.3	2.8	2.9	35.5	35.3
	2023	4985	33.5	63.4	31.9	1.1	3.7	33.5	33.4
United States	2019	1271	51.4	46.9	49.6	0.6	2.9	55.6	47.6
	2023	1293	37.4	60.3	36.1	0.3	3.3	37.1	37.8
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International Avg. (25)	2019	20341	49.0	48.8	47.2	2.0	2.0	50.0	48.0
	2023	24761	40.7	56.9	39.2	1.5	2.4	39.8	41.5
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Abu Dhabi, UAE	2019	1285	26.6	69.6	25.2	3.1	2.1	28.3	25.2
	2023	1793	23.9	71.7	22.5	1.3	4.5	24.4	23.4
Dubai, UAE	2019	1025	48.8	49.4	47.1	1.1	2.3	51.9	46.2
	2023	1337	46.1	52.8	45.2	0.2	1.8	46.3	46.0
Ontario, Canada	2019	547	35.6	61.8	34.1	1.9	2.3	39.5	32.0
	2023	627	27.8	69.1	26.7	0.7	3.5	26.9	27.9
Quebec, Canada	2019	555	58.3	39.2	54.9	2.7	3.2	55.5	60.4
	2023	555	48.8	49.4	47.2	0.6	2.8	48.3	49.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MM2\_09 ME71178: Properties of two pentagons (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	36.3	59.5	33.9	3.1	3.5	40.2	32.9
	2023	1994	31.1	65.4	29.5	1.8	3.3	28.9	32.9
Chile	2019	588	21.2	67.3	18.1	6.1	8.5	20.9	21.5
	2023	654	20.3	69.8	17.7	6.0	6.5	21.8	19.1
Chinese Taipei	2019	545	55.5	44.4	55.5	0.1	0.0	60.8	50.9
	2023	768	58.5	41.5	58.3	0.1	0.1	59.4	57.6
Czech Republic	2019	672	39.2	56.2	36.2	7.0	0.7	39.8	38.7
	2023	971	39.7	57.1	37.5	4.5	0.9	42.5	37.1
Denmark	2019	447	48.0	46.5	43.0	6.5	4.1	48.3	47.8
	2023	739	40.9	52.5	36.4	4.7	6.3	43.3	38.5
England	2019	490	48.8	49.2	47.0	3.3	0.4	49.8	47.7
	2023	582	52.2	46.5	50.8	2.7	0.1	51.1	53.3
Finland	2019	665	36.6	60.4	34.9	3.9	0.8	34.9	38.2
	2023	832	35.8	62.3	34.7	1.6	1.4	37.0	34.6
France	2019	597	26.5	64.4	23.2	10.0	2.3	24.5	28.4
	2023	668	23.6	67.4	20.8	5.7	6.1	20.5	26.8
Georgia	2019	541	25.7	65.1	22.5	8.8	3.6	25.3	26.1
	2023	623	25.0	64.0	21.4	6.1	8.6	26.1	24.1
Germany	2019	492	37.7	58.1	35.1	5.0	1.8	36.9	38.6
	2023	630	31.8	65.7	30.7	2.8	0.8	31.8	31.8
Hong Kong SAR	2019	407	59.2	40.5	58.7	0.6	0.2	56.4	61.6
	2023	596	53.8	46.2	53.8	0.0	0.0	53.6	54.0
Hungary	2019	654	35.9	62.4	35.0	2.1	0.6	39.2	32.9
	2023	741	32.9	65.5	32.0	1.1	1.4	32.2	33.6
Italy	2019	536	26.3	66.3	23.7	5.5	4.4	25.5	27.3
	2023	640	28.3	64.4	25.4	6.2	4.0	25.3	31.2
Korea, Rep. of	2019	555	55.9	43.7	55.4	0.7	0.2	54.8	56.8
	2023	632	52.0	47.8	51.7	0.0	0.5	51.7	52.1
Lithuania	2019	535	41.4	57.1	40.3	2.1	0.5	45.6	36.4
	2023	647	43.2	56.2	42.7	1.0	0.1	42.0	44.4
Netherlands	2019	480	30.9	65.7	29.4	4.2	0.7	35.0	26.6
	2023	515	36.7	59.9	34.8	3.5	1.9	40.0	33.0
Norway (5)	2019	565	47.1	50.1	44.6	3.0	2.2	50.8	43.2
	2023	761	39.3	57.8	37.5	2.8	1.9	36.2	42.3
Portugal	2019	611	35.4	61.5	33.6	2.2	2.7	33.3	37.6
	2023	757	35.3	60.7	33.1	2.1	4.1	35.8	34.7
Qatar	2019	700	18.7	73.6	17.0	3.2	6.1	19.1	18.4
	2023	919	21.2	74.3	20.0	1.2	4.5	19.2	23.4
Singapore	2019	850	62.4	37.2	61.8	0.9	0.1	61.8	63.0
	2023	935	55.1	44.8	55.1	0.0	0.1	57.1	53.3
Slovak Republic	2019	600	46.9	49.0	43.3	6.5	1.2	51.8	42.7
	2023	686	39.6	58.5	38.4	1.7	1.4	37.7	41.4
Spain	2019	1351	29.5	67.6	28.3	2.5	1.7	30.1	28.8
	2023	1458	24.0	70.7	22.3	3.3	3.6	20.8	27.0

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MM2\_09 ME71178: Properties of two pentagons (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	44.9	51.0	41.5	4.6	2.9	48.5	40.9
	2023	739	39.7	56.0	36.8	2.6	4.6	44.5	35.4
United Arab Emirates	2019	3663	26.3	69.2	24.7	2.7	3.4	27.2	25.4
	2023	4986	29.5	66.7	27.9	1.3	4.1	29.3	29.7
United States	2019	1271	43.9	53.2	41.7	2.1	3.0	43.7	44.1
	2023	1293	38.9	58.3	37.1	1.3	3.3	38.5	39.2
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International Avg. (25)	2019	20333	39.2	56.8	37.1	3.9	2.2	40.2	38.3
	2023	24766	37.1	59.2	35.5	2.6	2.8	37.1	37.2
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Abu Dhabi, UAE	2019	1281	17.6	77.3	16.5	3.5	2.7	19.4	15.3
	2023	1793	20.1	74.5	18.7	1.7	5.1	19.3	20.9
Dubai, UAE	2019	1025	41.7	56.0	40.0	1.5	2.4	42.5	41.0
	2023	1338	44.5	53.9	43.2	1.0	1.9	44.6	44.4
Ontario, Canada	2019	548	37.0	59.7	35.1	2.5	2.7	41.4	33.0
	2023	627	31.2	65.2	29.5	1.6	3.7	29.2	32.4
Quebec, Canada	2019	555	42.8	53.1	39.8	3.8	3.3	50.5	37.0
	2023	555	31.8	64.9	30.2	1.7	3.2	31.1	32.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing

A\_MM2\_10B ME71135B: Scores in game - Round 2 and Round 3 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	53.4	41.1	47.0	6.6	5.4	49.5	57.0
	2023	1994	50.4	45.6	46.5	3.3	4.6	48.4	52.3
Chile	2019	588	29.0	53.2	21.8	10.4	14.6	33.9	24.5
	2023	654	38.5	49.4	30.9	10.8	9.0	40.8	36.7
Chinese Taipei	2019	545	89.0	10.9	88.3	0.8	0.0	91.4	86.8
	2023	768	91.0	8.9	90.3	0.7	0.1	93.3	89.0
Czech Republic	2019	672	68.4	27.8	60.2	9.8	2.2	65.2	70.9
	2023	971	69.4	27.8	63.1	7.0	2.1	63.6	74.8
Denmark	2019	447	65.7	29.7	56.8	4.8	8.7	69.2	61.9
	2023	739	63.1	32.3	55.4	3.6	8.7	61.5	64.9
England	2019	490	64.3	33.8	60.9	4.7	0.5	66.2	62.2
	2023	582	67.9	30.9	65.5	2.4	1.1	65.3	70.2
Finland	2019	665	79.5	19.2	74.5	5.3	1.0	83.8	75.5
	2023	832	78.9	19.9	74.2	4.0	1.9	80.5	77.3
France	2019	597	47.1	45.4	40.5	10.4	3.7	48.9	45.4
	2023	668	46.4	41.2	35.6	14.1	9.1	45.4	47.4
Georgia	2019	542	50.2	37.4	37.7	18.0	6.9	51.8	48.7
	2023	623	49.2	39.0	37.8	12.3	11.0	53.0	46.1
Germany	2019	492	71.4	26.4	66.0	4.5	3.1	71.5	71.4
	2023	630	74.3	23.3	67.4	6.1	3.2	75.5	72.8
Hong Kong SAR	2019	407	85.6	14.0	83.3	2.4	0.2	86.7	84.6
	2023	596	84.3	15.5	82.9	1.4	0.2	83.8	84.7
Hungary	2019	654	49.8	46.6	46.2	5.7	1.5	52.6	47.3
	2023	741	46.6	49.9	43.6	3.3	3.2	47.0	46.3
Italy	2019	536	47.8	43.5	39.9	9.5	7.0	45.2	50.7
	2023	640	48.3	43.7	40.8	6.1	9.4	46.5	50.0
Korea, Rep. of	2019	555	85.5	14.2	84.0	1.6	0.2	90.2	81.7
	2023	632	84.3	15.4	82.9	0.9	0.7	82.8	85.7
Lithuania	2019	535	61.4	36.7	58.4	4.3	0.6	59.5	63.6
	2023	647	67.0	32.3	65.6	1.8	0.3	66.0	67.9
Netherlands	2019	480	77.7	20.6	71.8	6.4	1.3	79.9	75.4
	2023	515	73.8	24.6	69.2	2.6	3.5	77.9	70.3
Norway (5)	2019	565	72.5	24.7	65.0	6.2	4.2	73.6	71.2
	2023	761	72.4	25.8	67.5	2.8	3.9	72.7	72.1
Portugal	2019	611	50.1	44.7	44.9	5.6	4.8	48.9	51.5
	2023	757	51.6	44.8	47.7	1.6	5.9	49.2	54.1
Qatar	2019	700	44.7	44.7	36.1	11.3	8.0	44.1	45.2
	2023	919	46.3	46.8	40.3	6.4	6.5	43.4	49.3
Singapore	2019	850	80.1	19.7	79.1	1.1	0.1	79.7	80.4
	2023	935	79.0	20.9	78.6	0.4	0.1	79.3	78.8
Slovak Republic	2019	600	64.6	31.9	58.3	8.3	1.5	63.2	66.0
	2023	686	60.7	34.7	53.5	9.3	2.5	58.0	63.3
Spain	2019	1351	44.4	50.2	40.0	7.4	2.5	45.8	42.8
	2023	1458	43.2	50.6	38.5	4.7	6.2	46.4	40.3

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing  
A\_MM2\_10B ME71135B: Scores in game - Round 2 and Round 3 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	71.0	26.0	63.5	5.1	5.4	67.3	75.0
	2023	739	66.2	30.3	59.2	4.2	6.4	63.3	68.9
United Arab Emirates	2019	3672	44.5	46.9	37.6	10.6	4.9	43.4	45.6
	2023	4986	54.1	39.5	46.5	7.5	6.5	52.1	55.9
United States	2019	1271	54.3	42.0	50.0	2.6	5.4	54.8	53.9
	2023	1293	56.1	40.6	51.9	2.6	4.9	52.9	59.3
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International Avg. (25)	2019	20343	62.1	33.2	56.5	6.5	3.7	62.7	61.6
	2023	24766	62.5	33.3	57.4	4.8	4.4	61.9	63.1
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Abu Dhabi, UAE	2019	1286	35.1	54.2	29.3	12.2	4.2	33.8	35.9
	2023	1793	48.4	41.9	39.3	10.8	8.0	45.0	51.7
Dubai, UAE	2019	1025	61.2	35.2	55.6	5.1	4.0	61.4	61.1
	2023	1338	64.1	33.2	59.3	3.5	4.0	63.7	64.5
Ontario, Canada	2019	548	54.0	40.6	47.7	7.3	4.4	48.9	58.7
	2023	627	51.6	44.7	47.6	3.0	4.7	50.6	52.1
Quebec, Canada	2019	555	51.5	43.8	46.6	4.6	5.0	47.0	55.7
	2023	555	43.8	51.9	40.4	3.1	4.6	40.9	46.7
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Data / Reasoning

A\_MM2\_11 ME71201: Graphs of snowfall from two years - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	19.8	69.2	17.1	7.5	6.2	21.9	17.9
	2023	1994	19.2	69.2	16.4	9.0	5.4	19.9	18.1
Chile	2019	588	10.8	60.7	7.4	14.9	17.0	10.1	11.5
	2023	654	14.8	63.7	11.0	14.9	10.3	12.3	16.6
Chinese Taipei	2019	545	20.3	72.6	18.5	8.9	0.0	23.4	17.5
	2023	768	18.8	75.7	17.6	6.6	0.1	21.3	16.6
Czech Republic	2019	672	24.0	56.0	17.6	22.6	3.8	27.2	21.4
	2023	971	18.7	62.0	14.2	20.8	2.9	17.8	19.4
Denmark	2019	447	22.4	56.4	16.3	17.9	9.5	28.6	16.1
	2023	739	17.0	69.2	14.2	7.3	9.3	16.8	17.3
England	2019	490	33.2	60.4	30.0	9.0	0.5	34.2	32.1
	2023	582	32.0	61.1	28.8	8.8	1.3	32.5	31.5
Finland	2019	665	15.8	67.4	12.7	18.0	2.0	16.9	14.8
	2023	832	16.6	70.2	14.0	13.1	2.7	17.9	15.4
France	2019	597	15.8	58.2	10.9	25.4	5.6	15.1	16.4
	2023	667	7.1	64.8	4.9	19.0	11.2	7.6	6.5
Georgia	2019	542	8.0	55.1	4.8	30.2	9.9	9.1	7.2
	2023	623	15.7	50.4	9.4	27.1	13.1	18.4	13.5
Germany	2019	492	17.9	63.7	13.9	19.2	3.3	16.5	19.3
	2023	630	20.4	66.0	16.9	12.4	4.7	20.3	20.5
Hong Kong SAR	2019	407	31.3	64.6	29.5	5.8	0.2	37.9	25.5
	2023	596	28.5	66.9	26.7	6.2	0.2	28.6	28.4
Hungary	2019	654	15.5	73.9	13.6	10.8	1.7	17.9	13.4
	2023	741	10.5	81.7	9.6	5.2	3.5	10.0	11.1
Italy	2019	536	12.0	66.5	9.1	15.4	9.0	12.0	12.1
	2023	640	14.8	61.7	10.7	16.5	11.1	12.2	17.0
Korea, Rep. of	2019	555	46.5	50.7	44.0	4.7	0.6	50.7	43.1
	2023	632	34.2	62.6	32.6	4.0	0.8	37.9	31.0
Lithuania	2019	535	15.4	70.9	12.9	15.5	0.7	18.6	11.7
	2023	647	20.2	70.5	17.8	11.4	0.3	18.5	21.8
Netherlands	2019	480	27.9	65.0	25.1	8.5	1.3	34.3	21.2
	2023	515	20.0	70.1	17.5	8.8	3.7	25.0	15.4
Norway (5)	2019	565	22.5	65.3	18.9	10.6	5.1	24.7	20.2
	2023	761	21.5	68.2	18.7	8.7	4.4	27.4	16.4
Portugal	2019	611	22.2	62.9	17.9	13.2	6.1	21.9	22.4
	2023	757	21.2	64.0	17.3	12.6	6.1	24.4	18.0
Qatar	2019	700	16.2	61.8	12.0	17.1	9.1	18.8	13.7
	2023	919	12.5	72.7	10.4	9.5	7.3	13.0	12.0
Singapore	2019	850	32.9	65.1	31.9	2.9	0.1	35.5	30.3
	2023	935	33.9	65.2	33.4	1.3	0.1	35.0	32.8
Slovak Republic	2019	600	12.4	67.9	9.6	20.1	2.4	16.3	8.9
	2023	686	9.6	73.8	7.8	15.4	3.0	11.3	8.0
Spain	2019	1351	13.9	72.3	11.6	12.9	3.2	12.1	15.7
	2023	1458	16.9	65.2	13.2	14.5	7.1	17.2	16.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MM2\_11 ME71201: Graphs of snowfall from two years - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	13.0	70.1	10.5	13.4	6.0	13.1	12.9
	2023	739	21.0	61.9	16.5	14.3	7.4	21.8	20.4
United Arab Emirates	2019	3676	18.6	67.5	15.4	11.5	5.5	18.2	19.0
	2023	4986	22.1	66.6	18.8	7.4	7.1	23.7	20.6
United States	2019	1271	21.7	70.5	19.5	4.2	5.8	26.3	17.4
	2023	1293	24.0	68.8	21.7	3.9	5.5	26.8	21.2
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International Avg. (25)	2019	20347	20.4	64.6	17.2	13.6	4.6	22.5	18.5
	2023	24765	19.6	66.9	16.8	11.2	5.2	20.7	18.6
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Abu Dhabi, UAE	2019	1287	11.7	75.0	10.0	10.3	4.7	13.2	10.5
	2023	1793	15.7	70.6	13.2	7.3	8.8	16.0	15.5
Dubai, UAE	2019	1025	33.5	58.6	29.5	7.3	4.5	33.5	33.5
	2023	1338	31.5	62.6	28.8	4.3	4.4	35.2	28.1
Ontario, Canada	2019	548	21.2	69.4	18.7	6.5	5.4	21.3	21.2
	2023	627	21.3	65.4	17.7	11.2	5.6	20.6	21.0
Quebec, Canada	2019	555	20.9	68.2	18.0	8.6	5.2	27.9	15.4
	2023	555	17.4	72.6	15.3	7.1	5.1	20.1	14.9
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MM2\_12 ME71175: Number of origami animals (DERIVED) - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	54.3	18.9	41.4	26.3	4.2	9.2	54.6	54.0
	2023	1994	50.0	24.8	38.1	24.9	4.2	8.0	49.8	50.0
Chile	2019	588	36.1	28.1	35.8	8.1	6.1	22.0	37.8	34.5
	2023	654	35.9	34.3	35.3	11.4	5.8	13.3	40.6	32.6
Chinese Taipei	2019	545	64.9	11.3	46.6	40.5	0.5	1.1	68.0	62.1
	2023	768	66.2	10.3	46.0	42.3	0.8	0.5	68.6	64.2
Czech Republic	2019	672	58.8	15.0	44.5	31.0	3.6	5.8	61.6	56.6
	2023	971	55.8	19.3	40.2	29.6	3.8	7.1	55.6	56.0
Denmark	2019	447	58.1	13.0	39.3	25.5	8.0	14.3	59.0	57.2
	2023	739	58.6	17.6	30.3	31.3	8.5	12.4	58.8	58.4
England	2019	490	61.5	15.5	40.7	36.8	5.8	1.2	61.1	61.9
	2023	582	65.3	13.4	38.9	42.5	3.5	1.7	64.6	66.2
Finland	2019	665	64.4	14.7	34.8	40.7	5.3	4.5	69.9	59.2
	2023	832	59.6	20.5	31.7	37.8	5.4	4.5	63.1	56.1
France	2019	596	51.8	17.7	39.9	20.5	10.9	11.1	51.0	52.6
	2023	663	47.6	22.0	33.8	18.5	10.0	15.7	45.9	49.4
Georgia	2019	541	48.0	21.5	35.9	18.5	8.9	15.2	54.7	42.3
	2023	623	52.1	18.5	31.0	21.5	8.8	20.2	54.1	50.5
Germany	2019	492	60.1	17.8	33.3	35.2	6.3	7.4	63.9	56.0
	2023	630	57.7	20.0	32.3	33.1	7.5	7.1	59.1	56.1
Hong Kong SAR	2019	407	64.5	14.7	40.0	43.2	1.3	0.8	63.5	65.4
	2023	594	63.6	17.2	36.7	43.8	1.0	1.2	60.2	66.6
Hungary	2019	654	59.0	16.3	43.2	33.0	3.9	3.5	61.1	57.1
	2023	741	59.4	17.7	40.3	35.2	2.2	4.7	58.8	59.9
Italy	2019	536	50.7	19.2	38.0	20.2	7.5	15.1	47.1	54.7
	2023	639	47.2	24.5	31.2	20.2	7.5	16.7	46.8	47.5
Korea, Rep. of	2019	555	72.1	6.1	42.0	49.1	1.0	1.8	76.1	68.9
	2023	632	69.5	8.6	42.1	46.6	1.4	1.3	66.4	72.2
Lithuania	2019	535	61.9	12.2	47.6	34.6	2.8	2.7	63.3	60.1
	2023	646	63.3	13.5	43.2	38.9	3.2	1.2	59.3	67.1
Netherlands	2019	480	61.7	13.5	40.3	34.1	8.8	3.2	62.2	61.2
	2023	515	58.6	19.5	34.6	34.7	4.8	6.4	61.2	56.3
Norway (5)	2019	565	67.9	10.4	36.9	42.5	3.0	7.2	70.3	65.2
	2023	761	64.0	13.0	37.6	37.7	5.0	6.8	63.4	64.6
Portugal	2019	611	61.2	11.1	45.2	30.7	3.6	9.5	60.0	62.5
	2023	757	60.9	14.1	38.7	32.8	4.6	9.8	62.7	59.1
Qatar	2019	700	35.7	35.0	37.0	11.3	5.6	11.2	36.4	35.1
	2023	918	38.4	35.5	35.3	15.5	4.1	9.7	36.3	40.6
Singapore	2019	850	73.8	8.8	34.2	55.7	0.9	0.4	72.3	75.2
	2023	935	70.1	12.5	34.8	52.5	0.1	0.1	71.1	69.1
Slovak Republic	2019	600	59.0	14.6	43.7	30.6	6.7	4.5	57.7	60.2
	2023	686	56.3	18.2	43.2	29.7	4.1	4.8	57.4	55.2
Spain	2019	1351	53.3	16.3	47.9	22.1	7.7	6.0	54.0	52.6
	2023	1458	50.5	24.2	33.0	25.0	6.3	11.4	48.9	51.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MM2\_12 ME71175: Number of origami animals (DERIVED) - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	569	65.0	11.3	36.8	36.8	5.1	10.0	61.0	69.4
	2023	738	63.6	14.3	32.4	37.0	5.3	11.1	62.4	64.7
United Arab Emirates	2019	3671	40.2	35.2	35.0	17.9	3.5	8.4	40.2	40.2
	2023	4986	46.3	29.3	34.6	22.9	3.7	9.6	45.4	47.1
United States	2019	1271	56.0	17.8	43.2	28.6	2.1	8.3	55.6	56.4
	2023	1292	52.5	23.6	37.9	28.1	3.4	6.9	50.0	55.0
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International Avg. (25)	2019	20340	57.6	16.6	40.1	30.9	4.9	7.4	58.5	56.8
	2023	24754	56.5	19.5	36.5	31.7	4.6	7.7	56.4	56.7
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Abu Dhabi, UAE	2019	1285	31.5	43.6	33.7	10.9	4.4	7.3	31.8	30.9
	2023	1793	37.1	36.3	34.4	14.3	3.4	11.5	36.3	37.8
Dubai, UAE	2019	1025	55.2	22.1	36.9	31.5	2.2	7.3	56.2	54.4
	2023	1338	59.4	19.3	35.0	36.3	3.4	6.0	57.9	60.7
Ontario, Canada	2019	548	51.7	21.7	41.7	24.6	3.7	8.2	54.1	49.5
	2023	627	49.4	26.2	35.7	25.1	4.4	8.6	50.9	47.2
Quebec, Canada	2019	555	59.4	14.1	42.3	30.4	4.9	8.4	56.5	61.5
	2023	555	51.7	20.7	45.2	23.9	3.3	7.0	50.1	53.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM3\_02 ME71016: Number of people ferris wheel can take - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	44.3	54.1	43.0	2.5	0.4	44.0	44.6
	2023	1945	42.5	56.5	41.7	1.7	0.1	43.8	41.0
Chile	2019	584	32.5	63.2	30.4	5.3	1.0	32.6	32.4
	2023	642	25.8	70.7	24.6	4.6	0.1	23.7	27.9
Chinese Taipei	2019	533	86.6	13.4	86.4	0.1	0.0	85.5	87.5
	2023	757	90.6	9.4	90.4	0.2	0.0	88.6	92.7
Czech Republic	2019	664	65.1	33.7	62.8	3.5	0.0	67.6	62.3
	2023	979	61.3	37.8	60.0	2.2	0.0	57.8	64.9
Denmark	2019	456	42.7	54.0	40.2	5.2	0.7	41.6	43.8
	2023	741	41.7	56.2	40.2	3.5	0.1	42.0	41.4
England	2019	486	62.6	36.6	61.4	1.3	0.7	63.2	62.0
	2023	572	59.9	39.2	58.7	2.1	0.0	55.4	64.7
Finland	2019	672	24.7	72.1	23.7	3.9	0.2	21.4	28.1
	2023	819	22.1	73.8	20.9	5.1	0.1	17.1	26.7
France	2019	604	53.8	44.1	51.4	4.5	0.0	54.5	53.1
	2023	673	46.5	50.4	43.8	5.4	0.4	48.0	45.0
Georgia	2019	526	62.1	36.4	59.7	3.3	0.6	61.3	62.8
	2023	631	65.4	33.4	63.1	3.2	0.4	60.7	69.3
Germany	2019	485	51.8	45.8	49.2	4.6	0.4	54.0	49.7
	2023	635	46.4	50.6	43.9	5.3	0.2	47.3	45.6
Hong Kong SAR	2019	419	82.5	17.5	82.5	0.0	0.0	82.1	83.0
	2023	580	78.3	21.4	77.6	1.0	0.0	76.0	80.6
Hungary	2019	641	67.4	32.2	66.6	1.1	0.0	66.9	67.8
	2023	752	56.2	43.5	55.8	0.5	0.2	52.5	59.9
Italy	2019	538	64.5	34.5	62.7	2.4	0.4	58.7	69.2
	2023	629	65.0	33.4	62.0	4.6	0.0	59.4	69.8
Korea, Rep. of	2019	556	82.5	17.4	81.8	0.8	0.0	83.0	82.0
	2023	625	77.4	22.2	76.3	1.4	0.1	73.9	80.8
Lithuania	2019	534	68.6	31.0	67.8	1.2	0.0	72.7	65.0
	2023	639	67.0	32.8	66.7	0.5	0.0	64.2	69.8
Netherlands	2019	472	40.7	57.0	39.1	3.7	0.2	37.8	43.2
	2023	500	42.0	56.2	40.8	3.0	0.0	38.6	45.1
Norway (5)	2019	560	46.7	49.2	43.2	7.2	0.4	50.2	43.4
	2023	739	39.1	56.9	36.5	6.2	0.3	36.4	41.7
Portugal	2019	613	61.8	37.2	60.2	2.2	0.4	55.6	66.6
	2023	745	60.5	38.0	58.2	3.8	0.0	59.4	61.5
Qatar	2019	710	39.2	59.6	38.4	1.8	0.1	37.2	41.2
	2023	923	38.4	59.9	37.4	2.2	0.5	37.4	39.4
Singapore	2019	842	87.3	12.7	87.3	0.0	0.0	88.0	86.7
	2023	931	83.1	16.9	83.0	0.0	0.1	81.5	84.6
Slovak Republic	2019	610	39.5	57.7	37.8	4.3	0.2	32.2	45.6
	2023	683	40.6	57.9	39.5	2.4	0.1	38.1	43.0
Spain	2019	1364	68.2	31.1	66.8	2.1	0.0	65.2	70.7
	2023	1469	58.4	40.4	56.8	2.8	0.0	56.9	60.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM3\_02 ME71016: Number of people ferris wheel can take - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	42.5	52.3	38.7	7.8	1.1	48.1	37.2
	2023	735	42.8	54.3	40.7	4.6	0.5	42.9	42.7
United Arab Emirates	2019	3708	43.1	55.8	42.3	1.6	0.3	42.6	43.6
	2023	4948	45.6	53.5	44.9	1.2	0.3	43.9	47.3
United States	2019	1256	59.6	39.9	58.8	0.9	0.3	59.4	59.7
	2023	1335	51.4	48.1	50.9	0.7	0.2	49.9	52.8
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International Avg. (25)	2019	20349	56.8	41.5	55.3	2.9	0.3	56.2	57.2
	2023	24627	53.9	44.5	52.6	2.7	0.2	51.8	55.9
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Abu Dhabi, UAE	2019	1308	31.1	67.6	30.6	1.5	0.4	30.9	31.2
	2023	1790	37.3	61.2	36.4	1.8	0.6	36.5	38.1
Dubai, UAE	2019	1039	60.1	39.5	59.4	0.5	0.5	59.6	60.5
	2023	1307	59.3	40.5	58.9	0.6	0.1	55.0	63.3
Ontario, Canada	2019	538	40.4	58.2	39.5	1.7	0.6	40.7	40.2
	2023	601	40.8	57.9	39.9	2.0	0.1	41.2	40.4
Quebec, Canada	2019	549	58.3	40.5	56.5	3.0	0.0	58.8	58.0
	2023	560	49.7	49.8	49.1	1.1	0.0	53.0	46.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_MM3\_03 ME71163: Number of figures made of blocks - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	18.6	18.1	17.4	44.5	17.2	2.3	0.6	14.7	22.1
	2023	1945	16.1	16.0	18.5	45.7	19.2	0.4	0.2	13.8	18.8
Chile	2019	584	11.4	10.9	15.2	37.8	31.5	2.8	1.8	11.6	11.2
	2023	642	10.7	10.6	16.1	42.0	29.7	1.5	0.1	7.3	13.9
Chinese Taipei	2019	533	51.6	51.6	17.5	24.8	6.1	0.1	0.0	48.2	54.7
	2023	757	54.0	54.0	17.3	24.0	4.7	0.0	0.0	50.4	57.8
Czech Republic	2019	664	34.6	34.2	16.8	39.8	7.9	1.3	0.0	33.7	35.6
	2023	979	34.0	33.8	17.0	35.0	13.6	0.5	0.0	26.3	41.9
Denmark	2019	456	29.0	28.3	17.4	44.5	7.3	0.9	1.5	25.7	32.5
	2023	742	26.6	26.3	18.7	44.8	9.1	1.0	0.2	22.5	30.8
England	2019	486	33.0	32.1	14.2	37.7	13.2	2.1	0.7	30.4	35.7
	2023	572	35.4	35.0	17.2	33.2	13.4	1.0	0.1	31.7	39.9
Finland	2019	672	23.5	23.1	18.4	48.0	8.9	1.5	0.2	20.7	26.2
	2023	819	22.0	21.7	23.4	46.2	7.5	1.0	0.1	18.7	25.1
France	2019	604	15.9	15.3	11.8	49.3	19.8	3.7	0.0	14.8	17.1
	2023	677	14.4	14.1	16.8	45.8	21.5	1.1	0.6	11.8	16.9
Georgia	2019	524	23.7	23.1	15.8	30.5	27.9	2.1	0.6	24.5	23.0
	2023	631	23.6	22.8	17.4	28.8	27.5	2.8	0.6	17.6	28.5
Germany	2019	485	24.4	24.2	19.6	46.8	8.5	0.5	0.4	21.5	27.4
	2023	635	25.4	25.1	16.9	41.4	15.3	1.1	0.2	20.1	29.4
Hong Kong SAR	2019	419	61.3	61.1	17.9	17.0	3.7	0.2	0.0	65.7	57.4
	2023	581	52.6	52.5	22.4	18.7	6.4	0.1	0.0	44.9	60.0
Hungary	2019	641	28.3	28.2	16.1	35.2	20.2	0.3	0.0	26.2	30.2
	2023	752	28.2	28.1	17.0	38.4	16.1	0.2	0.2	22.9	33.5
Italy	2019	538	18.6	17.9	17.8	42.5	18.4	3.0	0.4	14.9	21.5
	2023	630	24.0	23.6	15.2	35.7	23.8	1.7	0.0	15.7	31.1
Korea, Rep. of	2019	556	52.7	52.6	14.5	26.0	6.7	0.2	0.0	47.1	57.8
	2023	625	51.9	51.8	15.5	24.8	7.7	0.0	0.2	48.8	54.9
Lithuania	2019	534	31.6	31.5	23.8	26.4	17.9	0.4	0.0	29.9	33.2
	2023	639	36.9	36.8	21.1	26.2	15.5	0.4	0.0	34.1	39.8
Netherlands	2019	472	32.4	31.8	20.5	37.4	8.5	1.6	0.2	26.2	37.7
	2023	500	28.0	27.9	22.1	41.1	8.3	0.7	0.0	21.2	34.6
Norway (5)	2019	560	23.7	22.8	23.3	40.7	9.5	2.7	0.9	21.9	25.4
	2023	739	26.1	25.6	21.0	45.0	6.7	1.0	0.6	23.5	28.8
Portugal	2019	613	19.8	19.5	14.4	46.7	17.8	1.3	0.4	16.3	22.5
	2023	745	17.7	17.5	13.5	45.6	22.3	1.0	0.1	13.9	21.5
Qatar	2019	710	13.0	12.7	14.3	29.6	41.2	1.9	0.3	9.5	16.5
	2023	923	16.6	16.4	14.9	36.6	30.7	0.5	0.9	14.7	18.4
Singapore	2019	842	52.9	52.7	18.3	20.3	8.4	0.4	0.0	47.7	58.1
	2023	931	52.3	52.1	18.8	19.3	9.5	0.1	0.1	47.4	57.0
Slovak Republic	2019	610	25.4	25.0	17.1	43.2	13.0	1.4	0.2	18.7	31.1
	2023	683	22.5	22.3	21.1	41.2	14.6	0.6	0.2	17.3	27.5
Spain	2019	1363	15.5	15.3	15.6	45.1	22.8	1.2	0.0	15.0	15.8
	2023	1469	14.4	14.1	14.7	46.8	22.6	1.7	0.0	11.7	17.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_MM3\_03 ME71163: Number of figures made of blocks - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	16.5	15.9	20.3	51.4	8.2	2.8	1.4	16.5	16.6
	2023	735	23.9	23.5	21.6	43.7	9.4	1.0	0.7	20.5	27.5
United Arab Emirates	2019	3703	18.2	17.9	14.9	32.3	33.2	1.3	0.4	16.2	20.3
	2023	4950	22.1	21.8	14.6	33.1	29.2	0.9	0.5	19.4	24.7
United States	2019	1256	28.7	28.1	17.0	34.6	18.3	1.6	0.4	24.7	32.2
	2023	1335	25.3	25.2	19.6	34.0	20.6	0.3	0.3	22.7	27.6
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International Avg. (25)	2019	20341	28.2	27.8	17.2	37.3	15.8	1.5	0.4	25.7	30.5
	2023	24636	28.2	27.9	18.1	36.7	16.2	0.8	0.2	24.0	32.3
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Abu Dhabi, UAE	2019	1308	13.4	13.2	13.8	32.0	39.6	0.9	0.4	12.8	14.0
	2023	1790	15.9	15.5	14.4	32.8	35.3	1.0	0.9	14.4	17.3
Dubai, UAE	2019	1039	26.4	26.0	17.0	34.8	20.7	1.0	0.5	24.1	28.6
	2023	1307	33.6	33.5	16.3	33.7	16.3	0.1	0.1	29.3	37.7
Ontario, Canada	2019	538	21.4	21.0	14.6	44.1	18.2	1.4	0.7	16.6	26.1
	2023	601	14.3	14.2	18.2	47.4	19.7	0.3	0.3	10.6	18.3
Quebec, Canada	2019	549	17.9	17.3	22.6	43.9	12.9	3.2	0.1	13.3	21.3
	2023	560	14.4	14.4	22.9	45.7	16.9	0.1	0.0	12.0	17.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Number / Reasoning

A\_MM3\_04 ME71045: Stars used in Mallika's pattern - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	51.4	13.0	23.6	49.9	10.6	1.9	1.1	48.8	53.8
	2023	1945	52.5	13.1	20.7	52.1	13.3	0.5	0.3	52.2	52.9
Chile	2019	584	35.5	17.4	33.7	34.2	11.1	1.2	2.4	37.6	33.3
	2023	642	39.2	15.8	28.3	38.5	15.8	1.4	0.3	37.1	41.1
Chinese Taipei	2019	533	59.8	15.5	15.8	59.6	8.7	0.4	0.0	60.5	59.2
	2023	757	68.5	11.4	11.4	68.5	8.8	0.0	0.0	68.2	68.8
Czech Republic	2019	664	61.9	8.6	18.7	60.8	10.2	1.7	0.0	57.3	66.9
	2023	979	57.1	10.3	21.6	56.2	10.3	1.5	0.0	54.1	60.1
Denmark	2019	456	57.7	11.0	17.0	55.9	12.9	1.1	2.0	55.3	60.4
	2023	742	59.1	9.8	19.4	57.8	10.8	1.6	0.6	60.6	57.6
England	2019	486	61.2	10.1	17.4	60.0	10.6	1.2	0.7	59.8	62.6
	2023	572	60.4	12.3	18.6	59.7	8.3	1.1	0.1	55.0	66.1
Finland	2019	672	52.6	15.4	19.8	50.6	10.3	3.7	0.2	51.3	53.9
	2023	819	48.4	15.7	21.0	47.5	13.9	1.7	0.1	45.7	50.9
France	2019	603	42.9	13.1	28.7	41.7	13.6	2.7	0.1	42.0	44.0
	2023	677	38.6	13.3	31.1	37.9	15.9	1.2	0.6	33.8	43.3
Georgia	2019	524	47.8	18.4	24.2	46.0	7.7	3.1	0.6	49.8	45.8
	2023	631	47.1	16.4	23.4	45.7	11.6	2.2	0.7	45.2	48.6
Germany	2019	485	53.7	13.3	19.6	51.7	11.7	3.3	0.4	56.8	50.4
	2023	635	56.2	10.1	22.4	55.7	10.8	0.6	0.3	52.5	59.3
Hong Kong SAR	2019	419	76.2	8.3	9.8	75.8	5.7	0.4	0.0	73.8	78.3
	2023	581	76.3	9.7	10.8	76.3	3.1	0.0	0.0	76.8	75.9
Hungary	2019	641	51.0	14.6	20.9	50.5	13.0	0.9	0.1	51.3	50.7
	2023	752	50.8	14.4	21.6	50.5	12.9	0.4	0.2	44.8	56.8
Italy	2019	538	46.1	11.7	24.7	44.3	15.5	3.0	0.8	42.3	49.1
	2023	630	47.6	16.1	22.1	46.4	12.9	2.5	0.0	42.8	51.6
Korea, Rep. of	2019	556	70.4	4.3	20.5	70.3	4.7	0.2	0.0	67.1	73.4
	2023	625	68.6	5.7	16.2	68.2	9.3	0.4	0.2	64.8	72.3
Lithuania	2019	534	53.2	15.1	16.9	52.6	14.3	1.1	0.0	57.3	49.3
	2023	639	65.3	9.7	17.0	65.2	7.9	0.2	0.0	62.2	68.4
Netherlands	2019	472	59.7	10.1	15.8	59.2	14.0	0.7	0.2	57.0	62.0
	2023	500	57.9	8.6	20.7	57.3	12.3	1.0	0.0	51.0	64.7
Norway (5)	2019	560	59.0	8.8	23.2	57.4	7.8	1.9	0.9	66.4	52.1
	2023	739	58.7	10.1	23.2	57.3	7.1	1.7	0.7	56.9	60.6
Portugal	2019	613	52.3	9.1	27.8	51.5	10.2	0.9	0.5	54.2	50.8
	2023	744	52.4	12.1	26.0	51.9	9.1	0.8	0.1	48.3	56.5
Qatar	2019	710	38.8	20.7	22.3	37.9	16.7	1.9	0.5	39.5	38.1
	2023	923	44.2	17.6	24.5	43.2	12.5	1.2	0.9	41.4	46.8
Singapore	2019	842	79.7	4.8	9.7	79.5	5.8	0.2	0.0	76.3	83.1
	2023	931	79.6	5.6	9.9	79.5	4.9	0.0	0.1	78.3	80.9
Slovak Republic	2019	610	53.8	12.0	18.1	52.9	15.2	1.5	0.2	54.2	53.4
	2023	683	56.0	13.4	16.6	55.1	13.2	1.4	0.2	59.7	52.5
Spain	2019	1363	48.3	11.0	26.3	47.4	13.4	1.8	0.1	47.4	49.0
	2023	1469	47.6	11.8	27.1	47.0	12.8	1.0	0.4	45.0	50.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_MM3\_04 ME71045: Stars used in Mallika's pattern - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	51.7	12.2	20.4	48.2	12.4	5.2	1.7	55.0	48.4
	2023	735	58.4	10.8	19.9	57.0	9.9	1.7	0.8	53.8	63.0
United Arab Emirates	2019	3701	45.2	17.8	24.2	44.2	11.5	1.8	0.5	43.5	47.0
	2023	4950	51.3	15.0	21.6	50.7	11.5	0.5	0.7	51.2	51.4
United States	2019	1256	55.8	11.4	18.7	54.7	13.2	1.2	0.8	55.8	55.7
	2023	1335	53.9	13.8	17.7	53.3	14.1	0.8	0.3	52.1	55.6
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International Avg. (25)	2019	20338	54.6	12.3	20.7	53.5	11.2	1.7	0.6	54.4	54.8
	2023	24635	55.8	12.1	20.5	55.2	10.9	1.0	0.3	53.3	58.2
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Abu Dhabi, UAE	2019	1307	38.3	22.6	24.1	37.5	13.5	1.7	0.7	37.0	39.8
	2023	1790	44.9	18.0	23.5	44.1	12.6	0.5	1.2	46.3	43.5
Dubai, UAE	2019	1039	55.2	12.1	22.0	54.1	9.8	1.5	0.6	51.7	58.6
	2023	1307	61.7	8.1	19.5	61.5	10.5	0.2	0.2	62.0	61.5
Ontario, Canada	2019	538	53.0	10.7	23.8	51.6	11.3	1.2	1.3	51.6	54.3
	2023	601	53.7	13.9	17.1	53.4	15.0	0.3	0.3	53.0	54.5
Quebec, Canada	2019	549	53.5	16.0	22.1	51.9	6.9	2.9	0.3	50.1	56.1
	2023	560	51.3	11.9	25.4	51.1	11.2	0.4	0.0	51.7	50.9
-----											

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MM3\_05 ME71213: Larger number in each pair (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	32.5	65.9	31.7	1.0	1.4	27.4	37.0
	2023	1945	34.7	64.7	34.4	0.5	0.4	29.2	40.9
Chile	2019	584	11.6	85.3	11.2	1.0	2.4	10.0	13.2
	2023	642	17.0	82.3	16.9	0.1	0.7	11.6	22.1
Chinese Taipei	2019	533	82.4	17.5	81.7	0.8	0.0	81.0	83.6
	2023	755	83.5	16.5	83.5	0.0	0.0	80.3	86.9
Czech Republic	2019	664	27.0	73.0	27.0	0.0	0.0	24.0	30.3
	2023	979	34.6	65.2	34.6	0.2	0.0	27.0	42.4
Denmark	2019	456	45.9	52.5	44.6	0.8	2.1	41.1	51.1
	2023	742	45.7	53.6	45.0	0.4	1.0	37.4	54.1
England	2019	486	59.7	40.0	59.2	0.2	0.7	54.3	65.3
	2023	572	62.6	37.4	62.5	0.0	0.1	56.4	69.3
Finland	2019	672	62.2	37.3	61.4	1.0	0.3	60.2	64.1
	2023	819	57.0	42.8	56.8	0.2	0.1	51.8	62.1
France	2019	604	38.3	61.1	37.9	0.5	0.5	36.3	40.5
	2023	677	35.5	63.5	34.9	1.0	0.6	30.4	40.5
Georgia	2019	525	13.3	84.6	12.9	1.8	0.7	14.6	12.0
	2023	631	19.1	79.5	18.8	1.0	0.7	17.4	20.6
Germany	2019	485	42.5	56.9	42.0	0.7	0.4	37.7	47.4
	2023	635	43.9	55.9	43.7	0.1	0.3	40.4	46.4
Hong Kong SAR	2019	419	81.0	18.9	80.9	0.2	0.0	80.5	81.6
	2023	581	76.4	23.5	76.3	0.2	0.0	77.0	75.9
Hungary	2019	641	28.2	71.4	28.0	0.4	0.1	25.7	30.4
	2023	752	31.9	67.8	31.7	0.2	0.2	26.0	37.7
Italy	2019	538	50.5	48.5	49.5	1.1	0.9	43.5	56.1
	2023	630	54.7	45.1	54.5	0.2	0.1	45.7	62.6
Korea, Rep. of	2019	556	87.7	12.2	87.4	0.4	0.0	87.2	88.2
	2023	625	90.4	9.5	90.0	0.0	0.5	88.4	92.4
Lithuania	2019	534	34.9	64.7	34.7	0.5	0.0	33.6	36.1
	2023	639	41.6	58.3	41.6	0.1	0.0	29.5	53.8
Netherlands	2019	472	43.2	56.5	42.9	0.5	0.2	43.8	42.6
	2023	500	42.7	57.3	42.7	0.0	0.0	35.8	49.3
Norway (5)	2019	560	60.1	39.0	58.8	0.8	1.3	57.5	62.5
	2023	739	54.0	45.4	53.4	0.5	0.7	52.9	55.2
Portugal	2019	613	46.0	53.6	45.6	0.3	0.5	41.7	49.4
	2023	744	47.8	51.8	47.4	0.3	0.4	44.9	50.7
Qatar	2019	710	20.2	79.0	20.0	0.3	0.7	20.6	19.8
	2023	923	27.5	71.4	27.0	0.2	1.5	23.9	30.8
Singapore	2019	842	79.6	20.4	79.6	0.0	0.0	76.3	83.0
	2023	931	80.1	19.9	80.0	0.0	0.1	78.1	82.1
Slovak Republic	2019	610	27.3	72.2	27.1	0.4	0.2	24.5	29.6
	2023	683	33.7	65.5	33.2	0.7	0.6	25.7	41.3
Spain	2019	1364	48.9	50.8	48.6	0.1	0.5	44.6	52.4
	2023	1469	46.3	53.2	45.8	0.3	0.7	44.5	48.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_MM3\_05 ME71213: Larger number in each pair (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	38.6	59.5	37.5	1.1	1.9	32.8	44.2
	2023	735	48.2	51.4	47.8	0.0	0.8	40.6	55.9
United Arab Emirates	2019	3703	27.0	71.7	26.6	1.1	0.7	24.4	29.6
	2023	4950	37.2	62.2	36.9	0.2	0.7	32.9	41.3
United States	2019	1256	39.3	59.9	38.7	0.3	1.1	34.0	44.0
	2023	1335	41.9	57.6	41.5	0.1	0.8	38.9	44.6
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International Avg. (25)	2019	20343	45.1	54.1	44.6	0.6	0.7	42.3	47.8
	2023	24633	47.5	52.1	47.2	0.3	0.4	42.7	52.3
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Abu Dhabi, UAE	2019	1308	19.7	78.4	19.3	1.4	0.9	15.6	23.4
	2023	1790	29.5	69.3	29.0	0.3	1.3	25.4	33.5
Dubai, UAE	2019	1039	42.2	57.0	41.6	0.8	0.6	40.5	43.8
	2023	1307	52.9	47.0	52.8	0.0	0.2	46.1	59.5
Ontario, Canada	2019	538	25.8	72.3	25.1	0.9	1.7	20.1	31.2
	2023	601	26.8	72.5	26.6	0.5	0.4	20.3	34.0
Quebec, Canada	2019	549	49.6	50.0	49.1	0.7	0.3	50.6	48.6
	2023	560	54.3	45.6	54.2	0.2	0.0	48.4	61.1
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MM3\_06 ME71070: Estimate length of twig - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	59.6	13.1	58.1	17.0	9.3	1.0	1.5	58.9	60.2
	2023	1945	58.8	16.0	58.2	17.5	7.3	0.3	0.8	57.6	59.9
Chile	2019	584	54.4	17.8	52.0	15.9	9.8	1.9	2.6	55.9	53.0
	2023	642	52.7	21.9	51.1	17.4	6.6	2.4	0.7	51.6	53.7
Chinese Taipei	2019	533	69.4	9.5	69.2	14.5	6.6	0.3	0.0	73.0	66.0
	2023	757	69.4	9.2	69.4	15.9	5.5	0.0	0.0	70.3	68.4
Czech Republic	2019	664	67.4	7.2	67.0	14.4	10.7	0.7	0.0	66.7	68.3
	2023	979	62.0	10.8	61.8	17.9	9.2	0.3	0.0	59.8	64.2
Denmark	2019	456	58.5	10.3	55.5	15.1	14.1	2.4	2.6	60.7	56.0
	2023	742	59.5	12.2	58.1	15.3	12.1	0.9	1.4	60.9	58.0
England	2019	486	67.9	15.3	67.1	11.4	5.0	0.6	0.7	67.7	68.1
	2023	572	66.2	16.8	66.1	12.9	4.0	0.1	0.1	68.2	63.2
Finland	2019	672	65.1	14.0	64.5	14.6	5.9	0.7	0.3	65.9	64.4
	2023	819	63.8	14.1	63.4	16.2	5.7	0.5	0.1	64.1	63.5
France	2019	604	59.8	15.0	58.6	16.6	7.8	1.5	0.5	59.3	60.3
	2023	677	56.8	17.1	55.9	19.1	6.4	0.3	1.1	55.3	58.2
Georgia	2019	525	39.0	8.6	37.7	15.9	34.6	2.4	0.8	36.4	41.4
	2023	631	47.9	12.9	46.9	12.8	25.5	0.9	1.1	43.0	52.0
Germany	2019	485	67.4	9.5	66.6	17.3	5.5	0.6	0.5	65.1	69.7
	2023	635	60.8	14.2	60.5	17.7	7.2	0.1	0.3	57.9	63.0
Hong Kong SAR	2019	419	76.8	9.6	76.4	11.0	2.5	0.4	0.0	78.6	75.1
	2023	581	74.2	10.9	74.0	11.7	3.2	0.2	0.0	74.7	73.7
Hungary	2019	641	56.2	11.5	55.9	16.8	15.2	0.5	0.1	57.6	54.9
	2023	752	57.9	10.1	57.6	17.8	13.9	0.4	0.2	56.3	59.5
Italy	2019	538	62.4	16.8	60.6	14.7	5.0	2.0	0.9	61.0	63.6
	2023	630	59.5	16.9	58.3	15.0	7.8	1.7	0.3	56.4	62.2
Korea, Rep. of	2019	556	69.0	8.9	68.9	15.7	6.3	0.2	0.0	70.6	67.7
	2023	625	67.9	7.3	67.5	17.2	7.5	0.0	0.5	68.3	67.4
Lithuania	2019	534	63.9	17.2	62.9	11.9	6.5	1.5	0.0	62.0	65.6
	2023	639	67.8	11.0	67.2	15.2	5.7	0.8	0.0	65.4	70.2
Netherlands	2019	472	65.0	10.8	64.2	19.7	4.1	1.0	0.2	63.2	66.5
	2023	500	64.9	11.7	64.8	19.4	3.8	0.2	0.0	64.7	65.1
Norway (5)	2019	560	71.6	13.1	69.6	10.6	3.9	1.4	1.3	73.2	70.2
	2023	739	68.0	12.6	67.1	14.4	4.7	0.6	0.7	68.0	68.0
Portugal	2019	613	60.4	13.4	59.4	18.6	6.9	1.2	0.5	54.2	65.4
	2023	745	58.1	12.2	57.3	21.5	7.7	0.8	0.4	58.0	58.2
Qatar	2019	710	50.8	22.3	50.1	15.3	11.1	0.5	0.7	49.5	52.0
	2023	923	53.6	19.7	52.7	17.2	8.7	0.1	1.6	50.3	56.7
Singapore	2019	842	71.4	11.7	71.0	14.6	2.1	0.5	0.0	71.4	71.4
	2023	931	72.0	11.4	71.9	14.6	1.9	0.0	0.1	70.8	73.2
Slovak Republic	2019	610	61.1	12.1	60.4	19.2	7.2	1.0	0.2	56.4	65.1
	2023	683	60.8	13.7	60.3	17.7	7.5	0.2	0.6	60.8	60.9
Spain	2019	1363	59.0	15.9	58.1	17.8	6.8	0.9	0.5	56.1	61.3
	2023	1469	60.0	12.9	59.2	19.1	7.4	0.6	0.7	58.5	61.4

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MM3\_06 ME71070: Estimate length of twig - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	67.1	11.6	64.7	15.8	4.3	1.5	2.1	72.0	62.3
	2023	735	68.2	13.9	67.7	14.6	3.0	0.0	0.8	70.7	65.7
United Arab Emirates	2019	3704	54.7	15.9	53.7	16.1	12.4	1.0	0.8	54.1	55.3
	2023	4950	59.8	17.7	59.0	14.3	7.8	0.5	0.9	59.3	60.2
United States	2019	1256	57.6	16.6	56.3	15.0	9.8	1.1	1.2	54.4	60.5
	2023	1335	56.3	21.0	55.7	13.3	8.9	0.3	0.8	54.4	58.1
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International Avg. (25)	2019	20343	62.2	13.1	61.1	15.4	8.5	1.1	0.7	61.7	62.6
	2023	24636	61.9	13.9	61.3	16.2	7.5	0.5	0.5	61.0	62.6
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Abu Dhabi, UAE	2019	1308	51.2	16.1	50.3	18.4	13.4	0.8	1.0	51.2	51.1
	2023	1790	56.1	17.9	54.9	15.8	9.3	0.6	1.6	55.8	56.3
Dubai, UAE	2019	1039	65.0	13.1	64.0	12.5	8.9	1.0	0.6	64.5	65.5
	2023	1307	67.0	15.5	66.8	12.2	5.2	0.2	0.2	64.9	68.9
Ontario, Canada	2019	538	61.8	13.7	60.0	15.2	8.2	1.0	1.8	62.2	61.3
	2023	601	60.0	17.0	59.3	16.4	6.1	0.3	0.9	60.8	59.1
Quebec, Canada	2019	549	58.4	13.9	57.6	17.3	9.9	1.0	0.3	57.6	58.9
	2023	560	59.7	13.7	59.4	18.8	7.6	0.2	0.2	56.4	62.9
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM3\_07 ME71181: Rectangle with perimeter of 10 cm - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	46.4	52.3	45.3	0.8	1.6	42.6	49.8
	2023	1945	41.5	57.6	41.0	0.5	0.9	40.1	43.1
Chile	2019	584	12.3	82.7	11.6	2.6	3.1	11.4	13.1
	2023	642	18.7	78.5	18.1	2.5	0.9	14.2	22.9
Chinese Taipei	2019	533	70.7	29.2	70.6	0.2	0.0	68.8	72.5
	2023	756	63.2	36.8	63.2	0.0	0.0	65.6	60.7
Czech Republic	2019	664	41.7	57.3	41.0	1.7	0.0	39.0	44.7
	2023	979	44.0	55.2	43.5	1.3	0.0	37.6	50.5
Denmark	2019	456	47.6	49.7	45.2	2.1	3.1	44.8	50.7
	2023	742	50.2	48.5	48.8	1.0	1.6	50.4	49.9
England	2019	486	41.8	57.5	41.3	0.5	0.7	43.2	40.3
	2023	572	50.9	48.4	50.1	1.4	0.1	49.0	52.6
Finland	2019	672	34.6	63.3	33.5	2.9	0.3	34.9	34.3
	2023	819	35.5	63.7	35.0	1.2	0.1	32.6	38.2
France	2019	604	25.1	72.9	24.4	1.8	0.8	22.0	28.5
	2023	677	25.8	71.4	24.8	2.6	1.2	22.6	28.9
Georgia	2019	525	32.8	63.5	31.1	4.4	1.1	32.7	33.0
	2023	631	37.1	60.6	35.8	2.5	1.1	36.3	37.8
Germany	2019	485	27.9	69.4	26.8	3.3	0.5	25.2	30.7
	2023	635	30.9	67.7	30.2	1.9	0.3	27.2	33.6
Hong Kong SAR	2019	419	71.2	28.8	71.2	0.0	0.0	71.0	71.4
	2023	581	63.5	36.3	63.2	0.5	0.0	62.0	65.0
Hungary	2019	641	30.1	69.5	30.0	0.4	0.1	26.5	33.4
	2023	752	28.3	71.3	28.1	0.3	0.4	26.7	29.8
Italy	2019	538	31.9	65.0	30.4	3.5	1.1	28.1	34.8
	2023	630	41.6	57.2	40.7	1.9	0.3	32.5	49.4
Korea, Rep. of	2019	556	54.0	45.9	53.9	0.2	0.0	51.7	56.1
	2023	625	47.5	52.1	47.3	0.1	0.5	49.8	45.4
Lithuania	2019	534	48.8	50.7	48.3	1.0	0.0	48.7	48.9
	2023	639	56.6	43.1	56.2	0.7	0.0	55.0	58.2
Netherlands	2019	472	40.7	58.8	40.3	0.7	0.2	41.6	39.9
	2023	500	42.3	57.5	42.1	0.4	0.0	41.7	42.9
Norway (5)	2019	560	43.9	54.0	42.2	2.5	1.3	45.8	42.1
	2023	739	27.8	69.7	26.8	2.3	1.2	25.9	29.7
Portugal	2019	613	46.5	52.6	45.7	1.2	0.5	44.8	47.8
	2023	745	44.2	54.6	43.2	1.8	0.4	40.0	48.4
Qatar	2019	710	20.8	76.7	20.1	2.4	0.7	20.8	20.7
	2023	923	22.5	75.5	21.9	1.0	1.6	20.7	24.2
Singapore	2019	842	75.9	24.1	75.8	0.1	0.0	73.3	78.6
	2023	931	74.3	25.7	74.1	0.1	0.1	74.6	73.9
Slovak Republic	2019	610	37.2	60.8	36.0	2.8	0.4	36.7	37.6
	2023	683	38.9	60.1	38.3	1.1	0.6	34.7	43.0
Spain	2019	1364	22.8	75.8	22.4	1.1	0.7	19.8	25.2
	2023	1469	29.1	68.1	27.9	3.3	0.8	25.8	32.3

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM3\_07 ME71181: Rectangle with perimeter of 10 cm - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	44.6	52.9	42.6	2.1	2.3	47.0	42.3
	2023	735	46.7	52.3	45.8	1.1	0.8	45.9	47.6
United Arab Emirates	2019	3705	29.7	68.5	29.0	1.8	0.8	28.0	31.3
	2023	4950	31.2	67.6	30.7	0.8	1.0	29.6	32.8
United States	2019	1256	33.8	65.1	33.2	0.4	1.2	30.6	36.7
	2023	1335	29.5	69.7	29.1	0.2	0.9	27.3	31.4
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International Avg. (25)	2019	20345	40.5	57.9	39.7	1.6	0.8	39.2	41.8
	2023	24635	40.9	58.0	40.2	1.2	0.6	38.7	42.9
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Abu Dhabi, UAE	2019	1308	18.7	78.9	18.2	1.9	1.0	16.8	19.9
	2023	1790	21.3	76.5	20.6	1.2	1.7	20.4	22.1
Dubai, UAE	2019	1039	47.8	51.2	46.9	1.3	0.6	47.4	48.1
	2023	1307	47.2	52.5	46.9	0.4	0.2	43.4	50.7
Ontario, Canada	2019	538	53.2	45.5	51.7	0.7	2.1	49.3	56.9
	2023	601	40.3	58.8	39.6	0.5	1.1	37.9	42.9
Quebec, Canada	2019	549	53.2	46.5	52.9	0.4	0.3	48.8	56.2
	2023	560	52.4	47.1	51.9	0.5	0.4	52.9	51.8
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Measurement and Geometry / Knowing

A\_MM3\_08 ME71179: Properties of rhombus and rectangle (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	21.1	74.8	20.0	3.4	1.9	19.3	22.8
	2023	1945	16.1	81.8	15.7	1.3	1.2	16.5	15.7
Chinese Taipei	2019	533	58.4	41.6	58.3	0.1	0.0	60.8	56.2
	2023	757	59.5	40.5	59.5	0.0	0.0	60.5	58.5
Czech Republic	2019	664	24.3	72.9	23.4	3.7	0.1	25.5	22.9
	2023	979	21.6	76.0	21.0	3.0	0.0	21.8	21.4
Denmark	2019	456	23.0	70.6	21.1	5.0	3.4	22.5	23.5
	2023	742	17.3	77.3	16.2	4.6	1.8	17.7	16.9
England	2019	486	24.7	73.2	24.1	2.1	0.7	26.7	22.8
	2023	572	25.3	73.4	24.8	1.6	0.2	24.4	26.1
Finland	2019	672	22.6	74.7	21.8	3.0	0.6	22.7	22.4
	2023	819	21.1	77.1	20.6	2.1	0.2	24.1	18.2
France	2019	603	28.8	66.5	26.9	5.1	1.5	28.2	29.5
	2023	677	21.8	72.3	20.2	6.3	1.2	22.6	21.1
Georgia	2019	524	9.5	82.6	8.7	7.5	1.2	12.6	6.7
	2023	631	11.1	82.2	10.3	6.3	1.2	10.2	11.9
Germany	2019	485	24.9	71.8	23.8	3.1	1.2	25.3	24.5
	2023	635	26.7	70.8	25.8	3.0	0.4	25.2	27.7
Hong Kong SAR	2019	419	60.4	39.5	60.3	0.3	0.0	62.0	59.0
	2023	581	56.1	43.7	55.8	0.5	0.0	55.6	56.6
Hungary	2019	641	24.0	75.7	23.9	0.4	0.1	24.8	23.3
	2023	752	19.3	79.4	19.0	1.2	0.5	19.6	19.0
Italy	2019	538	18.2	76.9	17.1	4.9	1.1	15.7	20.1
	2023	630	19.0	78.0	18.3	3.3	0.3	17.1	20.6
Korea, Rep. of	2019	556	69.5	30.4	69.3	0.3	0.0	75.2	64.2
	2023	625	54.9	44.8	54.5	0.2	0.5	56.3	53.5
Lithuania	2019	534	10.0	88.0	9.8	2.1	0.0	12.6	7.7
	2023	638	9.2	89.4	9.0	1.5	0.0	12.3	6.0
Norway (5)	2019	560	27.3	67.8	25.5	4.5	2.2	27.2	27.4
	2023	739	11.2	85.2	10.7	2.7	1.4	11.6	10.8
Portugal	2019	613	16.9	81.4	16.5	1.2	0.8	14.0	19.1
	2023	745	15.4	82.6	15.0	1.8	0.6	12.8	18.0
Qatar	2019	710	8.0	88.7	7.8	2.4	1.2	8.7	7.4
	2023	923	8.9	87.5	8.6	1.9	2.0	8.6	9.2
Singapore	2019	842	53.4	46.4	53.3	0.3	0.0	51.7	55.2
	2023	931	51.4	48.5	51.3	0.0	0.1	51.0	51.8
Slovak Republic	2019	610	10.4	85.7	9.9	3.7	0.7	10.8	10.0
	2023	683	7.1	90.1	6.9	2.4	0.6	6.6	7.7
Spain	2019	1363	15.9	81.7	15.4	2.2	0.7	18.9	13.4
	2023	1469	18.7	78.5	18.0	2.7	0.9	18.1	19.2
Sweden	2019	561	8.3	83.1	7.5	6.6	2.8	10.1	6.6
	2023	735	8.6	88.3	8.3	2.6	0.9	8.3	8.8
United Arab Emirates	2019	3699	13.2	84.5	12.9	1.6	1.0	12.8	13.6
	2023	4950	17.1	80.9	16.7	1.3	1.2	16.3	17.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing

A\_MM3\_08 ME71179: Properties of rhombus and rectangle (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
United States	2019	1256	24.9	73.2	24.2	1.2	1.4	23.4	26.1
	2023	1335	22.2	76.6	21.9	0.5	1.0	20.7	23.7
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International Avg. (23)	2019	19280	26.0	70.9	25.3	2.8	1.0	26.6	25.4
	2023	23493	23.5	74.1	23.0	2.2	0.7	23.4	23.5
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Abu Dhabi, UAE	2019	1307	6.8	90.0	6.6	2.0	1.4	7.5	6.1
	2023	1790	10.9	86.0	10.5	1.4	2.1	9.6	12.1
Dubai, UAE	2019	1039	23.7	75.3	23.4	0.8	0.6	22.9	24.4
	2023	1307	25.3	73.8	24.9	1.1	0.2	24.0	26.5
Ontario, Canada	2019	538	24.7	71.0	23.3	3.2	2.4	21.1	28.2
	2023	601	14.7	83.0	14.3	1.3	1.4	14.2	15.2
Quebec, Canada	2019	549	24.8	72.8	24.0	2.9	0.3	26.2	24.0
	2023	560	21.7	77.2	21.4	0.8	0.6	22.2	21.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning  
A\_MM3\_09 ME71067: Shelves needed for new books - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	17.4	73.0	6.8	12.7	4.6	3.0	14.6	19.9
	2023	1945	19.6	73.4	6.3	15.6	3.0	1.7	20.3	19.0
Chile	2019	584	10.4	74.3	6.2	5.8	7.8	5.9	12.4	8.2
	2023	642	12.6	77.2	4.7	9.1	6.8	2.1	9.7	15.1
Chinese Taipei	2019	533	43.6	53.4	5.4	40.7	0.4	0.0	38.6	48.1
	2023	756	48.7	48.9	4.1	46.4	0.6	0.0	46.0	51.7
Czech Republic	2019	664	29.7	62.3	6.8	24.4	6.2	0.3	24.7	35.1
	2023	978	23.1	71.0	5.3	19.5	3.7	0.6	19.5	26.8
Denmark	2019	456	27.8	59.9	8.6	20.4	6.6	4.4	24.2	31.5
	2023	742	26.3	63.9	6.7	20.6	4.5	4.3	23.8	28.8
England	2019	486	25.6	70.2	3.9	22.8	2.2	0.9	19.9	31.3
	2023	572	26.9	66.8	7.8	22.1	3.2	0.2	22.9	31.5
Finland	2019	672	27.0	65.0	9.6	21.0	3.9	0.6	25.3	28.7
	2023	818	23.5	69.0	7.8	18.5	3.9	0.8	20.0	26.6
France	2019	604	18.2	69.4	5.0	13.5	9.8	2.2	15.8	20.8
	2023	677	15.8	74.3	4.9	11.9	6.7	2.3	14.7	16.8
Georgia	2019	524	20.9	68.1	6.7	15.6	6.6	3.1	17.5	24.1
	2023	631	22.4	67.7	5.3	17.7	6.5	2.9	21.9	22.8
Germany	2019	485	27.5	62.5	6.9	21.5	7.0	2.1	25.3	29.5
	2023	634	25.0	65.4	6.5	19.6	7.3	1.2	19.4	29.1
Hong Kong SAR	2019	419	49.5	47.2	6.3	46.2	0.3	0.0	47.0	51.8
	2023	580	48.4	49.3	3.2	46.2	1.2	0.0	45.6	51.2
Hungary	2019	641	20.8	74.3	5.7	17.4	2.4	0.1	20.7	20.9
	2023	752	21.5	74.7	5.2	18.6	0.5	1.0	17.9	25.0
Italy	2019	538	14.8	72.6	5.1	10.5	9.3	2.4	14.9	14.8
	2023	630	19.7	69.4	8.0	14.0	7.4	1.2	14.7	23.6
Korea, Rep. of	2019	556	44.4	50.4	8.5	39.4	1.7	0.0	41.7	46.9
	2023	625	36.8	58.4	6.1	32.8	2.3	0.5	34.6	39.0
Lithuania	2019	534	24.3	68.6	7.9	19.3	3.6	0.6	20.4	27.9
	2023	639	29.4	65.0	8.8	24.4	1.7	0.0	26.8	31.9
Netherlands	2019	472	28.6	64.8	6.0	24.2	4.3	0.8	25.4	31.4
	2023	500	21.5	72.9	6.1	17.8	2.5	0.7	17.5	25.4
Norway (5)	2019	560	32.1	58.2	6.6	25.8	6.3	3.1	30.0	34.1
	2023	736	29.0	60.8	8.6	22.3	6.3	2.1	25.5	32.5
Portugal	2019	613	21.4	70.7	5.9	17.1	4.6	1.7	18.1	24.0
	2023	745	17.8	73.5	6.7	13.3	5.1	1.4	14.4	21.1
Qatar	2019	710	8.3	83.4	4.0	5.8	4.2	2.6	8.1	8.6
	2023	923	13.1	80.3	3.7	10.5	2.3	3.1	11.4	14.7
Singapore	2019	842	49.4	47.4	5.8	46.2	0.6	0.0	44.4	54.5
	2023	931	45.6	50.9	6.7	42.1	0.2	0.1	40.2	50.8
Slovak Republic	2019	610	28.5	64.2	6.3	23.6	4.4	1.5	24.7	31.7
	2023	683	22.5	69.4	4.5	18.5	6.4	1.2	20.7	24.1
Spain	2019	1363	15.9	75.4	6.1	11.7	5.7	1.1	12.2	18.8
	2023	1467	14.2	76.0	7.4	9.5	5.2	1.8	11.5	16.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning  
A\_MM3\_09 ME71067: Shelves needed for new books - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	27.7	57.9	8.8	19.5	8.7	5.1	25.7	29.6
	2023	735	30.7	60.4	8.4	24.5	4.9	1.9	24.2	36.9
United Arab Emirates	2019	3707	14.5	79.8	4.4	11.7	2.5	1.7	13.0	16.0
	2023	4949	18.4	75.5	4.0	15.4	2.4	2.6	15.2	21.3
United States	2019	1256	17.0	77.6	6.0	13.5	1.2	1.8	14.0	19.7
	2023	1335	17.0	78.6	4.4	14.3	1.4	1.3	14.3	19.4
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International Avg. (25)	2019	20345	25.8	66.0	6.4	21.2	4.6	1.8	23.1	28.3
	2023	24625	25.2	67.7	6.1	21.0	3.8	1.4	22.1	28.1
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Abu Dhabi, UAE	2019	1309	9.4	85.2	3.9	7.1	1.5	2.3	8.6	10.4
	2023	1790	12.6	80.0	3.6	10.0	2.4	4.2	9.2	15.8
Dubai, UAE	2019	1039	23.8	71.5	5.3	20.6	1.7	0.9	21.0	26.6
	2023	1307	27.6	68.1	4.8	24.5	1.5	1.2	22.9	32.0
Ontario, Canada	2019	538	15.9	73.7	8.2	10.6	3.9	3.6	13.7	18.0
	2023	601	21.4	71.0	6.0	17.1	4.2	1.7	21.8	20.9
Quebec, Canada	2019	549	21.1	71.2	5.6	17.0	5.3	0.9	15.6	25.2
	2023	560	15.3	78.8	6.3	11.7	2.2	1.1	14.8	16.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing  
A\_MM3\_10A ME71147A: Line graph of Scott's walk - 2 km - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	67.1	30.9	62.8	2.7	3.6	63.5	70.3
	2023	1945	64.8	33.3	61.3	2.7	2.7	61.5	68.5
Chile	2019	584	47.5	46.0	41.6	4.5	7.9	41.8	53.0
	2023	641	50.5	45.0	46.0	5.3	3.7	46.1	54.4
Chinese Taipei	2019	533	92.3	7.7	92.1	0.2	0.0	91.1	93.3
	2023	757	93.3	6.7	93.1	0.2	0.0	92.5	94.0
Czech Republic	2019	664	78.0	20.7	73.5	5.1	0.6	73.9	82.6
	2023	979	73.9	24.6	69.5	5.1	0.8	71.6	76.1
Denmark	2019	456	83.6	14.7	74.7	4.6	6.1	84.3	82.8
	2023	742	78.8	19.7	73.1	2.4	4.8	77.2	80.3
England	2019	486	82.7	16.9	81.0	1.2	0.9	82.7	82.7
	2023	572	75.5	23.9	73.4	2.5	0.2	73.1	78.0
Finland	2019	672	75.8	23.0	72.1	4.1	0.8	73.7	78.0
	2023	818	71.0	27.9	68.2	3.0	0.9	69.1	72.9
France	2019	604	64.6	31.8	58.1	7.5	2.6	62.3	67.1
	2023	675	65.0	31.4	58.1	7.7	2.8	67.0	62.9
Georgia	2019	525	50.3	41.1	41.6	12.9	4.4	50.2	50.3
	2023	631	58.2	36.3	50.6	9.3	3.8	55.0	60.8
Germany	2019	485	72.3	25.0	65.0	7.6	2.5	69.8	74.7
	2023	634	67.4	28.8	59.7	9.5	1.9	63.1	70.8
Hong Kong SAR	2019	419	85.9	14.1	85.7	0.2	0.0	84.8	86.8
	2023	581	84.4	15.4	83.2	1.4	0.0	84.6	84.1
Hungary	2019	641	68.6	30.5	66.6	2.2	0.7	66.9	70.2
	2023	752	65.6	33.7	64.3	1.0	1.0	60.6	70.7
Italy	2019	538	61.1	35.2	55.4	5.9	3.4	51.9	68.3
	2023	630	60.6	36.1	55.6	6.4	1.9	53.3	66.5
Korea, Rep. of	2019	556	92.3	7.7	91.7	0.6	0.1	90.2	94.2
	2023	625	90.5	9.3	89.1	1.1	0.5	89.1	91.9
Lithuania	2019	534	76.1	23.0	73.1	3.3	0.7	77.9	74.4
	2023	639	81.6	17.9	79.3	2.7	0.0	79.3	83.9
Netherlands	2019	472	84.5	15.0	81.9	1.9	1.2	84.1	85.0
	2023	500	82.4	17.1	80.1	1.7	1.1	79.7	84.7
Norway (5)	2019	560	79.4	18.8	72.5	4.7	4.1	81.8	77.2
	2023	739	76.7	21.7	71.7	3.5	3.1	75.6	77.9
Portugal	2019	613	64.9	33.4	61.9	2.5	2.2	60.7	68.2
	2023	745	67.0	31.3	63.5	2.7	2.4	63.7	70.2
Qatar	2019	710	51.6	44.4	47.4	4.6	3.6	54.0	49.3
	2023	922	55.8	41.5	52.5	1.9	4.2	54.3	57.3
Singapore	2019	842	92.5	7.4	92.1	0.3	0.1	91.8	93.2
	2023	931	91.9	8.1	91.8	0.0	0.1	90.8	93.0
Slovak Republic	2019	610	71.1	27.1	66.8	4.4	1.6	70.3	71.8
	2023	683	71.6	26.6	67.1	3.6	2.6	67.3	75.7
Spain	2019	1363	68.5	29.4	64.0	5.1	1.4	64.4	71.8
	2023	1469	67.1	30.3	61.8	5.5	2.5	64.2	69.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing  
A\_MM3\_10A ME71147A: Line graph of Scott's walk - 2 km - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	79.2	18.6	70.8	4.9	5.7	83.0	75.7
	2023	735	80.2	18.8	76.2	2.5	2.4	79.8	80.6
United Arab Emirates	2019	3705	54.6	43.3	52.1	2.4	2.2	52.5	56.4
	2023	4949	63.3	34.8	60.1	1.5	3.6	62.6	64.1
United States	2019	1256	69.0	29.9	66.6	1.3	2.1	65.2	72.5
	2023	1335	65.3	33.6	63.3	1.3	1.8	62.9	67.5
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International Avg. (25)	2019	20344	72.5	25.4	68.4	3.8	2.3	70.9	74.0
	2023	24629	72.1	26.2	68.5	3.4	1.9	69.8	74.3
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Abu Dhabi, UAE	2019	1308	41.6	55.8	39.7	2.0	2.5	39.8	42.6
	2023	1790	49.3	47.3	46.0	1.6	5.1	47.8	50.8
Dubai, UAE	2019	1039	75.7	23.6	73.6	1.4	1.4	72.9	78.5
	2023	1306	81.8	17.8	79.8	0.7	1.7	81.1	82.4
Ontario, Canada	2019	538	61.4	36.4	57.8	1.4	4.4	59.6	63.1
	2023	601	62.3	35.3	58.4	3.1	3.2	56.1	69.2
Quebec, Canada	2019	549	81.1	17.9	77.0	4.1	0.9	75.8	85.0
	2023	560	71.7	27.2	69.0	2.3	1.5	71.0	72.6
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MM3\_10B ME71147B: Line graph of Scott's walk - 6 km - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	49.7	46.3	45.8	4.1	3.9	38.2	59.9
	2023	1945	52.8	43.7	49.0	3.9	3.4	46.7	60.0
Chile	2019	584	34.4	55.5	29.2	6.2	9.2	30.8	37.8
	2023	642	40.4	51.0	34.5	9.4	5.1	31.9	47.6
Chinese Taipei	2019	533	68.7	31.2	68.5	0.2	0.0	60.5	76.1
	2023	757	73.6	26.3	73.3	0.3	0.0	70.3	77.0
Czech Republic	2019	664	57.0	40.2	53.3	5.6	0.9	50.0	64.8
	2023	979	57.0	39.8	52.8	6.1	1.4	50.2	63.7
Denmark	2019	456	57.9	37.5	51.5	3.4	7.6	50.8	65.3
	2023	742	58.8	37.5	53.6	3.3	5.5	49.6	68.2
England	2019	486	58.7	40.3	57.3	1.5	0.9	54.3	63.2
	2023	572	54.4	43.8	52.3	3.4	0.5	46.2	62.8
Finland	2019	672	55.7	41.5	52.1	4.6	1.9	52.0	59.3
	2023	819	56.3	41.2	53.2	4.6	1.0	51.6	60.9
France	2019	603	44.1	49.0	38.6	9.0	3.4	40.1	48.3
	2023	676	47.1	45.7	40.8	9.0	4.5	46.0	48.2
Georgia	2019	526	35.7	51.4	28.5	14.4	5.7	31.5	39.1
	2023	631	38.1	50.5	31.0	12.8	5.7	30.1	44.2
Germany	2019	485	54.4	40.5	48.2	7.6	3.7	47.6	61.0
	2023	635	58.0	36.2	50.0	11.4	2.4	51.7	63.0
Hong Kong SAR	2019	419	73.3	26.5	72.9	0.6	0.0	67.1	78.9
	2023	581	69.9	29.5	68.6	1.9	0.0	65.2	74.5
Hungary	2019	641	51.2	47.2	49.4	2.5	0.8	44.9	56.9
	2023	752	50.9	47.4	49.2	2.4	1.0	41.7	60.1
Italy	2019	538	43.2	49.7	37.8	8.4	4.1	37.1	47.8
	2023	630	48.1	45.6	42.3	9.4	2.6	37.5	56.6
Korea, Rep. of	2019	556	78.5	21.3	77.6	1.0	0.1	73.4	83.0
	2023	625	74.4	25.1	73.1	1.3	0.5	70.0	78.7
Lithuania	2019	534	51.0	46.8	48.8	3.5	0.9	48.5	53.3
	2023	639	58.8	40.0	57.1	2.9	0.0	48.0	69.7
Netherlands	2019	472	60.3	38.4	58.3	1.5	1.8	50.3	69.1
	2023	500	61.6	36.8	59.1	3.0	1.1	52.8	69.8
Norway (5)	2019	560	56.7	38.8	50.9	4.8	5.6	53.9	59.3
	2023	739	59.3	37.5	54.6	4.7	3.2	53.4	65.3
Portugal	2019	613	50.4	46.7	47.5	3.0	2.8	42.6	56.3
	2023	745	51.6	44.9	47.9	4.2	3.0	44.6	58.6
Qatar	2019	710	26.1	66.9	23.6	4.3	5.2	22.5	29.5
	2023	923	35.2	59.3	32.2	3.7	4.7	30.1	39.9
Singapore	2019	842	74.5	25.4	74.1	0.4	0.1	70.7	78.4
	2023	931	78.0	21.9	77.9	0.1	0.1	72.9	83.1
Slovak Republic	2019	610	53.8	43.1	50.2	4.7	1.9	44.8	61.4
	2023	683	55.3	41.2	50.9	5.4	2.6	49.2	61.0
Spain	2019	1364	45.2	50.8	41.9	5.6	1.7	36.8	51.8
	2023	1469	49.6	45.4	44.6	7.0	3.0	44.4	54.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MM3\_10B ME71147B: Line graph of Scott's walk - 6 km - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	58.4	36.6	51.4	5.5	6.5	56.2	60.4
	2023	735	63.0	34.7	59.0	3.4	2.9	54.4	71.6
United Arab Emirates	2019	3708	33.8	62.1	31.7	3.2	3.0	29.2	38.3
	2023	4949	44.1	51.4	40.5	3.8	4.3	38.4	49.6
United States	2019	1256	49.2	48.8	47.3	1.4	2.5	39.0	58.4
	2023	1335	48.5	49.4	46.6	1.9	2.1	42.7	53.7
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International Avg. (25)	2019	20348	52.9	43.3	49.5	4.3	3.0	46.9	58.3
	2023	24634	55.4	41.0	51.8	4.8	2.4	48.8	61.7
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Abu Dhabi, UAE	2019	1308	26.4	68.8	24.7	3.5	3.1	23.6	28.9
	2023	1790	35.5	57.6	31.8	4.5	6.1	30.4	40.7
Dubai, UAE	2019	1039	51.8	46.7	50.2	1.3	1.8	44.2	59.2
	2023	1306	60.5	37.7	57.6	2.7	1.9	54.4	66.3
Ontario, Canada	2019	538	46.1	49.9	42.7	2.9	4.5	34.9	56.8
	2023	601	53.6	42.4	49.0	4.3	4.3	46.5	61.3
Quebec, Canada	2019	549	58.8	38.6	54.9	5.2	1.2	45.3	68.6
	2023	560	56.3	41.9	53.8	2.3	1.9	49.8	64.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Data / Applying  
A\_MM3\_11 ME71189: Graph of weights of bears - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	83.7	15.1	77.3	3.3	4.3	84.2	83.2
	2023	1945	84.7	14.5	80.2	1.5	3.7	84.3	85.0
Chile	2019	584	70.6	24.8	59.5	6.0	9.7	66.6	74.6
	2023	642	75.6	21.7	67.3	5.3	5.7	75.0	76.2
Chinese Taipei	2019	533	88.0	11.9	87.5	0.5	0.0	88.3	87.8
	2023	757	96.0	4.0	96.0	0.0	0.0	95.8	96.1
Czech Republic	2019	664	90.7	8.9	87.0	3.0	1.1	89.7	91.9
	2023	979	88.4	11.3	85.6	1.8	1.4	87.7	89.1
Denmark	2019	456	92.2	6.9	81.7	3.5	7.8	95.0	89.2
	2023	742	91.9	7.4	84.4	2.2	6.0	90.4	93.5
England	2019	486	87.2	12.4	84.4	2.3	0.9	88.8	85.5
	2023	572	90.8	9.0	88.9	1.3	0.7	87.9	93.7
Finland	2019	672	91.9	7.6	86.4	3.8	2.1	92.2	91.5
	2023	819	90.2	9.4	86.5	3.0	1.1	92.6	88.0
France	2019	604	78.6	19.3	70.9	6.4	3.4	78.4	78.8
	2023	677	84.1	13.5	71.4	9.9	5.2	82.2	86.0
Georgia	2019	526	70.9	25.0	60.8	8.2	6.0	70.1	71.6
	2023	631	80.3	17.7	72.2	3.7	6.4	78.1	82.0
Germany	2019	485	88.0	11.2	81.9	3.3	3.7	88.8	87.1
	2023	635	88.2	11.3	84.6	1.2	2.9	87.9	88.6
Hong Kong SAR	2019	419	98.2	1.8	98.2	0.0	0.0	98.7	97.7
	2023	581	94.0	5.9	91.6	2.5	0.0	93.3	94.7
Hungary	2019	641	83.9	15.8	81.9	1.5	0.8	84.2	83.5
	2023	752	83.5	16.2	82.1	0.7	1.0	81.9	85.2
Italy	2019	538	85.4	13.5	79.2	2.5	4.8	85.9	85.0
	2023	630	85.9	13.3	81.1	2.8	2.9	81.4	89.8
Korea, Rep. of	2019	556	96.5	3.5	96.0	0.5	0.1	98.9	94.3
	2023	625	94.4	5.6	93.7	0.2	0.5	94.9	93.9
Lithuania	2019	534	95.1	4.8	92.7	1.7	0.9	94.7	95.4
	2023	639	94.5	5.5	94.2	0.3	0.0	95.5	93.5
Netherlands	2019	472	88.1	11.4	84.1	2.8	1.8	91.1	85.5
	2023	500	93.6	6.0	88.8	4.1	1.1	91.9	95.3
Norway (5)	2019	560	93.9	5.5	85.8	3.1	5.6	97.2	91.0
	2023	739	89.5	9.8	83.8	2.7	3.7	88.8	90.3
Portugal	2019	613	89.2	10.2	84.3	2.4	3.2	85.8	91.9
	2023	745	90.2	9.3	85.1	2.0	3.6	89.1	91.2
Qatar	2019	710	68.4	29.0	62.8	2.7	5.5	69.5	67.3
	2023	923	77.9	20.4	72.0	2.7	4.9	74.7	80.8
Singapore	2019	841	94.3	5.7	93.9	0.3	0.1	92.9	95.6
	2023	931	95.2	4.8	94.9	0.1	0.1	95.3	95.0
Slovak Republic	2019	610	85.4	13.7	80.1	4.1	2.0	83.0	87.4
	2023	683	85.1	14.3	81.7	1.1	2.8	84.7	85.5
Spain	2019	1364	86.1	13.3	82.6	2.2	1.9	84.5	87.4
	2023	1469	85.5	13.7	80.7	2.5	3.1	83.9	87.0

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MM3\_11 ME71189: Graph of weights of bears - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	92.2	7.0	82.9	2.8	7.3	94.6	90.1
	2023	735	92.6	7.0	87.7	2.2	3.1	91.1	94.1
United Arab Emirates	2019	3706	74.6	23.6	69.6	3.3	3.5	73.6	75.6
	2023	4950	78.7	19.9	73.2	2.3	4.7	78.4	78.9
United States	2019	1256	85.3	14.1	82.0	1.2	2.8	85.2	85.4
	2023	1335	84.7	14.6	80.9	2.4	2.1	82.8	86.5
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International Avg. (25)	2019	20346	86.3	12.6	81.3	2.9	3.2	86.5	86.2
	2023	24636	87.8	11.4	83.5	2.3	2.7	86.8	88.8
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Abu Dhabi, UAE	2019	1309	64.8	32.5	60.0	4.0	3.5	64.6	64.6
	2023	1790	70.7	26.5	64.1	3.0	6.5	69.7	71.8
Dubai, UAE	2019	1039	86.5	12.9	83.1	1.9	2.1	85.2	87.8
	2023	1307	89.7	9.9	86.3	1.4	2.4	88.5	90.9
Ontario, Canada	2019	538	81.9	16.5	74.6	3.9	5.0	84.0	79.9
	2023	601	83.2	15.7	77.8	1.7	4.7	82.3	84.2
Quebec, Canada	2019	549	93.4	6.4	90.5	1.5	1.7	92.5	94.0
	2023	560	90.1	9.6	87.8	0.7	1.9	91.1	88.8
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MM3\_12A ME71187A: Table of Sarah's beads (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	78.7	17.2	63.6	13.3	5.9	78.1	79.3
	2023	1945	74.5	23.1	67.8	4.8	4.2	76.5	72.6
Chile	2019	584	70.4	19.7	46.8	21.8	11.7	75.4	64.9
	2023	642	58.5	32.8	46.1	14.1	7.0	57.3	59.5
Chinese Taipei	2019	533	88.2	10.8	81.2	7.8	0.2	88.8	87.7
	2023	757	88.9	10.5	84.1	5.4	0.0	90.4	87.3
Czech Republic	2019	664	89.5	8.4	71.6	18.9	1.1	90.4	88.4
	2023	979	76.0	21.6	68.4	8.1	1.9	76.2	75.8
Denmark	2019	456	84.2	12.3	65.7	12.4	9.6	85.7	82.6
	2023	742	70.7	24.7	59.7	9.1	6.5	70.0	71.5
England	2019	486	89.6	9.0	77.1	12.9	1.1	90.0	89.2
	2023	572	82.5	16.4	77.3	5.4	0.9	84.9	79.6
Finland	2019	672	84.7	12.8	71.1	12.8	3.3	87.6	81.7
	2023	819	80.7	17.2	71.8	9.6	1.5	83.2	78.2
France	2019	604	87.2	9.0	61.1	24.9	5.0	90.3	83.5
	2023	677	62.9	31.2	52.9	9.8	6.1	65.4	60.3
Georgia	2019	526	68.1	14.8	31.6	46.5	7.2	68.6	67.7
	2023	631	61.4	28.5	45.3	19.1	7.2	62.9	60.2
Germany	2019	485	84.6	12.2	67.4	15.9	4.5	86.9	82.2
	2023	635	79.9	18.0	71.8	7.1	3.1	82.1	78.5
Hong Kong SAR	2019	419	89.4	9.0	75.7	15.3	0.0	93.5	85.5
	2023	581	86.1	12.4	76.9	10.6	0.0	86.1	86.0
Hungary	2019	641	83.1	15.3	75.5	7.8	1.4	86.2	80.5
	2023	752	75.7	23.0	71.7	3.7	1.6	76.8	74.6
Italy	2019	538	84.7	12.3	68.3	13.6	5.8	85.0	84.5
	2023	630	85.4	13.6	79.5	3.7	3.2	84.1	86.4
Korea, Rep. of	2019	556	93.6	5.5	80.9	13.4	0.1	93.9	93.3
	2023	625	85.7	13.3	79.6	6.5	0.6	87.2	84.1
Lithuania	2019	534	86.6	11.6	74.8	12.4	1.3	90.0	83.3
	2023	639	83.7	15.8	81.1	3.1	0.0	86.1	81.3
Netherlands	2019	472	91.2	7.5	78.4	11.5	2.6	95.6	87.6
	2023	500	85.9	12.0	72.8	13.4	1.8	86.4	85.8
Norway (5)	2019	560	84.4	12.8	69.3	11.2	6.6	88.5	80.3
	2023	739	75.9	21.3	66.9	7.6	4.2	78.1	73.4
Portugal	2019	613	87.8	10.0	72.4	13.2	4.4	90.4	85.8
	2023	745	78.2	20.3	73.0	2.4	4.2	78.7	77.8
Qatar	2019	710	72.6	19.2	51.0	23.9	5.9	77.1	68.2
	2023	923	69.1	26.2	58.6	9.8	5.3	72.0	66.3
Singapore	2019	842	95.0	4.5	85.7	9.6	0.2	95.6	94.3
	2023	931	88.4	11.2	85.4	3.3	0.1	90.6	86.3
Slovak Republic	2019	610	75.7	17.3	53.9	25.8	3.0	75.4	76.0
	2023	683	75.7	22.2	69.0	6.1	2.8	78.1	73.4
Spain	2019	1364	88.6	9.5	73.7	14.4	2.4	88.9	88.4
	2023	1469	83.2	15.1	75.1	5.5	4.2	82.7	83.7

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MM3\_12A ME71187A: Table of Sarah's beads (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	84.0	10.9	56.9	23.7	8.6	89.5	78.7
	2023	735	80.4	17.2	70.5	8.4	3.9	78.7	82.1
United Arab Emirates	2019	3706	57.4	32.5	43.8	19.4	4.3	60.0	54.7
	2023	4950	67.1	28.2	57.6	8.5	5.7	68.9	65.3
United States	2019	1256	80.1	17.5	70.5	8.8	3.2	79.0	81.0
	2023	1335	69.9	26.8	62.4	8.2	2.6	74.3	66.0
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International Avg. (25)	2019	20347	83.2	12.9	66.7	16.4	4.0	85.2	81.2
	2023	24636	77.1	20.1	69.0	7.7	3.1	78.3	75.8
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Abu Dhabi, UAE	2019	1309	52.4	35.4	39.0	21.7	3.9	54.4	50.3
	2023	1790	56.5	36.0	46.8	9.7	7.5	57.6	55.4
Dubai, UAE	2019	1039	77.0	19.5	65.2	12.3	3.0	78.0	76.0
	2023	1307	81.8	16.7	74.8	5.0	3.5	82.1	81.4
Ontario, Canada	2019	538	76.1	19.1	60.8	13.0	7.1	75.5	76.6
	2023	601	74.6	22.8	67.2	4.7	5.3	76.0	73.2
Quebec, Canada	2019	549	83.4	14.4	72.4	10.6	2.6	80.6	85.4
	2023	560	73.2	25.4	69.4	3.2	1.9	75.5	71.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing

A\_MM3\_12B ME71187B: Table of Sarah's beads - square beads - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1955	46.8	41.3	36.4	14.1	8.3	45.2	48.2
	2023	1945	45.0	43.2	35.3	15.4	6.0	48.0	41.5
Chile	2019	584	38.9	43.8	27.9	10.5	17.8	46.0	32.1
	2023	642	33.4	51.7	26.0	13.3	9.1	35.6	31.5
Chinese Taipei	2019	533	64.0	33.5	59.6	5.8	1.1	68.0	60.3
	2023	757	67.0	30.9	62.8	6.3	0.0	72.4	61.3
Czech Republic	2019	664	77.0	20.2	67.5	8.1	4.2	79.4	74.2
	2023	979	69.9	23.7	55.2	18.2	2.8	69.2	70.7
Denmark	2019	456	72.2	19.0	49.4	19.1	12.5	74.4	69.7
	2023	742	60.6	29.6	45.6	17.2	7.7	62.8	58.3
England	2019	486	51.7	44.1	47.3	6.4	2.2	51.5	52.0
	2023	572	58.7	35.4	50.4	12.4	1.8	58.2	59.1
Finland	2019	672	70.8	23.7	57.3	13.8	5.2	72.8	68.7
	2023	819	64.6	30.7	55.9	11.0	2.4	70.7	58.5
France	2019	604	55.6	36.3	45.4	8.1	10.2	59.3	51.3
	2023	677	40.1	45.9	30.7	13.6	9.7	35.6	44.8
Georgia	2019	526	44.0	43.2	33.9	11.7	11.3	47.9	40.8
	2023	631	51.9	34.3	37.0	18.3	10.5	53.1	50.8
Germany	2019	485	72.1	22.6	58.4	10.8	8.1	76.2	67.4
	2023	635	63.7	29.3	51.5	14.8	4.4	66.7	61.3
Hong Kong SAR	2019	419	67.5	31.3	65.1	2.8	0.8	74.8	61.1
	2023	581	58.7	38.3	54.3	7.1	0.3	59.3	58.1
Hungary	2019	641	67.4	28.8	59.6	8.5	3.0	71.9	63.4
	2023	752	60.5	33.7	51.7	12.9	1.8	60.8	60.3
Italy	2019	538	65.0	28.6	53.0	8.7	9.7	67.1	63.4
	2023	630	61.2	29.7	46.8	18.2	5.3	65.1	57.8
Korea, Rep. of	2019	556	69.4	29.4	66.8	3.6	0.3	68.4	70.4
	2023	625	66.5	31.5	62.3	5.0	1.2	68.4	64.5
Lithuania	2019	534	72.3	24.9	64.9	7.9	2.3	77.9	67.2
	2023	639	74.2	23.1	66.4	9.6	1.0	74.6	73.8
Netherlands	2019	472	70.4	26.1	61.9	6.0	6.0	71.6	69.3
	2023	500	71.0	25.2	61.6	10.0	3.3	72.0	70.7
Norway (5)	2019	560	70.4	22.4	53.2	14.3	10.2	74.5	66.4
	2023	739	65.3	29.0	54.6	10.6	5.9	69.8	60.5
Portugal	2019	613	51.6	41.4	44.2	7.0	7.4	54.3	49.5
	2023	744	46.7	44.6	39.2	10.6	5.6	49.4	44.1
Qatar	2019	710	31.9	51.0	23.9	16.8	8.3	36.2	27.7
	2023	923	42.2	46.9	34.2	12.2	6.7	43.2	41.2
Singapore	2019	842	66.6	31.8	63.4	4.5	0.4	71.6	61.5
	2023	931	60.9	38.6	60.2	1.1	0.1	64.5	57.4
Slovak Republic	2019	610	64.3	30.1	54.3	8.1	7.4	64.8	63.9
	2023	683	70.4	23.2	55.1	18.4	3.2	72.3	68.5
Spain	2019	1364	46.2	48.3	41.5	5.3	4.9	49.2	43.8
	2023	1469	48.6	38.8	36.8	18.2	6.2	51.5	45.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing

A\_MM3\_12B ME71187B: Table of Sarah's beads - square beads - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	561	70.5	20.2	48.4	18.2	13.2	74.0	67.3
	2023	735	70.6	24.6	59.1	10.6	5.6	73.0	68.0
United Arab Emirates	2019	3705	40.4	46.7	31.7	14.6	6.9	42.7	38.3
	2023	4949	46.2	41.6	35.7	14.8	7.9	50.8	41.7
United States	2019	1256	44.3	49.9	39.6	5.6	4.9	46.1	42.7
	2023	1334	45.8	46.9	39.7	9.6	3.7	49.3	42.5
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International Avg. (25)	2019	20346	59.6	33.5	50.2	9.6	6.7	62.6	56.8
	2023	24633	57.8	34.8	48.3	12.4	4.5	59.9	55.7
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Abu Dhabi, UAE	2019	1308	30.6	53.1	23.4	17.0	6.6	33.7	27.7
	2023	1789	37.4	45.6	27.2	17.2	10.0	41.2	33.6
Dubai, UAE	2019	1039	51.9	40.4	43.6	11.3	4.7	53.1	50.8
	2023	1307	58.7	34.8	49.5	10.5	5.2	63.0	54.5
Ontario, Canada	2019	538	44.7	43.0	34.8	13.2	9.1	45.3	44.2
	2023	601	45.0	41.8	34.2	16.7	7.3	49.5	40.4
Quebec, Canada	2019	549	51.7	39.0	41.8	14.5	4.7	47.7	54.6
	2023	560	43.4	47.2	36.2	13.6	3.0	42.9	44.1
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DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing  
A\_MM4\_01 ME71024: 927/3 = - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	26.6	66.7	24.2	9.1	0.1	23.0	30.3
	2023	1958	29.0	65.5	26.8	7.6	0.1	26.0	32.4
Chile	2019	602	10.1	76.2	8.6	14.7	0.5	11.6	8.4
	2023	654	9.2	74.7	7.5	17.0	0.8	6.6	11.8
Chinese Taipei	2019	530	80.8	19.0	80.1	0.8	0.0	82.6	79.2
	2023	761	74.7	25.2	74.5	0.3	0.0	73.1	76.2
Czech Republic	2019	673	62.1	36.3	59.5	4.2	0.0	62.4	61.7
	2023	974	51.9	45.1	48.7	6.1	0.0	48.3	55.4
Denmark	2019	462	32.4	58.2	27.9	13.6	0.4	27.9	36.3
	2023	735	36.5	56.2	32.2	11.4	0.1	33.8	39.0
England	2019	489	60.5	37.6	57.7	4.6	0.1	58.7	62.1
	2023	575	53.0	43.8	49.4	6.6	0.2	47.3	58.9
Finland	2019	675	36.3	57.1	32.5	10.2	0.2	29.7	42.6
	2023	815	33.9	60.8	31.2	7.9	0.0	30.0	37.7
France	2019	594	32.0	55.1	25.9	19.0	0.0	29.2	34.5
	2023	673	25.6	62.5	21.5	15.9	0.1	20.6	30.5
Georgia	2019	536	39.0	56.8	36.4	6.5	0.4	31.9	45.7
	2023	634	47.0	50.2	44.5	5.4	0.0	44.2	50.0
Germany	2019	493	59.4	35.5	51.9	12.6	0.0	53.6	64.5
	2023	641	44.4	47.0	37.6	15.3	0.0	39.1	49.3
Hong Kong SAR	2019	413	60.8	39.0	60.6	0.4	0.0	55.3	65.0
	2023	583	58.1	41.8	57.9	0.3	0.0	53.5	62.3
Hungary	2019	653	57.3	41.7	55.8	2.5	0.0	55.1	59.2
	2023	738	50.9	47.8	49.6	2.6	0.0	48.4	53.4
Italy	2019	531	54.5	43.3	51.9	4.8	0.0	55.5	53.6
	2023	633	52.1	44.6	48.5	6.8	0.0	47.0	56.7
Korea, Rep. of	2019	557	43.5	54.6	42.0	3.4	0.0	38.5	48.1
	2023	617	45.2	52.9	43.6	3.5	0.0	39.9	51.7
Lithuania	2019	538	51.7	47.6	50.9	1.5	0.0	53.4	50.2
	2023	652	55.7	43.9	55.1	1.0	0.0	51.7	58.9
Netherlands	2019	472	51.5	43.6	46.3	9.9	0.2	46.8	55.6
	2023	515	45.1	49.0	40.3	10.7	0.0	37.6	52.9
Norway (5)	2019	555	41.5	50.6	35.9	12.9	0.5	38.1	44.5
	2023	755	36.4	54.2	31.0	14.3	0.4	28.4	44.6
Portugal	2019	621	42.0	55.5	40.2	4.1	0.1	44.3	39.7
	2023	748	37.6	58.8	35.5	5.6	0.1	36.4	38.7
Qatar	2019	704	21.0	75.6	20.1	4.2	0.1	16.8	25.3
	2023	916	25.1	70.0	23.5	6.1	0.3	21.4	28.5
Singapore	2019	850	86.0	14.0	85.8	0.2	0.0	86.7	85.3
	2023	933	82.7	17.3	82.4	0.3	0.0	83.9	81.4
Slovak Republic	2019	609	33.9	56.1	28.8	15.1	0.0	26.1	40.3
	2023	680	26.7	62.9	22.8	14.3	0.0	16.6	36.7
Spain	2019	1364	59.6	38.1	56.2	5.7	0.0	60.2	59.0
	2023	1453	50.4	45.0	45.7	9.3	0.0	46.3	54.5

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing  
A\_MM4\_01 ME71024: 927/3 = - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	27.1	61.1	22.7	15.9	0.3	22.5	31.4
	2023	736	29.1	62.4	25.6	11.9	0.1	24.6	33.5
United Arab Emirates	2019	3675	33.5	64.1	32.3	3.4	0.2	31.3	35.8
	2023	4938	41.5	56.3	40.0	3.7	0.1	37.7	45.0
United States	2019	1272	48.2	50.4	46.8	2.8	0.0	44.6	51.6
	2023	1293	42.4	55.6	40.9	3.1	0.4	41.7	43.1
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International Avg. (25)	2019	20365	46.0	49.4	43.2	7.3	0.1	43.4	48.4
	2023	24610	43.4	51.7	40.7	7.5	0.1	39.4	47.3
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Abu Dhabi, UAE	2019	1279	24.8	72.9	24.1	2.9	0.1	22.1	27.6
	2023	1771	32.6	64.8	31.3	3.8	0.1	28.4	36.4
Dubai, UAE	2019	1048	46.3	52.4	45.1	2.5	0.0	45.4	47.1
	2023	1310	51.6	46.8	50.0	3.2	0.0	47.4	55.6
Ontario, Canada	2019	545	24.1	69.0	21.9	9.1	0.0	19.8	28.0
	2023	607	27.2	66.6	24.8	8.4	0.2	23.9	31.0
Quebec, Canada	2019	539	38.1	57.1	35.1	7.9	0.0	35.0	41.2
	2023	557	40.6	55.4	37.9	6.6	0.0	37.2	44.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Number / Applying

A\_MM4\_02 ME71008: Heights of Khalifa and Shanghai towers - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	47.1	18.6	21.1	12.4	46.4	1.1	0.3	43.6	50.7
	2023	1960	48.9	14.9	22.7	13.1	48.5	0.6	0.1	46.2	51.7
Chile	2019	602	40.0	19.9	27.3	10.8	38.7	2.0	1.2	45.9	33.5
	2023	654	38.8	24.3	23.0	12.5	38.0	1.1	1.2	39.2	38.5
Chinese Taipei	2019	530	97.1	1.0	1.2	0.6	97.1	0.0	0.0	97.9	96.5
	2023	761	93.6	2.0	2.8	1.6	93.6	0.0	0.0	94.1	93.2
Czech Republic	2019	673	65.2	10.8	13.3	10.5	64.8	0.6	0.0	64.3	66.0
	2023	974	57.5	14.2	15.7	12.4	57.1	0.6	0.0	54.6	60.2
Denmark	2019	462	44.2	12.1	24.5	18.6	43.6	0.6	0.6	40.4	47.8
	2023	736	45.8	11.3	21.6	20.5	45.2	1.3	0.1	42.6	49.1
England	2019	489	66.4	13.0	12.6	7.7	65.7	0.6	0.3	69.5	63.7
	2023	575	65.9	9.0	17.4	7.6	65.8	0.0	0.2	66.5	66.2
Finland	2019	675	53.9	8.6	21.8	15.4	53.5	0.4	0.3	48.1	59.8
	2023	816	49.9	10.6	22.9	16.2	49.5	0.6	0.1	46.4	53.2
France	2019	594	38.3	21.9	23.8	15.0	37.7	1.3	0.2	34.3	42.1
	2023	673	41.7	20.2	25.7	11.7	41.2	0.9	0.2	39.7	43.9
Georgia	2019	535	71.2	13.7	8.9	5.4	69.2	2.4	0.4	73.6	68.8
	2023	634	71.9	9.8	11.7	6.3	71.2	1.0	0.0	71.9	71.9
Germany	2019	493	57.1	15.8	14.7	12.0	56.7	0.9	0.0	53.8	60.2
	2023	641	53.1	16.9	15.9	13.9	52.8	0.6	0.0	47.3	58.7
Hong Kong SAR	2019	413	90.8	3.4	3.2	2.6	90.6	0.2	0.0	93.9	88.4
	2023	586	87.4	5.5	4.8	2.3	87.1	0.3	0.0	86.3	88.3
Hungary	2019	653	67.3	10.4	13.1	8.9	66.8	0.8	0.0	65.9	68.6
	2023	739	65.8	15.5	12.1	6.7	65.8	0.0	0.0	62.3	69.2
Italy	2019	531	67.1	9.5	14.9	7.8	65.6	2.3	0.0	65.3	68.7
	2023	633	63.6	16.3	12.6	7.2	63.1	0.9	0.0	61.7	65.4
Korea, Rep. of	2019	557	93.2	2.1	3.1	1.7	92.9	0.3	0.0	92.1	94.1
	2023	617	90.0	3.6	4.9	1.5	90.0	0.0	0.0	89.1	91.2
Lithuania	2019	538	80.4	7.5	6.9	5.2	80.3	0.1	0.0	80.9	80.0
	2023	652	85.8	4.7	4.7	4.7	85.6	0.2	0.0	86.8	85.0
Netherlands	2019	472	66.1	6.7	10.2	15.9	64.2	2.8	0.2	66.5	65.8
	2023	515	59.7	9.9	13.6	16.3	59.0	0.3	0.9	56.5	64.1
Norway (5)	2019	555	58.8	10.0	16.2	14.6	58.0	0.5	0.7	60.9	57.0
	2023	755	50.3	10.3	22.7	16.2	49.8	0.6	0.4	46.0	55.1
Portugal	2019	621	64.7	16.0	12.2	6.9	64.1	0.7	0.1	67.4	62.0
	2023	750	55.5	17.1	16.5	10.4	55.1	0.8	0.1	51.0	59.6
Qatar	2019	704	49.7	21.6	20.4	7.5	48.9	1.5	0.1	52.6	46.6
	2023	916	45.1	22.4	23.3	8.0	44.2	1.6	0.5	46.7	43.6
Singapore	2019	850	94.2	3.2	2.3	0.3	94.1	0.1	0.0	95.5	93.0
	2023	933	91.7	3.6	3.1	1.7	91.6	0.1	0.0	91.2	92.2
Slovak Republic	2019	609	54.4	15.3	16.8	12.9	53.7	1.4	0.0	53.9	54.8
	2023	680	56.1	14.7	20.0	8.8	55.7	0.7	0.0	48.8	63.7
Spain	2019	1364	64.5	16.9	11.4	7.0	64.2	0.5	0.0	65.8	63.4
	2023	1453	56.2	16.8	17.3	8.8	55.1	2.0	0.0	54.6	57.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM4\_02 ME71008: Heights of Khalifa and Shanghai towers - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	51.4	12.0	19.9	15.8	50.5	1.4	0.3	50.8	52.0
	2023	736	56.1	15.9	18.3	9.5	55.8	0.5	0.1	56.2	56.0
United Arab Emirates	2019	3668	50.3	22.0	18.6	8.5	49.8	0.9	0.2	52.2	48.5
	2023	4940	54.0	19.3	19.0	7.6	53.8	0.3	0.1	54.0	54.1
United States	2019	1272	75.0	8.2	10.8	5.9	74.8	0.3	0.1	75.1	75.0
	2023	1293	67.1	10.5	15.4	6.7	66.5	0.5	0.4	67.4	66.8
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International Avg. (25)	2019	20357	64.3	12.0	14.0	9.2	63.7	0.9	0.2	64.4	64.3
	2023	24622	62.1	12.8	15.5	9.3	61.6	0.6	0.2	60.3	63.9
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Abu Dhabi, UAE	2019	1273	37.6	30.3	21.0	10.1	37.1	1.3	0.2	40.1	35.0
	2023	1772	42.8	26.4	21.6	9.0	42.7	0.1	0.2	42.3	43.3
Dubai, UAE	2019	1048	67.7	11.1	15.3	5.8	67.5	0.4	0.0	69.4	66.1
	2023	1310	70.2	9.3	14.3	6.1	70.1	0.0	0.1	69.6	70.9
Ontario, Canada	2019	545	44.2	19.8	21.8	13.3	43.6	1.1	0.3	38.7	49.4
	2023	607	49.0	14.5	20.3	15.8	48.5	0.8	0.2	48.7	49.4
Quebec, Canada	2019	539	58.0	14.4	16.5	10.6	57.4	1.2	0.0	57.6	58.5
	2023	557	56.6	16.0	18.5	8.5	56.3	0.5	0.1	51.8	61.9
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM4\_03 ME71165: Expression for marbles Linda has left - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	39.4	10.5	15.5	32.6	38.1	2.8	0.6	37.5	41.5
	2023	1960	43.1	9.4	13.3	33.2	42.2	1.7	0.2	40.6	45.8
Chile	2019	602	32.1	16.2	14.2	32.2	29.5	5.9	1.9	33.3	30.7
	2023	654	25.5	15.3	17.5	38.4	24.4	3.1	1.3	25.8	25.2
Chinese Taipei	2019	530	81.3	2.9	6.6	9.0	80.9	0.5	0.0	78.9	83.5
	2023	761	80.6	3.4	6.9	9.1	80.4	0.2	0.0	77.3	83.8
Czech Republic	2019	673	64.1	7.6	9.2	18.1	62.2	3.0	0.0	61.4	66.5
	2023	974	61.4	8.0	11.5	18.2	60.0	2.4	0.0	54.7	67.7
Denmark	2019	462	40.9	13.1	15.0	28.9	39.5	2.8	0.6	39.5	42.3
	2023	736	38.9	12.7	13.8	32.7	37.6	2.9	0.2	36.2	41.6
England	2019	489	53.1	7.0	11.2	27.6	51.9	2.0	0.3	48.1	57.4
	2023	575	58.2	5.3	10.7	25.1	57.1	1.6	0.2	55.0	61.3
Finland	2019	675	62.2	6.6	9.5	20.9	60.9	1.8	0.3	63.0	61.5
	2023	816	62.9	8.3	10.2	17.6	61.2	2.5	0.1	61.7	64.0
France	2019	594	38.2	10.6	15.7	32.6	36.4	4.5	0.2	34.4	41.9
	2023	673	44.0	8.9	16.2	29.9	43.3	1.4	0.2	36.5	52.2
Georgia	2019	535	65.2	7.4	10.3	15.8	62.8	3.0	0.6	67.2	63.2
	2023	634	65.6	7.5	10.9	15.8	65.1	0.7	0.0	66.0	65.1
Germany	2019	493	50.3	9.1	14.4	24.2	48.3	4.1	0.0	50.9	49.7
	2023	641	48.2	10.2	17.1	22.9	46.6	3.2	0.0	44.5	51.8
Hong Kong SAR	2019	413	81.7	3.0	6.1	9.2	81.7	0.0	0.0	80.4	82.6
	2023	586	80.3	4.4	6.8	8.4	80.1	0.1	0.1	76.2	84.1
Hungary	2019	653	50.5	10.9	18.0	20.0	49.8	1.3	0.0	49.9	51.0
	2023	739	54.3	12.4	14.1	18.7	53.8	1.0	0.0	52.2	56.4
Italy	2019	531	41.2	12.3	11.9	32.3	39.6	3.8	0.0	36.3	45.7
	2023	633	43.9	9.5	12.6	32.4	42.5	3.0	0.0	39.1	48.2
Korea, Rep. of	2019	557	73.9	4.2	5.9	15.7	73.3	0.8	0.0	72.2	75.7
	2023	617	74.1	2.6	7.2	16.1	74.1	0.0	0.0	69.8	79.4
Lithuania	2019	538	64.3	10.2	8.0	17.0	63.4	1.5	0.0	62.2	66.1
	2023	652	74.6	5.8	7.6	12.0	74.3	0.3	0.0	72.3	76.4
Netherlands	2019	472	49.2	9.0	12.8	27.1	47.4	3.6	0.2	46.1	52.2
	2023	515	44.9	7.1	12.6	33.6	43.5	2.2	1.0	37.8	51.5
Norway (5)	2019	555	46.5	10.2	8.2	33.3	45.1	2.4	0.7	44.6	48.1
	2023	755	51.9	6.3	8.2	31.9	50.2	2.8	0.6	47.6	56.7
Portugal	2019	621	44.6	9.2	11.8	33.4	43.8	1.6	0.1	43.9	45.3
	2023	750	46.7	9.8	11.5	31.6	46.3	0.7	0.1	42.6	50.3
Qatar	2019	704	34.7	16.6	18.8	28.5	33.9	2.0	0.3	32.1	37.3
	2023	916	36.9	13.2	15.1	33.7	36.3	1.2	0.6	35.7	38.1
Singapore	2019	850	79.8	2.1	5.1	13.0	79.6	0.2	0.0	78.2	81.2
	2023	933	76.0	3.6	5.9	14.5	75.9	0.1	0.0	75.0	77.0
Slovak Republic	2019	609	58.3	8.1	10.5	22.0	56.8	2.5	0.0	57.7	58.8
	2023	680	54.2	8.9	13.4	23.1	53.7	0.9	0.0	52.3	56.2
Spain	2019	1364	41.6	9.8	16.3	31.0	40.8	1.7	0.3	35.5	47.1
	2023	1453	39.2	12.5	18.0	28.4	37.9	3.2	0.0	31.5	46.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM4\_03 ME71165: Expression for marbles Linda has left - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	49.8	6.9	9.9	31.3	47.7	3.9	0.3	47.9	51.7
	2023	736	54.9	5.4	9.5	29.0	53.6	2.4	0.1	49.0	60.9
United Arab Emirates	2019	3670	39.8	13.4	15.7	29.9	39.0	1.6	0.3	38.0	41.6
	2023	4940	47.2	10.7	13.6	28.2	46.8	0.6	0.1	43.9	50.2
United States	2019	1272	60.9	5.7	10.2	22.8	60.4	0.8	0.1	54.7	66.7
	2023	1293	59.4	7.4	10.1	22.7	58.8	0.4	0.6	56.2	62.6
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International Avg. (25)	2019	20359	53.8	8.9	11.6	24.3	52.5	2.3	0.3	51.8	55.6
	2023	24622	54.7	8.3	11.8	24.3	53.8	1.5	0.2	51.2	58.1
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Abu Dhabi, UAE	2019	1276	35.0	15.0	21.6	27.0	34.2	1.8	0.4	33.7	35.8
	2023	1772	40.4	14.4	17.8	27.2	40.2	0.2	0.2	38.8	41.9
Dubai, UAE	2019	1048	49.9	8.0	9.8	32.1	49.6	0.5	0.1	49.6	50.1
	2023	1310	57.4	5.6	8.4	28.3	56.9	0.8	0.1	51.6	62.8
Ontario, Canada	2019	545	39.1	9.2	13.5	35.6	37.4	3.4	0.9	38.7	39.5
	2023	607	46.5	8.2	11.0	33.3	45.6	1.5	0.3	44.7	48.7
Quebec, Canada	2019	539	41.9	9.3	20.2	27.6	41.1	1.9	0.0	38.1	45.8
	2023	557	36.4	11.8	18.3	32.4	35.8	1.5	0.1	29.7	43.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM4\_04 ME71049: Rule for number pattern - 6, 10, 14, 18, 22 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	50.9	47.6	49.4	2.3	0.7	47.3	54.8
	2023	1960	55.2	43.8	53.9	2.0	0.3	57.5	52.5
Chile	2019	602	51.4	44.3	46.8	6.5	2.5	55.9	46.2
	2023	654	46.6	49.1	42.7	6.9	1.3	48.5	44.5
Chinese Taipei	2019	530	55.3	43.6	53.9	2.5	0.0	61.3	49.9
	2023	761	70.5	29.0	69.2	1.9	0.0	71.7	69.3
Czech Republic	2019	673	49.6	44.6	43.9	11.5	0.0	54.6	45.0
	2023	974	48.6	44.2	41.9	13.9	0.0	52.8	44.9
Denmark	2019	462	47.1	49.7	44.3	5.3	0.6	51.9	42.8
	2023	736	44.9	52.9	43.1	3.7	0.2	48.4	41.4
England	2019	489	59.3	38.6	56.1	5.0	0.3	64.1	55.1
	2023	574	61.4	36.7	58.4	4.8	0.2	63.6	59.6
Finland	2019	675	56.0	41.4	52.7	5.5	0.4	59.8	52.2
	2023	816	42.9	53.7	40.3	5.8	0.1	48.0	38.0
France	2019	594	49.7	43.6	43.1	12.8	0.6	49.9	49.5
	2023	673	42.2	50.3	36.8	12.7	0.2	44.4	40.0
Georgia	2019	535	54.6	38.8	46.6	13.9	0.6	56.0	53.2
	2023	634	52.4	42.9	47.3	9.7	0.0	57.7	46.5
Germany	2019	493	71.2	27.3	67.4	5.3	0.0	74.0	68.7
	2023	641	70.5	27.7	66.3	6.0	0.0	74.6	66.7
Hong Kong SAR	2019	413	47.3	51.0	45.9	3.1	0.0	49.1	46.0
	2023	586	49.0	48.3	46.5	5.1	0.1	47.9	50.1
Hungary	2019	653	74.0	25.8	73.5	0.7	0.0	75.3	73.0
	2023	739	69.2	30.2	67.8	2.0	0.0	68.5	69.8
Italy	2019	531	64.6	32.9	60.0	7.2	0.0	66.1	63.3
	2023	633	57.1	38.8	51.6	9.5	0.1	57.7	56.6
Korea, Rep. of	2019	557	94.6	5.4	94.4	0.2	0.0	94.6	94.4
	2023	617	91.7	8.2	91.2	0.6	0.0	90.4	93.3
Lithuania	2019	538	45.3	50.6	41.9	7.5	0.0	49.6	41.8
	2023	652	44.4	52.8	42.2	5.0	0.0	47.5	42.0
Netherlands	2019	472	54.4	42.7	50.8	6.3	0.2	58.3	50.8
	2023	515	53.8	44.4	51.6	3.0	1.0	53.4	54.4
Norway (5)	2019	555	51.7	45.5	48.7	4.9	0.9	50.2	52.9
	2023	755	34.2	62.4	32.4	4.3	0.9	33.3	35.1
Portugal	2019	621	38.6	58.2	36.5	5.2	0.1	40.6	36.6
	2023	750	25.6	70.2	24.2	5.6	0.1	25.9	25.4
Qatar	2019	704	34.1	62.3	32.2	5.1	0.4	37.9	30.2
	2023	916	32.1	63.6	30.0	5.8	0.6	30.8	33.3
Singapore	2019	850	69.2	30.5	68.6	0.9	0.0	71.6	66.9
	2023	932	71.6	28.3	71.2	0.5	0.0	72.6	70.5
Slovak Republic	2019	609	54.5	43.1	51.5	5.4	0.0	61.5	48.5
	2023	680	50.0	47.7	47.8	4.5	0.0	49.7	50.3
Spain	2019	1364	49.1	46.9	45.2	7.5	0.4	48.4	49.7
	2023	1453	28.9	64.3	26.1	9.6	0.0	31.8	25.9

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM4\_04 ME71049: Rule for number pattern - 6, 10, 14, 18, 22 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	27.2	68.0	25.4	6.2	0.5	28.3	26.1
	2023	736	51.8	46.2	49.7	3.6	0.5	51.0	52.6
United Arab Emirates	2019	3672	46.4	51.9	44.8	2.9	0.5	48.9	43.9
	2023	4939	42.8	56.1	42.0	1.7	0.1	43.6	42.2
United States	2019	1272	59.5	39.6	58.3	2.0	0.1	60.3	58.9
	2023	1293	57.0	41.6	55.1	2.7	0.7	58.2	55.8
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International Avg. (25)	2019	20361	54.2	43.0	51.3	5.4	0.3	56.6	52.0
	2023	24619	51.8	45.3	49.2	5.2	0.3	53.2	50.4
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Abu Dhabi, UAE	2019	1276	37.4	60.6	36.2	2.7	0.4	42.2	32.9
	2023	1772	33.9	65.0	33.3	1.5	0.2	35.1	32.7
Dubai, UAE	2019	1048	63.9	35.5	62.7	1.8	0.1	65.8	62.0
	2023	1310	56.9	42.8	56.6	0.5	0.1	57.2	56.8
Ontario, Canada	2019	545	52.7	46.1	51.4	1.5	1.0	49.0	56.3
	2023	607	57.7	41.6	56.7	1.4	0.3	61.5	52.9
Quebec, Canada	2019	539	60.4	38.4	58.6	2.8	0.1	55.4	65.9
	2023	557	54.0	44.6	52.3	3.0	0.1	55.2	52.5
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM4\_05 ME71063: Money spent on book, notebook and pencils - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	43.7	53.7	41.6	3.8	1.0	40.9	46.6
	2023	1956	39.4	58.6	38.1	3.0	0.3	38.0	40.8
Chile	2019	602	18.4	72.4	16.3	8.4	3.0	21.5	14.8
	2023	653	18.0	73.8	16.2	8.1	1.9	17.5	18.5
Chinese Taipei	2019	530	79.1	20.7	78.2	1.1	0.0	85.0	73.8
	2023	761	76.1	23.9	75.8	0.3	0.0	72.9	79.2
Czech Republic	2019	673	29.7	66.0	27.9	6.0	0.0	26.9	32.3
	2023	974	27.5	66.0	25.0	8.9	0.0	23.3	31.1
Denmark	2019	462	39.5	57.2	37.2	4.9	0.6	39.3	39.6
	2023	736	34.9	61.9	33.2	4.5	0.4	34.0	35.8
England	2019	489	60.8	38.3	59.4	2.0	0.3	58.6	62.7
	2023	575	52.8	46.2	51.7	1.9	0.2	56.7	49.5
Finland	2019	675	38.7	57.9	36.6	5.1	0.4	38.2	39.3
	2023	815	34.1	62.8	32.4	4.6	0.1	34.8	33.3
France	2019	594	40.8	54.2	37.4	7.7	0.7	34.9	46.2
	2023	662	36.0	58.8	33.1	7.9	0.2	34.9	37.2
Georgia	2019	536	42.1	50.2	36.5	12.6	0.7	39.7	44.3
	2023	634	41.7	53.0	38.0	8.8	0.2	43.0	40.3
Germany	2019	493	58.9	39.1	56.0	4.5	0.5	66.5	51.8
	2023	641	47.2	50.7	45.3	4.0	0.0	45.0	49.3
Hong Kong SAR	2019	413	57.3	42.2	56.5	1.3	0.0	56.4	57.9
	2023	584	69.2	30.3	67.9	1.7	0.1	64.0	73.9
Hungary	2019	653	25.9	70.0	24.5	5.6	0.0	20.2	31.0
	2023	739	21.6	74.9	20.6	4.5	0.0	15.5	27.3
Italy	2019	531	61.5	36.5	58.3	4.6	0.5	64.0	59.2
	2023	631	51.6	46.2	49.3	4.3	0.1	50.9	52.3
Korea, Rep. of	2019	557	68.9	30.9	68.4	0.7	0.0	71.6	66.0
	2023	617	68.3	31.3	67.3	1.5	0.0	65.5	71.6
Lithuania	2019	538	59.3	40.0	58.4	1.5	0.0	60.7	58.2
	2023	649	63.0	36.8	62.8	0.4	0.0	61.7	64.1
Netherlands	2019	472	53.5	43.7	50.2	6.0	0.2	53.7	53.3
	2023	515	47.7	50.1	45.6	3.2	1.0	43.6	51.1
Norway (5)	2019	555	43.0	52.7	39.8	6.7	0.9	37.5	48.1
	2023	752	34.8	61.2	32.6	5.3	0.9	33.2	36.4
Portugal	2019	621	59.7	39.3	58.1	2.3	0.3	59.0	60.3
	2023	749	54.7	44.1	53.3	2.4	0.2	53.1	56.1
Qatar	2019	704	26.6	69.5	25.2	4.6	0.7	24.7	28.6
	2023	915	28.5	69.2	27.6	2.6	0.6	23.4	33.6
Singapore	2019	850	79.6	20.4	79.4	0.2	0.0	78.0	81.0
	2023	933	74.2	25.7	74.1	0.1	0.1	74.1	74.4
Slovak Republic	2019	609	40.4	56.4	38.2	5.4	0.0	36.8	43.4
	2023	679	36.6	61.1	35.3	3.6	0.0	29.1	44.5
Spain	2019	1364	57.0	41.8	55.4	2.4	0.4	56.5	57.4
	2023	1449	46.0	51.5	43.9	4.2	0.5	42.7	49.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_MM4\_05 ME71063: Money spent on book, notebook and pencils - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	25.1	68.4	22.9	8.1	0.6	22.1	27.9
	2023	736	30.0	65.1	27.9	6.4	0.6	24.7	35.3
United Arab Emirates	2019	3675	36.1	61.4	34.7	3.2	0.7	35.5	36.8
	2023	4938	40.5	58.0	39.5	2.3	0.2	36.4	44.3
United States	2019	1272	54.8	44.6	54.0	1.3	0.1	53.7	55.8
	2023	1293	47.1	51.7	46.1	1.4	0.8	45.7	48.5
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International Avg. (25)	2019	20365	48.0	49.1	46.0	4.4	0.5	47.3	48.7
	2023	24586	44.9	52.5	43.3	3.8	0.3	42.5	47.1
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Abu Dhabi, UAE	2019	1277	24.3	72.7	23.4	3.3	0.6	23.9	24.9
	2023	1771	27.5	70.3	26.7	2.7	0.3	24.8	30.1
Dubai, UAE	2019	1048	54.7	44.3	53.4	2.1	0.2	54.5	54.9
	2023	1310	55.6	43.9	54.9	1.1	0.1	50.7	60.2
Ontario, Canada	2019	545	39.9	57.1	37.9	3.7	1.3	35.6	44.0
	2023	607	34.7	63.4	33.6	2.6	0.4	32.1	37.9
Quebec, Canada	2019	539	59.1	39.4	57.1	3.2	0.3	57.4	61.0
	2023	553	53.6	44.8	51.7	3.3	0.1	54.4	52.8
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DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent



Mathematics: Measurement and Geometry / Knowing  
A\_MM4\_06 ME71079: Speed shown on speedometer - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	36.9	4.8	40.8	35.9	15.7	1.5	1.3	36.0	37.9
	2023	1960	39.0	3.9	41.2	38.6	15.3	0.5	0.6	34.9	43.5
Chile	2019	602	29.6	8.3	42.4	27.8	15.4	2.5	3.7	23.9	35.9
	2023	654	32.8	11.3	33.4	31.8	20.7	0.5	2.3	25.8	40.1
Chinese Taipei	2019	530	52.4	0.8	38.1	52.3	8.6	0.2	0.0	45.1	58.9
	2023	761	54.8	2.4	34.9	54.8	7.9	0.0	0.0	49.0	60.4
Czech Republic	2019	673	34.7	2.3	50.6	34.5	12.0	0.7	0.0	31.5	37.8
	2023	973	33.0	1.8	45.4	32.8	19.5	0.5	0.0	26.7	38.8
Denmark	2019	462	52.2	2.8	32.0	50.8	11.7	1.8	0.9	43.6	60.6
	2023	736	46.3	1.0	37.3	45.6	14.6	0.7	0.8	42.6	49.9
England	2019	489	55.4	2.3	32.2	54.4	9.3	1.5	0.3	51.2	59.0
	2023	575	55.6	4.1	30.0	55.2	9.9	0.4	0.3	51.3	59.8
Finland	2019	675	40.7	1.3	43.8	39.8	13.0	1.6	0.4	34.9	46.4
	2023	816	42.5	1.3	40.2	42.3	15.6	0.5	0.1	35.0	49.6
France	2019	594	29.8	5.1	50.1	29.3	13.9	0.7	0.9	27.2	32.2
	2023	673	35.7	5.6	43.0	35.3	15.1	0.6	0.4	28.4	43.8
Georgia	2019	536	26.0	7.5	35.8	25.2	28.5	2.2	0.8	19.3	32.3
	2023	634	32.0	8.0	38.4	31.4	20.2	1.6	0.4	30.1	34.2
Germany	2019	493	41.6	1.5	40.8	40.6	14.7	1.8	0.6	36.7	46.1
	2023	641	37.8	2.0	40.7	37.7	19.2	0.2	0.2	32.9	42.6
Hong Kong SAR	2019	413	71.1	0.6	22.4	71.1	5.9	0.0	0.0	64.1	76.4
	2023	586	64.2	1.8	25.3	64.0	8.6	0.1	0.1	58.1	69.8
Hungary	2019	653	39.2	3.6	40.7	39.1	16.3	0.3	0.0	34.4	43.6
	2023	739	39.1	3.5	37.8	39.1	19.5	0.1	0.0	35.8	42.4
Italy	2019	531	30.8	4.5	46.9	30.1	16.1	1.4	0.9	29.1	32.5
	2023	633	33.9	4.5	43.5	33.7	17.6	0.6	0.3	26.9	40.3
Korea, Rep. of	2019	557	67.4	0.8	28.1	67.3	3.7	0.2	0.0	66.1	68.8
	2023	617	61.9	0.7	32.0	61.8	5.4	0.1	0.0	57.9	66.7
Lithuania	2019	538	43.6	1.7	41.4	43.2	12.7	0.9	0.1	34.7	51.1
	2023	652	47.3	1.4	41.4	47.2	9.8	0.2	0.0	37.7	55.1
Netherlands	2019	472	63.0	0.2	28.3	61.8	7.8	1.2	0.7	53.0	72.0
	2023	515	54.7	1.8	30.1	53.8	12.7	0.6	1.0	46.2	61.8
Norway (5)	2019	555	52.5	2.0	35.7	51.2	8.6	1.6	0.9	46.1	58.2
	2023	755	48.2	2.4	33.6	47.6	15.1	0.1	1.1	43.3	53.7
Portugal	2019	621	36.2	2.4	45.1	35.8	15.5	0.6	0.5	31.4	41.0
	2023	750	38.5	5.1	39.0	38.2	16.8	0.4	0.4	33.5	43.1
Qatar	2019	704	28.6	8.5	41.6	27.6	18.6	2.4	1.3	24.6	32.7
	2023	916	29.9	10.8	39.4	29.3	18.5	1.4	0.6	26.0	33.5
Singapore	2019	850	70.7	0.8	24.4	70.2	3.9	0.7	0.0	67.1	74.2
	2023	933	69.7	1.4	22.9	69.5	5.9	0.2	0.1	66.5	73.0
Slovak Republic	2019	609	36.4	4.0	41.4	35.9	17.4	1.3	0.0	31.1	41.0
	2023	680	34.6	5.3	42.3	34.4	17.6	0.3	0.1	30.3	39.0
Spain	2019	1364	39.4	2.6	45.1	38.8	11.9	1.3	0.4	31.1	47.0
	2023	1453	37.0	5.0	39.0	36.5	18.2	0.8	0.5	37.1	36.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing  
A\_MM4\_06 ME71079: Speed shown on speedometer - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	41.6	2.8	39.1	40.7	15.1	1.5	0.8	36.2	47.2
	2023	736	54.4	1.6	29.5	53.6	13.8	0.5	1.0	52.1	56.8
United Arab Emirates	2019	3673	35.2	8.9	38.9	34.4	15.5	1.3	0.9	33.0	37.7
	2023	4940	40.7	7.2	35.7	40.4	15.9	0.4	0.4	35.5	45.5
United States	2019	1272	39.1	4.9	44.4	38.1	10.1	2.4	0.2	32.9	44.9
	2023	1293	39.7	3.3	42.7	39.0	13.3	0.5	1.0	35.8	43.6
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International Avg. (25)	2019	20363	43.8	3.4	38.8	43.0	12.9	1.3	0.6	38.6	48.6
	2023	24621	44.1	3.9	36.7	43.7	14.7	0.5	0.5	39.2	49.0
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Abu Dhabi, UAE	2019	1275	31.9	10.8	38.5	31.0	16.8	2.0	0.9	31.3	33.1
	2023	1772	34.7	9.3	35.9	34.4	19.6	0.3	0.5	29.5	39.6
Dubai, UAE	2019	1048	46.1	5.3	35.9	45.4	11.8	0.9	0.7	43.4	48.7
	2023	1310	52.7	3.8	32.4	52.4	10.8	0.2	0.3	46.5	58.5
Ontario, Canada	2019	545	34.1	4.6	44.3	32.9	14.7	1.9	1.6	32.1	35.8
	2023	607	38.5	4.0	41.8	38.1	15.1	0.4	0.6	33.9	43.8
Quebec, Canada	2019	539	43.2	3.4	36.9	42.8	16.0	0.4	0.4	42.8	43.5
	2023	557	37.0	3.4	42.9	36.5	15.9	0.6	0.6	34.3	40.0
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing

A\_MM4\_07 ME71081: Hours to travel from Town A to Town B - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	44.7	52.6	42.5	3.5	1.4	36.6	52.9
	2023	1958	46.8	51.4	45.1	2.8	0.8	38.8	55.4
Chile	2019	602	26.2	65.3	23.2	7.0	4.5	22.6	30.1
	2023	654	28.1	64.8	25.2	7.5	2.5	21.3	34.9
Chinese Taipei	2019	530	81.1	18.7	80.4	0.9	0.0	80.7	81.5
	2023	761	83.0	16.9	82.5	0.6	0.0	83.4	82.7
Czech Republic	2019	673	57.1	40.8	54.3	4.8	0.0	49.3	64.3
	2023	974	59.8	38.3	56.9	4.8	0.0	49.3	69.2
Denmark	2019	462	62.4	35.0	58.2	5.4	1.4	57.4	67.0
	2023	736	60.0	37.8	56.7	4.4	1.2	47.1	72.6
England	2019	489	60.9	37.6	58.5	3.6	0.3	56.4	64.9
	2023	575	55.0	43.2	52.9	3.4	0.5	45.3	63.9
Finland	2019	675	57.3	40.3	54.2	4.1	1.4	50.2	64.4
	2023	816	60.2	38.1	57.6	4.1	0.1	53.8	66.1
France	2019	594	35.7	55.7	31.0	12.3	1.0	22.2	47.2
	2023	666	42.1	53.5	38.9	7.2	0.4	32.8	52.2
Georgia	2019	536	57.5	37.5	50.7	11.0	0.8	50.0	64.4
	2023	634	63.1	34.1	58.2	6.8	1.0	59.3	67.4
Germany	2019	493	63.6	34.2	59.8	5.5	0.6	61.0	65.9
	2023	641	63.6	34.6	60.6	4.6	0.2	56.2	70.5
Hong Kong SAR	2019	413	78.4	21.5	78.1	0.4	0.0	72.4	83.0
	2023	586	75.0	24.7	74.1	1.0	0.1	71.3	78.4
Hungary	2019	653	53.7	45.5	52.7	1.8	0.0	43.2	63.2
	2023	738	53.6	45.4	52.4	2.2	0.0	44.4	62.3
Italy	2019	531	50.4	45.5	46.3	7.0	1.2	44.1	56.1
	2023	633	56.8	40.1	52.8	6.9	0.3	47.8	64.5
Korea, Rep. of	2019	557	78.0	21.6	76.5	1.9	0.0	73.8	81.8
	2023	617	82.3	17.5	81.2	1.2	0.0	77.1	88.4
Lithuania	2019	538	74.2	25.0	71.8	3.1	0.1	70.4	77.4
	2023	652	77.5	22.0	75.8	2.3	0.0	71.9	82.0
Netherlands	2019	472	66.2	32.4	63.3	3.6	0.7	58.8	72.8
	2023	515	71.7	27.4	69.4	1.6	1.6	61.4	82.2
Norway (5)	2019	555	59.5	37.8	55.7	5.6	0.9	52.0	66.6
	2023	754	59.7	37.8	55.9	5.2	1.1	54.0	65.8
Portugal	2019	621	48.9	48.6	46.4	4.3	0.6	44.4	53.2
	2023	750	47.6	49.1	44.6	5.9	0.4	35.9	57.6
Qatar	2019	704	30.8	64.6	28.8	4.5	2.2	25.5	36.3
	2023	916	39.5	57.2	37.3	4.7	0.7	30.1	48.3
Singapore	2019	850	81.6	18.3	81.2	0.5	0.0	79.6	83.4
	2023	933	77.3	22.6	77.1	0.2	0.1	73.8	80.9
Slovak Republic	2019	609	51.9	45.7	49.4	4.9	0.0	45.1	57.7
	2023	680	53.7	44.0	50.9	4.9	0.1	45.3	61.9
Spain	2019	1364	47.9	48.1	44.1	7.1	0.7	39.8	54.8
	2023	1453	43.4	51.2	39.3	8.9	0.6	32.1	53.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing

A\_MM4\_07 ME71081: Hours to travel from Town A to Town B - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	53.1	43.2	48.9	6.9	1.0	43.3	62.4
	2023	736	60.1	37.4	56.4	5.1	1.1	53.8	66.4
United Arab Emirates	2019	3671	42.0	55.2	40.0	3.8	1.1	38.6	45.5
	2023	4940	50.9	47.8	49.6	2.2	0.5	45.1	56.3
United States	2019	1272	51.0	48.0	50.0	1.4	0.6	43.3	58.1
	2023	1293	50.0	48.2	48.2	2.4	1.1	43.5	56.6
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International Avg. (25)	2019	20361	56.6	40.7	53.8	4.6	0.8	50.4	62.2
	2023	24611	58.4	39.4	56.0	4.0	0.6	51.0	65.6
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Abu Dhabi, UAE	2019	1275	32.4	64.2	30.7	3.9	1.1	28.4	36.6
	2023	1772	40.3	58.1	39.3	2.1	0.6	32.6	47.6
Dubai, UAE	2019	1048	58.4	40.0	56.2	3.0	0.8	56.1	60.7
	2023	1310	64.2	35.2	63.1	1.3	0.4	59.1	69.0
Ontario, Canada	2019	545	46.6	50.7	44.2	3.6	1.6	36.7	55.7
	2023	607	49.6	49.3	48.5	1.6	0.6	41.6	59.2
Quebec, Canada	2019	539	44.9	53.1	43.3	3.1	0.5	39.5	50.6
	2023	557	44.9	51.9	42.3	4.8	1.0	36.4	53.5
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM4\_08 ME71094: Area of rectangle on grid - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	55.8	18.1	53.8	19.4	5.2	1.6	1.8	56.4	55.1
	2023	1960	52.4	22.6	51.2	18.5	5.4	1.5	0.8	53.2	51.9
Chile	2019	602	37.6	26.0	33.7	23.2	6.8	4.2	6.0	33.4	42.1
	2023	654	35.8	23.6	33.4	28.1	8.3	3.7	2.9	33.9	37.7
Chinese Taipei	2019	530	73.9	10.1	73.5	11.4	4.5	0.5	0.0	74.7	73.1
	2023	761	79.9	8.3	79.8	9.2	2.6	0.2	0.0	80.2	79.6
Czech Republic	2019	673	50.9	18.1	49.3	25.0	4.4	2.9	0.1	51.9	50.0
	2023	974	50.6	19.8	48.7	20.7	7.2	3.6	0.0	48.2	52.8
Denmark	2019	462	78.3	9.4	72.9	8.0	2.8	3.8	3.0	81.7	75.3
	2023	736	68.8	12.8	65.2	13.5	3.2	3.5	1.8	70.2	67.5
England	2019	489	55.1	21.9	53.8	17.1	4.9	2.0	0.3	53.2	56.7
	2023	575	54.9	19.6	53.8	20.8	3.8	1.0	1.2	55.3	54.9
Finland	2019	675	58.0	19.4	55.5	16.7	4.2	2.8	1.5	61.1	54.8
	2023	816	56.5	21.3	54.7	15.8	4.9	2.9	0.2	59.0	54.2
France	2019	594	50.2	23.4	46.7	18.4	4.5	5.3	1.7	46.7	53.3
	2023	673	46.6	23.3	44.2	19.0	8.3	4.4	0.9	48.8	44.3
Georgia	2019	536	44.0	24.7	38.9	18.9	5.8	9.4	2.4	44.1	43.9
	2023	634	46.4	20.1	43.2	21.3	8.4	6.0	1.0	43.2	50.0
Germany	2019	493	55.5	25.8	52.8	12.7	3.7	3.8	1.2	56.7	54.5
	2023	641	53.8	23.9	52.2	16.8	4.0	3.0	0.2	53.8	53.9
Hong Kong SAR	2019	413	74.4	7.7	74.2	15.5	2.4	0.2	0.0	76.1	73.1
	2023	586	63.4	10.1	63.0	24.0	2.4	0.3	0.4	64.5	62.3
Hungary	2019	653	55.4	19.5	55.2	19.5	5.5	0.2	0.0	53.1	57.4
	2023	739	48.6	22.2	47.9	20.3	8.1	1.6	0.0	47.5	49.8
Italy	2019	531	47.7	14.7	44.7	29.3	5.0	4.7	1.5	46.5	48.7
	2023	633	49.2	18.8	46.9	23.7	5.9	4.2	0.5	42.2	55.5
Korea, Rep. of	2019	557	61.0	21.1	59.6	13.8	3.3	2.2	0.0	60.0	61.5
	2023	617	56.7	20.3	55.3	19.0	2.9	2.3	0.2	57.5	55.8
Lithuania	2019	538	57.9	22.5	56.8	13.0	5.7	1.9	0.1	59.1	57.0
	2023	652	59.3	15.0	58.1	16.1	8.8	2.0	0.0	61.6	57.4
Netherlands	2019	472	66.8	10.3	64.2	15.8	5.8	2.5	1.3	64.2	69.0
	2023	515	60.2	13.9	58.5	17.5	7.3	1.2	1.6	63.7	56.6
Norway (5)	2019	555	74.0	11.8	70.4	10.9	2.0	2.8	2.1	75.8	72.3
	2023	755	60.7	15.4	57.8	19.1	2.9	3.1	1.7	61.8	59.5
Portugal	2019	621	61.8	14.0	60.9	19.2	4.4	0.5	0.9	63.5	60.2
	2023	750	53.2	18.1	52.1	19.2	8.6	1.2	0.8	52.3	54.0
Qatar	2019	704	39.4	25.7	37.0	24.1	7.2	2.3	3.7	41.4	37.3
	2023	916	41.5	27.6	40.2	22.0	7.0	2.1	1.1	41.5	41.5
Singapore	2019	850	67.6	16.7	67.2	11.3	4.2	0.6	0.0	66.1	69.1
	2023	933	70.1	14.4	69.8	10.6	4.8	0.3	0.1	69.9	70.3
Slovak Republic	2019	609	42.1	21.5	40.7	28.0	6.5	3.3	0.0	38.8	45.1
	2023	680	42.4	22.1	40.6	24.9	8.1	4.1	0.1	40.3	44.5
Spain	2019	1364	46.1	26.4	44.2	19.7	5.6	3.2	0.8	46.0	46.2
	2023	1453	45.8	24.2	42.5	18.4	7.9	6.2	1.0	43.8	47.7

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_MM4\_08 ME71094: Area of rectangle on grid - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	56.7	19.4	53.0	16.5	4.5	5.3	1.3	57.2	56.2
	2023	736	59.6	15.1	55.8	15.0	7.7	5.0	1.4	59.1	60.1
United Arab Emirates	2019	3668	46.7	23.7	45.2	21.8	6.0	1.7	1.5	45.6	47.8
	2023	4940	51.6	23.0	50.7	18.3	6.3	1.0	0.7	51.9	51.3
United States	2019	1272	42.9	24.0	42.2	25.2	7.0	0.7	0.9	42.3	43.4
	2023	1293	42.9	24.9	41.8	21.8	8.8	1.5	1.3	42.2	43.7
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International Avg. (25)	2019	20358	56.0	19.0	53.9	18.2	4.9	2.7	1.3	55.8	56.1
	2023	24622	54.0	19.2	52.3	18.9	6.1	2.6	0.8	53.8	54.3
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Abu Dhabi, UAE	2019	1274	38.7	27.9	37.4	24.0	7.3	1.8	1.6	38.2	38.7
	2023	1772	42.4	29.9	41.8	19.2	7.8	0.6	0.7	43.6	41.2
Dubai, UAE	2019	1048	58.4	17.2	57.2	19.1	4.5	0.8	1.1	60.0	56.8
	2023	1310	62.4	16.2	61.5	16.6	4.2	0.9	0.5	62.1	62.8
Ontario, Canada	2019	545	52.6	18.8	50.9	20.3	6.8	0.9	2.2	56.1	49.2
	2023	607	47.1	26.3	46.2	19.7	5.9	1.2	0.6	48.4	45.7
Quebec, Canada	2019	539	72.1	9.9	70.6	15.4	2.0	1.6	0.6	71.5	72.9
	2023	557	67.2	12.2	65.8	14.3	5.6	0.9	1.2	63.8	70.7
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning

A\_MM4\_09 ME71177: Complete the shape given 3 conditions - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	47.8	50.4	46.2	1.4	2.1	47.0	48.7
	2023	1960	40.5	58.1	39.5	1.5	0.9	41.2	39.9
Chile	2019	602	36.6	57.1	32.9	3.0	6.9	36.0	37.2
	2023	654	22.9	71.4	21.2	4.4	3.0	22.6	23.2
Chinese Taipei	2019	530	64.8	35.2	64.8	0.0	0.0	66.6	63.3
	2023	758	53.7	46.2	53.6	0.2	0.0	52.2	55.2
Czech Republic	2019	673	53.4	45.1	51.7	2.8	0.3	55.2	51.7
	2023	974	45.3	52.6	43.5	3.9	0.0	44.1	46.4
Denmark	2019	462	56.7	40.5	53.1	2.6	3.8	63.5	50.4
	2023	736	41.7	55.2	39.4	2.5	2.8	41.7	41.7
England	2019	489	56.4	43.3	55.9	0.5	0.3	60.7	52.6
	2023	574	43.6	55.3	42.8	0.8	1.2	47.3	40.5
Finland	2019	675	41.5	55.9	39.6	3.1	1.5	43.7	39.2
	2023	816	36.5	60.9	35.1	3.9	0.2	39.7	33.5
France	2019	594	43.6	53.6	41.5	3.2	1.7	45.0	42.3
	2023	673	38.7	58.2	36.8	3.8	1.2	40.3	37.0
Georgia	2019	535	48.6	45.3	42.9	7.4	4.5	49.0	48.2
	2023	634	40.9	55.4	38.3	5.2	1.0	42.4	39.3
Germany	2019	493	50.0	48.3	48.2	1.6	1.9	56.6	44.0
	2023	641	42.3	55.8	40.9	3.1	0.2	46.5	38.2
Hong Kong SAR	2019	413	77.2	22.8	77.2	0.0	0.0	76.2	77.9
	2023	586	57.9	41.5	57.2	0.9	0.4	59.2	56.8
Hungary	2019	653	44.0	55.3	43.3	1.4	0.0	40.3	47.3
	2023	739	35.7	64.0	35.5	0.6	0.0	37.9	33.4
Italy	2019	531	45.2	52.6	43.4	2.0	1.9	44.1	46.2
	2023	633	46.1	53.0	45.3	1.2	0.5	45.0	47.1
Korea, Rep. of	2019	557	68.6	31.2	68.3	0.5	0.0	68.7	69.2
	2023	617	57.0	42.7	56.7	0.5	0.2	58.0	55.8
Lithuania	2019	538	40.7	57.6	39.5	2.8	0.1	42.8	38.9
	2023	652	40.7	58.4	40.0	1.6	0.0	38.0	42.9
Netherlands	2019	472	41.0	57.3	39.8	1.4	1.5	37.5	44.2
	2023	515	32.4	63.5	30.5	4.4	1.6	27.7	36.1
Norway (5)	2019	555	54.5	43.6	52.1	2.1	2.1	59.5	49.8
	2023	755	37.5	58.4	35.1	4.2	2.3	37.3	37.7
Portugal	2019	621	51.2	47.7	50.0	1.2	1.1	54.3	48.1
	2023	749	39.3	59.1	38.3	1.7	0.9	42.5	36.3
Qatar	2019	704	27.8	67.6	26.0	2.7	3.7	30.6	24.9
	2023	916	28.8	68.7	27.8	2.1	1.4	28.3	29.2
Singapore	2019	850	60.9	39.0	60.9	0.1	0.0	63.1	58.9
	2023	933	57.3	42.5	57.0	0.4	0.1	55.9	58.7
Slovak Republic	2019	609	47.4	50.8	45.8	3.1	0.4	45.3	49.3
	2023	680	42.8	55.3	41.3	2.9	0.5	39.5	46.2
Spain	2019	1364	44.5	54.4	43.6	0.9	1.1	46.3	42.9
	2023	1453	36.0	62.3	35.0	1.2	1.4	36.3	35.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning

A\_MM4\_09 ME71177: Complete the shape given 3 conditions - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	46.5	50.7	44.0	3.7	1.6	48.4	44.5
	2023	736	41.6	54.8	39.0	4.3	1.9	46.7	36.2
United Arab Emirates	2019	3672	40.6	57.0	39.1	1.9	2.0	42.2	39.2
	2023	4939	35.0	63.6	34.3	1.4	0.8	34.3	35.6
United States	2019	1272	48.3	50.6	47.3	1.0	1.1	46.0	50.5
	2023	1293	37.5	60.7	36.4	1.3	1.6	36.6	38.3
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International Avg. (25)	2019	20361	49.5	48.5	47.9	2.0	1.6	50.8	48.4
	2023	24616	41.3	56.7	40.0	2.3	1.0	41.7	40.8
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Abu Dhabi, UAE	2019	1277	31.7	65.1	30.3	2.5	2.1	33.5	30.2
	2023	1772	26.9	71.4	26.3	1.4	0.8	27.0	26.8
Dubai, UAE	2019	1048	49.7	49.3	48.8	0.4	1.5	52.8	46.8
	2023	1309	43.3	56.1	42.8	0.6	0.5	42.4	44.2
Ontario, Canada	2019	545	54.0	44.5	52.2	1.0	2.3	52.5	55.5
	2023	607	41.9	56.7	40.9	1.8	0.7	41.3	42.8
Quebec, Canada	2019	539	47.5	51.4	46.4	1.6	0.6	48.8	46.0
	2023	557	42.7	55.9	41.7	1.1	1.4	43.5	42.0
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Data / Knowing

A\_MM4\_10 ME71206: Type of Coin with most total value - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	64.5	8.5	8.7	61.7	16.8	2.0	2.3	63.2	65.8
	2023	1960	67.2	8.1	8.5	65.7	15.5	1.5	0.9	66.9	67.6
Chile	2019	602	56.1	14.4	8.3	49.7	16.1	3.8	7.7	54.4	58.0
	2023	654	64.9	11.3	7.4	61.9	14.8	1.6	3.0	66.6	63.1
Chinese Taipei	2019	530	74.5	8.1	6.8	74.5	10.7	0.0	0.0	75.2	73.8
	2023	761	76.2	8.5	9.2	76.1	6.1	0.2	0.0	75.5	76.9
Czech Republic	2019	673	68.0	8.0	4.8	64.9	17.8	4.2	0.3	69.6	66.5
	2023	974	64.8	7.2	10.3	63.1	16.7	2.5	0.2	64.6	65.1
Denmark	2019	462	72.2	7.4	6.3	66.4	11.8	3.9	4.2	69.2	74.9
	2023	736	67.8	11.9	6.2	63.9	12.3	2.5	3.3	64.4	71.1
England	2019	489	73.5	7.4	6.1	72.6	12.7	0.9	0.3	72.4	74.4
	2023	574	79.1	6.4	5.4	77.3	8.5	1.1	1.2	79.6	79.2
Finland	2019	675	70.9	6.5	8.6	67.7	12.6	2.9	1.6	70.7	71.1
	2023	816	67.6	4.3	11.7	65.4	15.4	3.0	0.2	69.8	65.4
France	2019	594	64.9	10.0	4.5	62.1	19.1	2.4	1.9	58.5	70.7
	2023	673	61.1	8.4	9.1	58.9	20.0	2.3	1.2	61.8	60.3
Georgia	2019	536	62.9	11.7	11.3	56.9	10.6	4.6	4.9	63.6	62.2
	2023	634	66.6	10.5	9.9	63.6	11.5	3.3	1.2	66.4	66.9
Germany	2019	493	68.9	6.6	6.9	65.5	16.0	2.8	2.1	70.5	67.4
	2023	641	65.5	7.0	7.2	64.1	19.7	1.6	0.4	63.1	67.8
Hong Kong SAR	2019	413	75.7	6.2	8.0	75.5	10.1	0.2	0.0	72.1	78.4
	2023	586	77.1	6.5	8.1	76.6	8.2	0.3	0.4	74.9	79.1
Hungary	2019	653	63.9	15.9	6.9	63.3	12.9	0.3	0.5	64.0	63.8
	2023	739	68.9	11.0	7.8	68.4	12.1	0.7	0.1	70.0	67.8
Italy	2019	531	65.3	9.7	6.3	61.5	16.6	4.0	1.9	62.4	68.1
	2023	633	67.7	8.1	6.1	67.0	17.8	0.6	0.5	67.9	67.5
Korea, Rep. of	2019	557	88.1	3.4	2.6	87.9	5.9	0.2	0.0	88.7	87.9
	2023	617	87.5	3.6	3.5	87.4	5.4	0.0	0.2	84.6	91.0
Lithuania	2019	538	71.7	8.5	6.9	70.7	12.5	1.0	0.3	70.9	72.3
	2023	652	70.0	14.2	8.3	69.8	7.5	0.3	0.0	69.5	70.4
Netherlands	2019	472	78.5	7.6	6.4	75.9	6.8	1.9	1.5	75.4	81.3
	2023	515	77.0	6.8	8.9	74.5	6.7	1.7	1.6	74.5	80.9
Norway (5)	2019	555	75.9	4.9	6.3	71.6	11.6	3.1	2.5	77.1	75.1
	2023	755	71.5	7.0	9.4	68.3	10.8	2.1	2.4	73.1	69.8
Portugal	2019	621	50.5	19.7	4.7	48.6	23.4	2.4	1.2	50.2	50.8
	2023	750	56.7	12.9	5.0	55.7	24.6	0.9	1.0	52.9	60.2
Qatar	2019	704	51.6	13.2	7.7	48.3	24.4	2.2	4.3	52.9	50.3
	2023	916	56.6	13.1	10.1	54.9	18.9	1.6	1.5	57.4	55.8
Singapore	2019	850	81.0	5.3	4.4	80.7	9.2	0.3	0.0	79.5	82.5
	2023	933	78.5	3.6	5.3	78.3	12.6	0.2	0.1	76.5	80.5
Slovak Republic	2019	609	67.4	7.9	10.1	64.5	13.2	3.7	0.6	70.8	64.5
	2023	680	65.4	11.3	7.8	64.6	15.0	0.7	0.5	64.1	66.8
Spain	2019	1364	68.2	8.6	5.7	66.5	16.6	1.0	1.6	66.8	69.5
	2023	1453	68.3	10.2	7.9	66.1	12.5	1.6	1.6	66.7	70.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing

A\_MM4\_10 ME71206: Type of Coin with most total value - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	70.5	8.5	5.7	65.4	13.1	4.7	2.5	69.5	71.6
	2023	736	73.8	6.5	7.5	70.7	11.1	2.1	2.1	76.5	70.9
United Arab Emirates	2019	3672	55.9	14.2	7.7	53.5	20.3	2.1	2.3	54.9	56.8
	2023	4940	59.1	11.2	9.1	58.1	19.9	0.8	0.9	58.5	59.7
United States	2019	1272	72.7	8.5	6.0	70.4	12.0	1.9	1.2	72.4	72.9
	2023	1293	73.4	6.5	6.7	71.3	12.6	1.1	1.7	72.7	74.1
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International Avg. (25)	2019	20362	68.5	9.2	6.7	65.8	14.1	2.3	1.8	67.8	69.2
	2023	24621	69.3	8.6	7.8	67.7	13.4	1.4	1.0	68.7	69.9
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Abu Dhabi, UAE	2019	1275	49.5	17.3	8.3	47.2	22.4	2.5	2.3	48.4	50.2
	2023	1772	53.4	13.4	10.5	52.5	21.8	0.8	1.0	53.2	53.6
Dubai, UAE	2019	1048	69.4	11.4	6.2	67.4	12.2	1.2	1.6	68.1	70.6
	2023	1310	70.1	8.3	7.1	69.2	14.2	0.6	0.6	67.6	72.5
Ontario, Canada	2019	545	61.6	9.9	10.7	59.3	16.4	1.2	2.4	60.3	62.8
	2023	607	69.2	6.9	7.7	67.7	15.6	1.4	0.7	70.0	68.3
Quebec, Canada	2019	539	72.2	5.3	7.1	69.3	14.3	3.1	0.8	70.2	74.3
	2023	557	62.7	10.2	9.8	61.0	16.3	1.3	1.4	59.4	66.0
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MM4\_11A ME71138A: Students at school - statements about graph (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	49.0	48.4	46.5	2.0	3.1	44.8	53.4
	2023	1960	52.0	46.6	50.5	1.4	1.5	46.0	58.4
Chile	2019	602	36.3	54.5	31.0	5.1	9.4	31.4	41.7
	2023	654	40.4	56.3	38.1	1.8	3.7	35.4	45.5
Chinese Taipei	2019	530	68.0	31.8	67.6	0.6	0.0	66.4	69.4
	2023	761	74.0	26.0	74.0	0.0	0.0	72.1	75.9
Czech Republic	2019	673	50.3	47.2	47.9	3.5	1.5	45.9	54.6
	2023	974	50.6	47.5	48.5	3.7	0.3	42.2	58.3
Denmark	2019	462	63.2	34.1	58.5	1.7	5.6	60.9	65.2
	2023	736	61.9	35.7	58.0	1.8	4.6	54.0	69.6
England	2019	489	64.7	34.1	62.5	3.1	0.3	60.9	68.0
	2023	575	60.6	38.1	58.5	1.8	1.5	55.4	66.1
Finland	2019	675	59.2	38.9	56.4	3.1	1.7	55.7	62.7
	2023	816	55.3	43.6	53.8	1.8	0.8	53.3	57.1
France	2019	594	52.5	42.9	47.5	7.4	2.2	45.8	58.4
	2023	673	46.0	51.7	44.0	2.4	1.9	40.3	52.2
Georgia	2019	537	30.6	56.9	25.1	12.3	5.7	24.6	36.3
	2023	634	35.1	58.2	31.5	8.5	1.7	33.2	37.3
Germany	2019	493	58.8	37.5	53.5	5.6	3.3	58.9	58.7
	2023	641	52.8	45.1	50.5	3.5	0.9	48.6	56.9
Hong Kong SAR	2019	413	70.0	29.6	68.9	1.5	0.0	68.5	71.1
	2023	586	62.6	37.0	61.8	0.9	0.4	58.2	66.6
Hungary	2019	653	49.7	48.8	48.1	2.5	0.5	44.0	54.7
	2023	739	51.2	48.4	50.8	0.7	0.1	48.4	53.9
Italy	2019	531	48.8	48.1	45.8	2.9	3.3	44.1	53.0
	2023	633	57.9	41.3	56.7	1.3	0.8	49.8	65.2
Korea, Rep. of	2019	557	75.7	24.2	75.4	0.4	0.0	75.6	76.6
	2023	617	78.8	21.1	78.6	0.2	0.2	77.2	80.8
Lithuania	2019	538	55.5	43.9	54.6	1.1	0.4	52.8	57.7
	2023	652	65.8	33.8	65.0	0.9	0.2	62.0	68.8
Netherlands	2019	472	59.3	38.9	56.8	2.5	1.9	56.9	61.5
	2023	515	58.9	39.8	57.0	1.1	2.1	51.7	65.8
Norway (5)	2019	555	50.1	46.3	46.4	4.2	3.2	44.4	55.2
	2023	755	47.2	49.9	44.6	2.1	3.4	41.0	54.1
Portugal	2019	621	55.4	42.7	53.2	2.1	2.0	53.4	57.5
	2023	750	56.9	42.1	55.6	0.9	1.4	51.9	61.2
Qatar	2019	704	33.4	61.2	30.7	2.9	5.3	31.9	34.8
	2023	916	43.9	54.4	42.6	1.2	1.8	37.3	50.3
Singapore	2019	850	74.0	25.9	73.6	0.4	0.1	75.2	72.8
	2023	933	73.7	26.2	73.6	0.1	0.1	69.3	78.3
Slovak Republic	2019	609	46.9	51.1	45.1	3.0	0.9	44.5	49.0
	2023	680	50.5	48.4	49.4	1.7	0.5	44.2	57.0
Spain	2019	1364	57.4	41.0	55.1	1.8	2.2	50.9	63.1
	2023	1453	51.8	46.4	49.7	1.9	2.0	44.2	59.2

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MM4\_11A ME71138A: Students at school - statements about graph (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	55.7	40.8	51.3	3.6	4.3	53.5	57.8
	2023	736	56.5	41.7	54.1	1.5	2.7	54.2	58.8
United Arab Emirates	2019	3668	41.5	55.4	39.3	2.3	2.9	41.0	42.0
	2023	4940	47.3	51.6	46.3	0.7	1.4	43.8	50.6
United States	2019	1272	56.1	41.9	53.5	2.6	2.0	50.6	61.2
	2023	1293	53.7	44.8	52.0	0.6	2.6	47.2	60.3
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International Avg. (25)	2019	20359	54.5	42.6	51.8	3.1	2.5	51.3	57.5
	2023	24622	55.4	43.0	53.8	1.7	1.5	50.5	60.3
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Abu Dhabi, UAE	2019	1273	32.9	62.9	30.9	3.3	2.9	34.5	31.2
	2023	1772	38.9	60.0	38.1	0.5	1.5	36.6	41.0
Dubai, UAE	2019	1048	55.2	43.5	53.5	0.8	2.1	53.5	56.8
	2023	1310	61.1	38.4	60.2	0.5	0.9	54.7	66.9
Ontario, Canada	2019	545	49.9	48.0	47.7	1.5	2.9	44.7	54.8
	2023	607	48.7	49.6	47.2	1.6	1.7	42.3	56.6
Quebec, Canada	2019	539	54.0	44.4	52.0	1.2	2.4	50.7	57.5
	2023	557	58.9	39.9	57.2	1.4	1.5	53.9	64.0
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MM4\_11B ME71138B: Students at school - Arne's statement - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	23.3	65.4	19.8	11.0	3.7	20.3	26.3
	2023	1960	21.9	63.6	17.9	16.1	2.5	18.9	25.4
Chile	2019	602	11.8	60.9	8.2	19.5	11.5	9.7	14.3
	2023	654	16.0	59.3	11.3	24.7	4.8	11.3	21.4
Chinese Taipei	2019	530	40.4	58.3	39.5	2.2	0.0	34.6	45.5
	2023	760	38.6	59.6	37.4	3.0	0.0	37.2	40.0
Czech Republic	2019	673	26.0	68.1	23.9	5.4	2.6	22.6	29.2
	2023	974	20.6	68.1	17.7	13.3	0.9	17.9	23.0
Denmark	2019	462	27.9	60.3	23.3	9.3	7.1	23.8	31.8
	2023	736	24.6	57.5	18.8	18.0	5.7	22.6	26.6
England	2019	489	39.5	58.7	38.4	2.2	0.6	32.7	45.4
	2023	575	43.0	46.3	34.9	17.1	1.7	35.2	50.4
Finland	2019	675	18.9	71.0	16.6	10.3	2.2	16.6	21.4
	2023	816	19.0	71.3	16.7	11.0	1.0	16.3	21.7
France	2019	594	12.9	78.4	11.6	5.9	4.1	8.4	16.8
	2023	673	10.3	61.8	7.1	28.1	3.0	5.3	16.8
Georgia	2019	537	21.6	56.2	15.5	21.6	6.7	17.4	25.9
	2023	634	21.6	56.4	15.5	24.5	3.5	19.7	23.9
Germany	2019	493	24.7	58.8	19.3	17.0	4.9	20.8	28.4
	2023	641	22.6	68.0	19.9	9.6	2.6	18.3	26.9
Hong Kong SAR	2019	413	54.7	44.5	53.7	1.6	0.2	52.8	56.1
	2023	586	48.9	41.8	39.9	17.8	0.6	49.1	48.6
Hungary	2019	653	24.4	71.6	23.1	4.2	1.2	23.7	24.9
	2023	739	26.9	64.5	23.8	11.6	0.2	23.3	30.7
Italy	2019	531	21.6	67.9	18.7	8.1	5.2	20.0	22.9
	2023	633	23.0	64.8	19.4	14.8	1.0	16.1	29.7
Korea, Rep. of	2019	557	38.9	60.4	38.4	0.9	0.3	32.2	45.5
	2023	617	42.5	55.4	40.9	3.6	0.2	38.5	47.3
Lithuania	2019	538	25.3	69.0	23.4	6.8	0.9	19.0	30.9
	2023	652	40.0	54.7	36.4	8.8	0.2	35.7	43.5
Netherlands	2019	472	26.5	70.2	25.3	1.9	2.7	28.6	24.6
	2023	515	27.6	62.8	24.0	11.0	2.3	19.8	36.0
Norway (5)	2019	555	33.2	58.0	28.9	9.1	4.0	31.4	35.0
	2023	755	32.6	53.3	25.8	16.3	4.5	28.3	37.8
Portugal	2019	621	26.0	68.5	24.0	4.6	2.9	24.4	27.6
	2023	750	29.2	58.8	24.2	15.3	1.7	20.6	37.3
Qatar	2019	704	16.0	58.4	11.2	23.7	6.6	15.6	16.5
	2023	916	21.6	54.0	14.9	28.8	2.4	17.9	25.5
Singapore	2019	850	57.5	41.9	56.8	1.1	0.1	52.4	62.5
	2023	933	58.1	40.6	56.3	3.1	0.1	56.8	59.5
Slovak Republic	2019	609	23.2	70.5	21.3	6.8	1.4	18.2	27.7
	2023	680	24.9	60.4	20.0	18.8	0.7	17.8	32.5
Spain	2019	1364	23.0	72.4	21.6	3.0	3.0	19.4	26.2
	2023	1453	26.0	56.1	19.7	21.7	2.5	22.2	29.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Reasoning

A\_MM4\_11B ME71138B: Students at school - Arne's statement - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	31.8	59.5	27.8	7.8	4.9	31.7	31.9
	2023	736	38.9	51.5	32.8	12.0	3.7	35.1	43.2
United Arab Emirates	2019	3676	21.5	67.1	18.4	11.0	3.5	22.2	20.9
	2023	4940	29.4	48.3	20.1	29.4	2.1	25.3	33.5
United States	2019	1272	30.6	65.6	29.0	2.4	3.0	26.1	34.8
	2023	1293	32.0	56.6	26.6	13.7	3.0	25.7	38.7
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International Avg. (25)	2019	20367	28.1	63.3	25.5	7.9	3.3	25.0	30.9
	2023	24621	29.6	57.4	24.9	15.7	2.0	25.4	34.0
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Abu Dhabi, UAE	2019	1279	13.0	74.2	11.1	11.4	3.3	15.3	10.9
	2023	1772	22.7	49.2	14.5	33.9	2.4	17.4	28.1
Dubai, UAE	2019	1048	38.2	57.1	35.3	5.1	2.4	41.0	35.4
	2023	1310	39.7	48.0	31.6	19.1	1.2	33.6	45.8
Ontario, Canada	2019	545	23.4	65.9	20.1	10.6	3.4	21.5	25.1
	2023	607	21.0	63.1	16.8	16.9	3.3	15.3	28.8
Quebec, Canada	2019	539	26.7	61.9	22.6	13.0	2.5	22.5	31.7
	2023	557	24.6	63.2	20.7	14.2	1.9	23.4	25.7
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_MM4\_12 ME71203: Graph that best shows target hits - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	31.6	28.8	16.7	34.4	11.1	4.9	4.0	33.1	30.1
	2023	1959	33.2	31.1	16.6	35.3	10.7	3.1	3.2	33.1	33.5
Chile	2019	602	22.7	18.7	17.3	32.6	13.6	6.0	11.8	19.8	25.9
	2023	654	23.5	21.6	18.6	36.3	15.2	2.8	5.4	21.1	26.1
Chinese Taipei	2019	530	70.3	69.5	7.0	16.8	5.5	1.2	0.0	75.0	66.3
	2023	761	71.8	71.7	4.4	17.1	6.8	0.1	0.0	74.0	69.6
Czech Republic	2019	673	34.9	32.1	20.2	24.6	15.1	5.1	2.7	32.6	37.0
	2023	974	42.8	39.8	18.5	19.5	15.1	5.5	1.6	42.1	43.5
Denmark	2019	462	47.3	40.9	17.1	22.6	5.9	5.9	7.6	46.5	47.9
	2023	736	48.2	43.7	16.7	23.3	6.9	2.8	6.5	46.5	49.8
England	2019	489	43.4	41.4	13.5	33.1	7.2	4.1	0.6	42.2	44.5
	2023	575	44.8	42.6	11.5	31.7	9.4	2.7	2.1	45.1	45.0
Finland	2019	675	43.2	40.3	11.3	31.6	10.2	4.3	2.4	39.2	47.1
	2023	816	43.6	41.7	16.1	26.6	11.3	3.0	1.3	41.9	45.2
France	2019	594	36.0	31.6	14.8	21.4	20.0	7.6	4.5	35.7	36.3
	2023	673	38.4	34.3	18.9	17.4	18.7	6.8	4.0	37.8	39.0
Georgia	2019	537	21.1	17.9	20.8	22.3	23.6	8.0	7.5	18.0	24.0
	2023	634	30.8	27.3	21.7	20.2	19.4	7.2	4.1	30.3	31.4
Germany	2019	493	31.7	28.3	23.1	27.4	10.5	5.5	5.3	29.0	34.2
	2023	641	32.6	30.8	19.9	33.5	10.2	2.8	2.7	33.1	32.2
Hong Kong SAR	2019	413	51.7	50.5	17.6	25.2	4.4	2.0	0.2	46.2	55.8
	2023	586	45.6	45.1	15.1	33.0	5.8	0.4	0.6	44.3	46.7
Hungary	2019	653	23.3	22.3	19.0	32.3	22.1	3.0	1.4	18.5	27.6
	2023	739	35.5	34.7	19.9	26.9	16.3	1.2	1.0	32.1	38.8
Italy	2019	531	28.5	24.6	24.7	26.3	10.9	7.3	6.2	26.3	30.2
	2023	633	25.5	23.9	23.7	30.9	15.2	4.7	1.6	21.1	29.4
Korea, Rep. of	2019	557	83.2	82.5	6.9	6.8	3.0	0.3	0.5	85.4	80.9
	2023	617	74.8	74.5	9.0	12.7	3.4	0.2	0.2	76.3	72.8
Lithuania	2019	538	35.0	33.9	19.3	29.7	14.0	2.2	0.9	35.9	34.2
	2023	652	42.3	41.7	19.3	24.6	13.1	1.1	0.2	45.8	39.4
Netherlands	2019	472	62.0	57.4	8.9	21.8	4.5	4.4	2.9	67.2	57.5
	2023	515	61.9	59.2	9.1	21.3	6.0	1.8	2.7	64.2	59.8
Norway (5)	2019	555	43.6	39.9	18.9	25.6	7.1	4.2	4.4	43.1	44.1
	2023	755	39.6	36.3	17.7	28.3	9.4	3.2	5.1	34.8	44.6
Portugal	2019	620	14.7	13.4	17.9	46.0	13.8	6.0	3.0	11.0	18.2
	2023	750	24.8	23.9	20.1	40.2	11.9	1.9	2.0	21.2	28.0
Qatar	2019	704	29.0	25.5	19.8	31.3	11.6	4.7	7.1	28.6	29.4
	2023	916	33.6	31.7	16.9	33.2	12.7	2.5	3.1	31.0	36.0
Singapore	2019	850	63.5	63.2	8.3	24.3	3.7	0.4	0.1	63.6	63.4
	2023	933	62.2	62.0	7.6	25.0	5.2	0.2	0.1	64.1	60.2
Slovak Republic	2019	609	33.1	31.0	28.3	21.7	12.9	4.6	1.5	29.0	36.5
	2023	680	40.1	38.6	26.9	18.7	12.0	3.1	0.7	39.8	40.5
Spain	2019	1364	31.6	29.3	20.7	32.7	10.1	4.0	3.3	30.0	32.9
	2023	1453	35.3	33.3	22.0	28.1	10.8	2.6	3.1	33.8	36.7

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying

A\_MM4\_12 ME71203: Graph that best shows target hits - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	40.5	35.3	12.7	31.9	7.4	7.6	5.1	35.3	45.6
	2023	736	44.5	41.1	18.9	27.2	5.2	3.8	3.8	41.5	47.6
United Arab Emirates	2019	3671	34.2	31.7	16.5	33.5	10.8	3.7	3.9	35.2	33.5
	2023	4940	43.3	41.4	15.2	29.3	9.6	1.8	2.7	42.4	44.2
United States	2019	1272	38.4	35.8	12.3	38.4	6.8	3.6	3.2	35.6	40.9
	2023	1293	39.9	37.9	15.2	33.0	8.7	2.0	3.2	37.5	42.4
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International Avg. (25)	2019	20361	39.8	37.0	16.5	27.8	10.6	4.4	3.6	38.5	41.0
	2023	24621	42.3	40.4	16.8	26.9	10.8	2.7	2.4	41.4	43.3
-----											
Abu Dhabi, UAE	2019	1275	29.3	27.0	16.5	37.4	11.3	4.1	3.6	31.0	28.1
	2023	1772	36.4	34.6	16.4	33.9	10.2	1.9	2.9	35.1	37.6
Dubai, UAE	2019	1048	43.0	40.6	15.2	32.3	6.3	3.1	2.5	44.0	42.0
	2023	1310	53.2	51.3	13.6	25.2	6.2	1.6	2.0	53.5	53.0
Ontario, Canada	2019	545	27.0	24.4	18.5	38.5	9.1	5.6	4.0	28.5	25.6
	2023	607	32.2	29.8	15.1	39.9	7.8	3.1	4.2	32.7	31.7
Quebec, Canada	2019	539	42.1	39.2	17.2	22.7	14.0	4.0	2.8	45.7	38.3
	2023	557	36.7	34.6	21.4	26.2	12.1	3.4	2.3	36.2	37.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Data / Applying  
A\_MM4\_13 ME71205: Ages of children at skate park (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	39.9	54.3	36.1	2.8	6.7	41.4	38.5
	2023	1959	38.3	56.5	35.0	3.2	5.2	38.7	37.9
Chile	2019	602	15.9	66.4	12.6	6.1	14.9	16.3	15.6
	2023	654	16.9	73.1	14.9	5.7	6.3	16.8	17.0
Chinese Taipei	2019	530	57.9	41.7	57.5	0.4	0.4	61.8	54.5
	2023	761	66.0	33.8	65.6	0.6	0.0	68.3	63.7
Czech Republic	2019	673	33.5	58.8	29.6	6.3	5.3	35.5	31.6
	2023	972	28.2	65.1	25.6	6.6	2.7	27.8	28.6
Denmark	2019	462	46.0	45.6	38.8	5.5	10.1	49.8	42.8
	2023	736	43.4	49.6	38.0	5.1	7.2	45.0	41.7
England	2019	489	46.3	50.7	43.7	2.2	3.3	42.2	49.8
	2023	575	50.2	47.4	47.8	1.6	3.3	54.9	46.0
Finland	2019	675	43.4	51.7	39.7	4.9	3.8	48.7	38.2
	2023	816	46.1	49.5	42.4	6.4	1.7	50.6	41.6
France	2019	594	25.7	64.3	22.3	5.5	7.9	25.2	26.2
	2023	667	27.0	62.9	23.3	7.5	6.3	24.2	29.9
Georgia	2019	537	12.6	71.8	10.4	8.2	9.6	11.2	14.0
	2023	633	17.6	68.3	14.6	11.7	5.4	14.8	20.6
Germany	2019	493	43.0	51.0	38.4	3.5	7.1	48.1	38.5
	2023	641	43.8	51.9	40.3	3.7	4.1	48.7	38.9
Hong Kong SAR	2019	413	73.2	26.4	72.0	0.6	1.0	73.2	73.1
	2023	583	67.9	31.6	66.8	1.1	0.6	69.5	66.3
Hungary	2019	653	26.4	68.6	24.6	4.3	2.5	25.0	27.7
	2023	737	32.8	63.9	31.2	3.5	1.4	38.1	27.8
Italy	2019	531	32.8	58.1	28.4	4.6	8.8	37.6	29.0
	2023	633	39.8	53.8	35.5	7.9	2.8	38.7	40.7
Korea, Rep. of	2019	557	56.9	42.4	56.1	1.0	0.5	59.4	54.2
	2023	617	61.6	37.6	60.2	2.0	0.2	62.8	60.2
Lithuania	2019	538	37.0	60.3	35.4	2.5	1.8	39.3	35.1
	2023	652	43.3	54.9	41.9	2.7	0.4	47.2	40.1
Netherlands	2019	472	39.2	56.3	36.4	3.2	4.1	40.7	37.9
	2023	515	39.3	56.1	36.4	4.7	2.8	37.5	41.0
Norway (5)	2019	555	49.5	44.7	43.7	4.3	7.3	51.6	47.7
	2023	755	49.0	44.9	43.1	5.8	6.2	51.0	46.7
Portugal	2019	621	43.3	51.0	39.0	4.1	5.9	42.4	44.2
	2023	750	47.7	49.3	44.9	2.9	2.9	48.6	46.9
Qatar	2019	704	14.9	74.9	13.1	3.1	8.8	16.2	13.7
	2023	916	21.6	71.6	19.7	4.0	4.6	20.8	22.3
Singapore	2019	850	62.8	36.9	62.2	0.6	0.4	61.8	63.7
	2023	933	59.2	40.6	58.9	0.3	0.2	63.9	54.3
Slovak Republic	2019	609	32.6	61.6	29.8	5.8	2.7	37.4	28.4
	2023	680	34.5	61.8	32.6	4.2	1.4	35.1	34.0
Spain	2019	1364	32.9	61.1	29.9	3.7	5.3	32.5	33.2
	2023	1453	28.9	65.2	26.6	4.2	4.0	31.9	26.0

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying

A\_MM4\_13 ME71205: Ages of children at skate park (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	571	36.3	54.9	31.3	6.6	7.3	35.1	37.4
	2023	735	41.6	52.4	37.3	4.5	5.8	45.1	37.9
United Arab Emirates	2019	3675	25.0	68.6	22.9	3.1	5.5	26.0	24.2
	2023	4937	32.8	62.9	30.6	2.7	3.8	33.5	32.1
United States	2019	1272	45.6	50.4	42.3	1.9	5.4	47.8	43.6
	2023	1293	39.0	57.5	36.7	1.4	4.4	41.0	36.9
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International Avg. (25)	2019	20366	38.9	54.9	35.8	3.8	5.5	40.3	37.7
	2023	24603	40.7	54.5	38.0	4.2	3.4	42.2	39.2
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Abu Dhabi, UAE	2019	1278	17.1	76.9	15.9	2.1	5.1	19.9	14.6
	2023	1770	20.7	74.1	19.4	2.3	4.2	20.0	21.4
Dubai, UAE	2019	1048	42.0	53.4	38.7	3.3	4.5	43.5	40.7
	2023	1310	48.9	48.5	46.4	2.2	2.9	51.6	46.4
Ontario, Canada	2019	545	40.9	53.5	37.0	2.4	7.1	40.1	41.4
	2023	606	38.2	56.0	34.6	3.3	6.0	38.0	38.5
Quebec, Canada	2019	539	43.4	52.0	39.9	2.7	5.5	48.4	38.1
	2023	557	42.8	52.4	39.3	3.8	4.5	45.1	40.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME2\_01 ME61178: Round Mount Everest height to nearest 1000 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	54.9	43.3	52.7	3.6	0.3	49.6	59.6
	2023	1937	52.5	46.5	51.4	2.0	0.1	45.9	58.8
Chile	2019	592	10.8	76.8	9.3	13.2	0.7	9.0	12.7
	2023	642	11.8	78.1	10.4	11.0	0.5	9.4	13.8
Chinese Taipei	2019	532	91.2	8.8	91.1	0.1	0.0	89.6	92.6
	2023	453	88.0	12.0	88.0	0.0	0.0	90.9	85.9
Czech Republic	2019	671	74.8	24.5	72.7	2.7	0.0	72.8	76.8
	2023	960	77.4	21.9	75.1	2.5	0.5	75.9	78.7
Denmark	2019	466	62.4	35.0	58.1	6.5	0.4	59.0	66.1
	2023	704	66.7	32.1	64.2	3.2	0.5	61.6	72.6
England	2019	484	75.2	24.3	73.8	1.9	0.0	70.6	79.5
	2023	568	76.8	23.0	76.4	0.6	0.0	69.0	84.9
Finland	2019	676	63.7	35.2	62.0	2.8	0.0	60.0	67.8
	2023	811	70.9	28.7	70.0	1.3	0.0	66.2	75.5
France	2019	602	26.1	61.2	21.6	17.0	0.2	21.8	29.9
	2023	648	33.0	60.5	29.8	9.7	0.0	24.6	39.8
Georgia	2019	534	42.9	50.3	37.7	11.9	0.1	39.4	46.3
	2023	608	57.3	39.8	53.3	7.0	0.0	51.3	62.8
Germany	2019	489	71.7	27.2	69.1	3.6	0.0	69.8	73.8
	2023	621	74.0	25.3	72.1	2.3	0.3	72.8	75.3
Hong Kong SAR	2019	430	19.4	78.6	18.9	2.5	0.0	17.6	20.7
	2023	584	43.5	55.5	42.7	1.8	0.0	36.7	50.1
Hungary	2019	651	63.7	34.9	61.2	4.0	0.0	64.8	62.8
	2023	730	64.1	35.5	63.3	1.2	0.0	61.1	67.3
Italy	2019	541	27.8	59.1	22.8	17.9	0.2	26.0	29.8
	2023	625	30.6	58.9	26.0	14.9	0.1	21.8	38.9
Lithuania	2019	529	62.7	36.0	60.5	3.2	0.3	61.1	64.3
	2023	641	71.2	28.5	70.5	0.8	0.2	69.9	72.5
Netherlands	2019	474	60.6	38.4	59.0	2.6	0.0	58.7	62.5
	2023	494	63.3	35.9	61.9	2.2	0.0	60.5	66.3
Norway (5)	2019	565	75.7	23.7	73.8	1.7	0.7	75.8	75.6
	2023	744	69.3	29.9	67.4	2.5	0.2	68.8	69.7
Portugal	2019	606	31.7	61.9	28.8	9.3	0.0	26.5	35.9
	2023	735	39.5	57.2	37.3	5.6	0.0	30.8	48.1
Qatar	2019	710	37.4	58.7	35.0	6.2	0.1	38.3	36.5
	2023	897	44.3	54.3	43.1	2.6	0.0	38.1	50.5
Singapore	2019	849	78.3	21.6	78.0	0.4	0.0	76.8	79.8
	2023	591	76.4	23.5	76.3	0.1	0.0	71.3	81.5
Slovak Republic	2019	608	71.2	27.5	68.2	4.3	0.0	68.3	73.8
	2023	668	71.1	27.7	68.4	3.9	0.0	65.3	76.8
Spain	2019	1366	34.9	56.4	30.2	13.5	0.0	33.5	36.0
	2023	1441	38.1	53.3	32.8	13.9	0.1	32.8	42.8
Sweden	2019	554	64.1	33.5	59.8	6.5	0.2	63.9	64.3
	2023	723	67.4	30.8	63.8	5.3	0.1	61.7	73.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME2\_01 ME61178: Round Mount Everest height to nearest 1000 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
United Arab Emirates	2019	3686	42.7	55.7	41.6	2.6	0.1	40.4	45.1
	2023	5624	51.2	47.9	50.2	1.8	0.1	46.4	55.5
United States	2019	1246	66.6	33.0	66.0	0.7	0.2	62.7	70.4
	2023	1290	68.3	31.4	67.6	0.8	0.2	65.6	70.8
International Avg. (24)	2019	19810	54.6	41.9	52.2	5.8	0.1	52.3	56.8
	2023	23739	58.6	39.1	56.7	4.0	0.1	54.1	63.0
Abu Dhabi, UAE	2019	1295	29.7	68.1	28.7	3.0	0.3	29.5	29.7
	2023	2512	41.1	58.0	40.4	1.5	0.1	37.1	45.0
Dubai, UAE	2019	1033	65.0	34.6	64.3	1.1	0.1	60.3	69.3
	2023	1306	71.6	28.2	70.9	0.8	0.1	65.5	76.8
Ontario, Canada	2019	542	57.8	41.1	56.4	2.3	0.1	53.4	61.8
	2023	596	57.4	41.8	56.4	1.8	0.0	52.5	62.4
Quebec, Canada	2019	555	54.1	43.3	50.9	5.8	0.0	46.9	60.6
	2023	545	49.2	49.5	48.0	2.1	0.3	43.2	54.7

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME2\_02 ME61246: Number that is even and multiple of 7 - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	50.7	15.7	18.4	49.8	14.4	1.2	0.5	47.1	53.9
	2023	1937	51.2	17.4	19.2	50.9	12.0	0.3	0.1	48.2	53.9
Chile	2019	592	16.9	31.6	12.4	16.0	34.4	4.6	1.0	15.5	18.4
	2023	642	19.0	29.5	16.4	18.2	31.7	3.5	0.6	16.7	20.9
Chinese Taipei	2019	532	54.9	28.4	5.0	54.8	11.5	0.2	0.0	53.1	56.6
	2023	453	76.6	15.8	4.6	76.6	2.9	0.0	0.0	77.0	76.3
Czech Republic	2019	671	53.0	34.0	5.8	51.9	6.2	2.1	0.0	55.5	50.5
	2023	960	50.0	34.8	7.9	49.5	6.7	0.6	0.5	54.1	46.3
Denmark	2019	466	38.2	36.7	11.7	37.5	12.4	1.3	0.4	38.0	38.4
	2023	704	37.3	36.9	11.8	36.9	13.3	0.7	0.5	37.4	37.2
England	2019	484	69.5	14.9	9.6	68.6	5.7	1.2	0.0	74.7	64.7
	2023	568	73.2	13.2	7.1	73.2	6.5	0.0	0.0	71.9	75.0
Finland	2019	676	55.3	17.5	16.3	54.5	10.2	1.5	0.0	59.4	51.0
	2023	811	52.3	22.3	14.2	51.3	10.3	1.9	0.0	52.6	52.1
France	2019	602	38.1	32.1	14.0	36.9	13.8	2.6	0.6	36.0	40.2
	2023	652	39.0	38.2	11.0	38.3	10.9	1.7	0.0	33.9	43.5
Georgia	2019	534	38.8	28.3	15.8	37.9	15.7	2.2	0.1	38.2	39.6
	2023	608	49.5	23.8	11.4	47.3	13.0	4.5	0.0	51.8	47.3
Germany	2019	489	56.9	22.6	11.2	56.4	8.9	0.9	0.0	56.2	57.6
	2023	622	56.7	18.3	14.2	56.2	10.3	0.8	0.2	54.1	59.5
Hong Kong SAR	2019	430	50.4	32.1	6.0	50.3	11.4	0.2	0.0	53.1	48.2
	2023	585	75.2	12.0	6.7	75.2	6.2	0.0	0.0	72.8	77.6
Hungary	2019	651	75.1	6.2	12.7	74.9	5.8	0.3	0.0	77.7	72.9
	2023	730	76.3	5.1	14.1	76.1	4.4	0.3	0.0	78.0	74.5
Italy	2019	541	56.7	22.2	10.3	55.3	9.8	2.1	0.4	52.3	61.6
	2023	625	48.9	24.5	15.3	48.1	10.4	1.5	0.1	45.7	52.1
Korea, Rep. of	2019	555	66.4	8.8	10.8	65.5	13.5	1.4	0.0	61.1	71.0
	2023	385	69.8	9.3	12.5	69.4	8.1	0.5	0.2	60.7	78.7
Lithuania	2019	529	38.9	23.1	10.5	38.7	27.0	0.4	0.3	40.2	37.7
	2023	641	47.4	20.9	11.0	46.9	20.1	0.9	0.2	46.9	47.9
Netherlands	2019	474	28.9	25.0	12.6	27.9	31.1	3.3	0.0	27.0	30.7
	2023	494	35.6	29.9	9.2	34.9	24.2	1.8	0.0	33.7	36.9
Norway (5)	2019	565	53.6	18.7	14.2	52.3	12.3	1.8	0.7	50.4	56.5
	2023	744	49.8	24.3	16.0	49.3	9.4	0.7	0.2	49.1	50.5
Portugal	2019	606	62.2	22.5	10.2	61.6	4.7	1.0	0.0	58.8	64.9
	2023	735	65.4	16.4	10.6	65.2	7.5	0.3	0.0	62.7	68.2
Qatar	2019	710	40.1	27.0	16.8	39.6	15.5	0.8	0.3	40.5	39.7
	2023	897	43.5	32.5	12.0	43.3	11.9	0.3	0.0	41.7	45.3
Singapore	2019	849	85.4	6.6	5.0	85.0	3.0	0.5	0.0	86.7	84.1
	2023	591	85.4	6.4	4.9	85.4	3.3	0.0	0.0	85.5	85.3
Slovak Republic	2019	608	60.0	22.6	11.5	59.5	5.6	0.8	0.0	57.4	62.3
	2023	668	65.5	22.3	8.1	65.2	4.0	0.4	0.0	67.9	63.0
Spain	2019	1365	44.4	21.4	17.8	43.3	15.1	2.3	0.0	46.5	42.7
	2023	1441	47.8	22.3	14.0	46.7	14.7	2.2	0.1	47.0	48.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME2\_02 ME61246: Number that is even and multiple of 7 - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	66.9	16.4	11.7	66.4	4.6	0.7	0.2	67.5	66.4
	2023	723	68.2	15.3	12.5	68.0	3.8	0.3	0.1	67.8	68.7
United Arab Emirates	2019	3685	47.7	24.5	13.0	47.1	14.1	1.1	0.2	47.1	48.3
	2023	5625	50.3	24.4	11.2	50.2	14.0	0.2	0.1	51.5	49.2
United States	2019	1246	62.2	20.5	8.5	61.7	8.5	0.7	0.2	62.6	61.8
	2023	1290	60.7	19.6	9.5	60.4	10.1	0.2	0.2	60.8	60.5
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International Avg. (25)	2019	20363	52.4	22.4	11.7	51.7	12.6	1.4	0.2	52.1	52.8
	2023	24131	55.8	21.4	11.4	55.3	10.8	0.9	0.1	54.8	56.8
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Abu Dhabi, UAE	2019	1296	35.4	29.1	14.5	34.9	20.1	1.1	0.3	34.7	36.0
	2023	2513	42.5	27.9	12.2	42.4	17.3	0.1	0.1	43.3	41.6
Dubai, UAE	2019	1033	67.0	16.3	9.7	66.7	6.8	0.5	0.1	65.8	68.1
	2023	1306	67.3	16.0	9.1	67.1	7.5	0.1	0.1	69.5	65.3
Ontario, Canada	2019	542	46.7	17.7	19.7	45.8	14.9	1.5	0.4	44.7	48.6
	2023	596	48.0	18.9	21.8	47.9	11.1	0.2	0.0	46.4	49.4
Quebec, Canada	2019	555	54.4	13.2	18.8	53.8	13.2	1.0	0.0	50.0	58.3
	2023	545	54.5	15.5	18.4	54.2	11.3	0.3	0.3	53.1	55.8
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing  
A\_ME2\_03 ME61271: 6 x 312 = - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	49.0	49.1	47.1	3.1	0.7	46.6	51.0
	2023	1936	44.6	54.1	43.6	2.1	0.2	40.6	48.3
Chile	2019	592	33.9	58.9	30.2	9.9	1.0	32.5	35.3
	2023	642	24.9	67.2	22.2	10.0	0.6	22.1	27.1
Chinese Taipei	2019	532	88.0	12.0	88.0	0.0	0.0	88.6	87.4
	2023	453	93.4	6.6	93.4	0.0	0.0	92.0	94.5
Czech Republic	2019	671	73.5	25.3	70.4	4.3	0.0	76.9	69.9
	2023	960	72.5	26.3	69.5	3.7	0.5	73.5	71.6
Denmark	2019	466	48.1	47.8	44.3	7.6	0.4	51.2	44.8
	2023	704	43.4	53.6	41.2	4.7	0.5	42.3	44.8
England	2019	484	66.8	31.8	63.9	4.2	0.1	68.5	65.1
	2023	568	70.0	29.1	67.8	3.2	0.0	70.6	69.8
Finland	2019	676	30.9	64.5	28.8	6.7	0.0	31.2	30.5
	2023	810	31.5	65.0	29.8	5.1	0.0	22.8	39.8
France	2019	602	67.5	30.2	62.6	6.7	0.6	68.4	66.5
	2023	650	61.6	36.2	58.0	5.9	0.0	60.5	62.6
Georgia	2019	534	73.5	25.7	71.1	3.0	0.2	72.7	74.3
	2023	608	79.3	20.2	77.4	1.8	0.6	82.2	76.5
Germany	2019	489	58.9	39.3	56.3	4.4	0.0	59.4	57.9
	2023	622	58.6	38.6	54.7	6.4	0.2	56.1	61.3
Hong Kong SAR	2019	430	89.9	10.1	89.7	0.2	0.0	91.7	88.5
	2023	584	85.9	14.1	85.9	0.0	0.0	87.4	84.3
Hungary	2019	651	77.4	22.3	76.5	1.2	0.0	80.2	75.1
	2023	730	68.2	31.4	67.5	1.1	0.0	66.7	69.8
Italy	2019	541	76.8	22.4	74.4	2.8	0.4	74.4	79.6
	2023	625	70.6	28.5	68.5	2.7	0.3	68.8	72.4
Korea, Rep. of	2019	555	84.0	15.8	83.3	0.9	0.0	85.4	82.9
	2023	385	80.7	19.1	80.0	0.7	0.2	81.2	80.2
Lithuania	2019	529	80.8	18.9	79.7	1.0	0.3	83.1	78.7
	2023	641	86.0	13.9	85.0	0.9	0.2	87.7	84.2
Netherlands	2019	474	58.9	39.7	56.8	3.5	0.0	62.5	55.3
	2023	494	65.2	33.6	62.9	3.5	0.0	65.5	64.3
Norway (5)	2019	565	52.7	43.7	48.7	7.0	0.7	52.6	52.8
	2023	743	41.8	53.6	38.5	7.7	0.2	38.4	45.2
Portugal	2019	606	75.0	24.6	73.7	1.6	0.0	77.1	73.2
	2023	735	73.0	26.5	71.7	1.8	0.0	73.3	72.8
Qatar	2019	710	56.2	42.8	55.0	2.0	0.3	59.0	53.7
	2023	896	51.7	47.6	51.0	1.5	0.0	49.8	53.7
Singapore	2019	849	91.7	8.2	91.0	0.7	0.0	93.7	89.7
	2023	591	88.6	11.4	88.6	0.0	0.0	90.5	86.9
Slovak Republic	2019	608	41.2	55.1	38.6	6.3	0.0	38.9	43.3
	2023	668	39.7	57.0	37.5	5.6	0.0	38.8	40.6
Spain	2019	1366	77.8	21.9	76.7	1.3	0.0	79.2	76.6
	2023	1441	70.3	28.9	68.5	2.6	0.1	70.0	70.6

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing  
A\_ME2\_03 ME61271: 6 x 312 = - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	42.2	53.3	38.9	7.6	0.2	44.6	40.1
	2023	723	44.7	51.4	41.5	7.0	0.1	44.0	45.4
United Arab Emirates	2019	3686	57.8	41.2	56.5	2.0	0.2	58.9	56.7
	2023	5624	57.2	42.2	56.4	1.2	0.1	56.2	58.1
United States	2019	1246	67.9	31.5	66.7	1.7	0.2	70.3	65.7
	2023	1289	60.8	38.9	60.4	0.5	0.2	61.2	60.4
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International Avg. (25)	2019	20365	64.8	33.5	62.8	3.6	0.2	65.9	63.8
	2023	24122	62.6	35.8	60.9	3.2	0.2	61.7	63.4
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Abu Dhabi, UAE	2019	1296	43.8	54.6	42.7	2.4	0.4	45.8	41.6
	2023	2513	46.7	52.7	46.1	1.1	0.1	45.0	48.4
Dubai, UAE	2019	1033	75.9	23.8	75.0	1.2	0.1	74.8	76.9
	2023	1306	71.3	28.5	70.7	0.7	0.1	72.4	70.4
Ontario, Canada	2019	542	42.0	56.5	41.0	1.6	0.9	40.1	43.9
	2023	596	37.9	60.4	36.9	2.5	0.2	30.9	44.7
Quebec, Canada	2019	555	66.6	32.2	64.3	3.5	0.0	64.8	68.0
	2023	544	57.5	41.6	56.3	1.8	0.3	59.2	56.0
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Number / Reasoning

A\_ME2\_04 ME61256: Mark and Keith's card game - can Keith win - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	47.1	51.4	45.8	2.0	0.9	46.2	47.9
	2023	1937	43.3	55.8	42.6	1.4	0.2	40.4	45.9
Chile	2019	592	29.4	66.8	27.8	3.9	1.4	28.3	30.5
	2023	642	38.7	58.0	36.6	4.4	1.0	35.6	41.4
Chinese Taipei	2019	532	46.5	53.3	46.5	0.2	0.0	43.2	49.6
	2023	453	55.1	44.7	54.8	0.5	0.0	54.4	55.6
Czech Republic	2019	671	59.9	39.1	58.4	2.4	0.0	63.5	56.2
	2023	960	57.9	41.2	56.6	1.7	0.5	56.9	58.8
Denmark	2019	466	59.8	38.9	57.8	2.3	1.0	58.5	61.2
	2023	704	60.3	38.6	58.8	1.6	0.9	60.2	60.5
England	2019	484	57.6	41.9	56.8	1.3	0.1	61.4	54.0
	2023	568	58.5	40.6	57.2	2.2	0.0	55.9	62.2
Finland	2019	676	58.1	40.8	56.4	2.8	0.0	58.9	57.2
	2023	811	61.0	38.4	60.0	1.6	0.0	61.6	60.3
France	2019	602	29.7	68.4	28.9	2.1	0.6	25.3	34.0
	2023	652	32.1	65.4	30.9	3.8	0.0	29.7	34.2
Georgia	2019	534	30.2	67.2	29.1	3.3	0.3	30.1	30.4
	2023	608	34.8	61.3	32.7	5.2	0.8	32.9	36.6
Germany	2019	489	53.0	45.8	51.7	2.4	0.0	47.1	59.0
	2023	622	56.3	42.7	55.1	1.9	0.2	54.4	58.5
Hong Kong SAR	2019	430	43.9	55.7	43.5	0.8	0.0	43.1	44.5
	2023	585	47.2	52.2	46.6	1.1	0.0	49.1	45.3
Hungary	2019	651	48.2	51.2	47.6	1.2	0.0	46.6	49.5
	2023	730	46.2	53.4	45.8	0.7	0.0	45.9	46.5
Italy	2019	541	24.9	72.5	24.0	2.6	0.8	23.7	26.2
	2023	625	30.4	68.0	29.7	1.9	0.4	26.0	34.6
Korea, Rep. of	2019	555	62.4	37.1	61.6	1.3	0.0	61.1	63.5
	2023	385	67.1	32.5	66.3	1.1	0.2	61.4	72.7
Lithuania	2019	529	48.2	50.7	47.1	1.8	0.3	46.7	49.5
	2023	641	53.6	45.7	52.8	1.2	0.2	48.1	59.1
Netherlands	2019	474	62.0	37.8	61.6	0.6	0.0	60.7	63.3
	2023	494	58.3	41.1	57.4	1.5	0.0	55.6	60.7
Norway (5)	2019	565	67.6	31.5	65.8	1.8	0.9	65.3	69.6
	2023	743	73.2	26.4	72.1	1.2	0.3	73.1	73.4
Portugal	2019	606	55.7	43.5	54.8	1.7	0.0	52.9	58.1
	2023	735	56.0	43.5	55.4	1.1	0.0	48.9	63.2
Qatar	2019	710	18.0	79.8	17.6	2.3	0.3	19.3	16.9
	2023	897	26.1	73.2	25.8	1.1	0.0	22.6	29.5
Singapore	2019	849	58.1	41.9	57.9	0.2	0.0	55.8	60.4
	2023	591	58.0	41.9	57.9	0.2	0.0	56.8	59.2
Slovak Republic	2019	608	50.5	48.8	49.7	1.5	0.0	48.3	52.4
	2023	668	47.6	51.9	47.1	0.9	0.1	45.4	49.7
Spain	2019	1365	52.0	47.3	51.3	1.4	0.0	54.3	50.2
	2023	1441	52.1	46.5	50.5	2.9	0.1	47.9	56.3

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_ME2\_04 ME61256: Mark and Keith's card game - can Keith win - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	66.2	32.8	64.2	2.6	0.3	63.5	68.5
	2023	723	67.4	32.0	66.3	1.3	0.4	64.6	70.4
United Arab Emirates	2019	3684	30.4	68.1	29.7	1.8	0.3	27.7	33.2
	2023	5625	35.9	63.4	35.5	0.9	0.2	34.7	37.0
United States	2019	1246	49.3	50.0	48.7	0.9	0.3	42.9	55.4
	2023	1290	47.6	51.9	47.2	0.7	0.2	42.9	52.1
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International Avg. (25)	2019	20362	48.3	50.5	47.4	1.8	0.3	47.0	49.6
	2023	24130	50.6	48.4	49.7	1.7	0.2	48.2	52.9
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Abu Dhabi, UAE	2019	1294	22.1	75.8	21.5	2.3	0.4	22.2	22.0
	2023	2513	28.9	70.3	28.5	1.0	0.2	27.8	30.0
Dubai, UAE	2019	1033	49.2	50.4	48.8	0.7	0.2	44.3	53.5
	2023	1306	52.6	47.1	52.3	0.6	0.1	50.3	54.6
Ontario, Canada	2019	542	51.5	47.1	50.1	1.9	0.9	50.4	52.6
	2023	596	45.3	53.5	44.4	1.9	0.2	42.5	48.0
Quebec, Canada	2019	555	45.7	52.8	44.6	2.5	0.1	44.0	46.9
	2023	545	44.7	54.8	44.2	0.7	0.3	39.6	49.5
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME2\_05 ME61182: Total amount of juice Zara and Khattab have - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	8.5	87.7	8.1	3.1	1.1	6.0	10.6
	2023	1928	8.1	89.6	7.9	2.3	0.2	4.5	11.7
Chile	2019	592	2.3	90.7	2.1	4.9	2.2	1.6	3.0
	2023	642	2.8	91.2	2.6	4.7	1.5	2.7	2.8
Chinese Taipei	2019	532	49.4	50.6	49.4	0.0	0.0	47.7	50.9
	2023	453	70.9	29.1	70.9	0.0	0.0	70.2	71.4
Czech Republic	2019	671	9.6	81.1	8.6	10.3	0.0	8.7	10.5
	2023	959	9.1	82.6	8.3	8.7	0.5	4.6	13.1
Denmark	2019	466	13.2	80.2	12.2	6.4	1.2	7.6	18.9
	2023	699	10.1	85.9	9.7	3.4	1.1	4.6	16.8
England	2019	484	43.0	54.6	41.2	3.9	0.3	43.8	42.2
	2023	567	46.8	51.3	45.1	3.6	0.0	42.2	52.4
Finland	2019	676	18.1	79.6	17.6	2.8	0.0	17.1	19.1
	2023	811	16.9	81.6	16.6	1.7	0.0	14.3	19.5
France	2019	602	7.8	81.7	6.9	10.7	0.7	5.7	9.8
	2023	648	5.3	85.8	4.8	9.1	0.3	2.1	8.1
Georgia	2019	534	11.5	78.1	10.1	11.4	0.3	13.1	9.7
	2023	606	14.5	73.3	12.5	13.2	1.0	13.3	15.7
Germany	2019	489	19.6	75.3	18.4	6.3	0.0	15.6	23.1
	2023	614	17.3	76.7	16.1	7.0	0.3	10.6	24.2
Hong Kong SAR	2019	430	47.0	52.9	46.8	0.4	0.0	46.1	47.6
	2023	578	49.6	49.8	49.0	1.2	0.0	47.8	51.3
Hungary	2019	651	5.3	88.8	5.0	6.3	0.0	3.2	7.1
	2023	729	7.6	90.0	7.4	2.6	0.0	7.1	8.2
Italy	2019	541	6.3	83.3	5.6	9.5	1.5	5.1	7.7
	2023	624	6.6	84.4	5.9	9.2	0.4	4.8	8.4
Korea, Rep. of	2019	555	21.5	77.0	21.1	1.9	0.0	18.3	24.3
	2023	385	28.9	69.1	28.1	2.3	0.5	22.1	35.4
Lithuania	2019	529	17.0	77.4	15.8	6.3	0.5	17.7	16.3
	2023	640	20.0	77.8	19.5	2.5	0.2	12.5	27.4
Netherlands	2019	474	9.1	88.7	8.8	2.5	0.0	8.3	9.8
	2023	494	9.9	88.8	9.7	1.5	0.0	7.0	13.2
Norway (5)	2019	565	12.7	81.9	11.9	4.7	1.5	10.3	14.8
	2023	741	16.4	80.7	15.8	3.0	0.5	14.2	18.5
Portugal	2019	606	19.9	75.8	18.8	5.1	0.2	20.0	19.8
	2023	735	16.4	80.0	15.7	4.2	0.1	12.1	20.8
Qatar	2019	710	18.1	78.0	17.2	4.1	0.7	20.4	15.9
	2023	897	19.0	79.8	18.7	1.4	0.1	17.0	21.0
Singapore	2019	849	84.5	15.5	84.3	0.3	0.0	83.2	85.7
	2023	591	81.1	18.9	80.9	0.2	0.0	80.3	81.9
Slovak Republic	2019	608	5.1	88.0	4.7	7.3	0.0	5.3	4.9
	2023	668	7.8	85.8	7.3	6.8	0.1	8.0	7.6
Spain	2019	1366	5.5	89.3	5.2	5.2	0.2	2.9	7.6
	2023	1434	7.1	86.4	6.6	6.9	0.2	4.4	9.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME2\_05 ME61182: Total amount of juice Zara and Khattab have - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	8.5	81.3	7.5	10.6	0.6	6.0	10.5
	2023	716	10.7	83.3	10.0	6.0	0.7	7.8	13.6
United Arab Emirates	2019	3687	20.8	76.6	20.1	3.0	0.3	18.5	23.0
	2023	5623	26.3	72.4	25.8	1.6	0.2	24.1	28.4
United States	2019	1246	31.8	67.1	31.2	1.0	0.7	27.9	35.5
	2023	1288	29.9	69.1	29.5	1.0	0.3	25.1	34.4
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International Avg. (25)	2019	20366	19.8	75.2	19.2	5.1	0.5	18.4	21.1
	2023	24070	21.6	74.5	21.0	4.2	0.3	18.5	24.6
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Abu Dhabi, UAE	2019	1296	12.1	84.3	11.6	3.7	0.4	11.2	12.9
	2023	2513	17.1	81.5	16.8	1.4	0.3	15.1	19.2
Dubai, UAE	2019	1033	32.8	66.5	32.4	1.0	0.2	30.6	34.7
	2023	1306	43.2	56.3	42.8	0.7	0.2	40.9	45.2
Ontario, Canada	2019	542	11.2	86.3	10.9	1.8	1.1	6.9	15.2
	2023	593	8.9	89.5	8.8	1.5	0.2	6.5	11.7
Quebec, Canada	2019	555	6.2	89.7	6.0	4.1	0.3	4.2	8.0
	2023	540	6.1	91.4	5.9	2.4	0.3	2.3	9.5
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME2\_06 ME61049: Choose operation for box in number sentence - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	78.0	7.0	1.4	75.0	12.8	2.4	1.5	73.4	82.2
	2023	1937	80.7	4.7	1.4	79.8	13.0	0.6	0.5	76.4	85.1
Chile	2019	592	49.8	16.3	5.8	45.5	23.8	5.7	3.0	47.0	52.7
	2023	642	64.7	9.6	5.0	62.7	19.5	1.6	1.6	58.5	70.2
Chinese Taipei	2019	532	89.8	2.4	2.5	89.7	5.3	0.2	0.0	86.6	92.7
	2023	453	92.3	1.9	0.3	92.3	5.4	0.0	0.0	91.3	93.1
Czech Republic	2019	671	90.2	2.9	1.6	87.2	5.0	3.2	0.0	89.3	91.0
	2023	960	90.3	3.3	1.2	86.9	4.7	3.2	0.6	88.7	91.8
Denmark	2019	466	74.7	4.8	3.8	71.5	15.7	2.5	1.8	68.7	81.0
	2023	704	79.6	5.3	1.7	77.4	12.9	0.8	2.0	74.2	86.0
England	2019	484	80.4	5.6	1.7	77.9	11.6	2.7	0.4	81.0	79.8
	2023	568	85.6	3.2	1.4	85.1	9.7	0.5	0.1	81.6	89.5
Finland	2019	676	83.4	3.3	0.4	80.5	12.3	3.2	0.3	82.4	84.6
	2023	811	84.0	3.0	1.2	82.8	11.7	1.4	0.0	82.1	85.8
France	2019	602	68.6	4.2	2.7	64.9	23.0	4.0	1.2	61.7	75.3
	2023	652	69.7	5.4	2.6	67.1	21.2	3.0	0.8	62.3	76.5
Georgia	2019	534	86.0	7.4	2.7	83.4	3.5	2.4	0.7	88.8	82.8
	2023	608	90.8	3.3	0.9	88.1	4.7	1.2	1.8	88.9	92.7
Germany	2019	489	82.7	4.3	1.2	80.3	11.4	2.7	0.2	80.7	84.4
	2023	622	87.6	3.8	0.7	85.9	7.8	1.7	0.2	86.3	88.9
Hong Kong SAR	2019	430	93.8	1.3	1.0	93.6	3.9	0.2	0.0	93.9	93.7
	2023	585	92.6	2.4	1.7	92.4	3.2	0.2	0.0	92.6	92.6
Hungary	2019	651	89.3	4.9	1.7	87.2	3.9	2.1	0.2	88.6	89.9
	2023	730	86.5	5.6	0.9	85.7	6.9	1.0	0.0	87.7	85.2
Italy	2019	541	74.8	3.0	1.4	70.2	19.3	4.3	1.9	69.0	81.2
	2023	625	77.1	2.4	1.4	73.8	18.1	3.6	0.6	72.1	82.0
Korea, Rep. of	2019	555	80.5	3.6	0.3	79.6	15.4	1.1	0.0	78.7	82.1
	2023	385	86.1	2.6	1.9	84.8	9.2	1.1	0.5	80.2	91.8
Lithuania	2019	529	90.8	2.3	2.1	89.0	4.6	1.5	0.5	89.5	92.0
	2023	641	93.2	1.4	0.3	92.6	5.0	0.4	0.2	93.5	93.0
Netherlands	2019	474	80.6	3.1	1.1	78.4	14.7	2.1	0.6	75.0	86.0
	2023	494	86.9	1.1	0.7	84.8	10.9	2.5	0.0	87.6	86.0
Norway (5)	2019	565	81.1	4.5	2.2	77.7	11.4	2.6	1.6	77.6	84.2
	2023	744	84.7	4.0	1.4	83.6	9.7	0.8	0.6	83.6	85.9
Portugal	2019	606	71.4	2.8	0.9	69.4	24.1	1.7	1.1	66.6	75.1
	2023	735	71.9	4.1	1.5	70.8	22.1	1.2	0.3	62.5	81.5
Qatar	2019	710	64.7	9.0	5.8	61.9	19.0	2.9	1.4	63.9	65.5
	2023	897	69.8	7.7	4.2	69.0	17.9	0.7	0.5	63.7	76.0
Singapore	2019	849	93.5	1.4	1.1	93.0	3.9	0.5	0.0	93.8	93.1
	2023	591	92.6	1.6	0.8	92.6	5.0	0.0	0.0	91.2	94.0
Slovak Republic	2019	608	85.4	8.8	0.9	84.2	4.7	1.2	0.2	82.6	88.0
	2023	668	85.6	5.0	2.5	85.0	6.8	0.5	0.2	84.8	86.4
Spain	2019	1366	60.7	5.2	3.3	57.4	28.7	5.1	0.2	56.7	63.6
	2023	1441	66.1	3.2	1.5	64.0	28.1	2.5	0.7	60.5	71.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME2\_06 ME61049: Choose operation for box in number sentence - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	85.4	4.2	2.5	83.1	7.5	1.4	1.2	83.6	87.0
	2023	723	84.0	3.8	1.0	82.2	10.9	1.2	1.0	84.2	83.9
United Arab Emirates	2019	3683	67.7	8.2	4.4	65.8	18.8	2.1	0.7	64.1	71.4
	2023	5625	73.8	6.2	3.6	73.1	16.1	0.5	0.4	69.9	77.5
United States	2019	1246	79.5	4.3	2.1	78.2	13.7	0.7	1.0	76.6	82.3
	2023	1290	84.9	2.4	2.3	83.9	10.3	0.7	0.5	82.1	87.5
-----											
International Avg. (25)	2019	20362	79.3	5.0	2.2	77.0	12.7	2.3	0.8	76.8	81.7
	2023	24131	82.5	3.9	1.7	81.1	11.6	1.2	0.5	79.5	85.4
-----											
Abu Dhabi, UAE	2019	1295	62.2	9.2	5.6	60.8	22.1	1.8	0.5	57.8	66.8
	2023	2513	69.7	7.4	4.2	69.1	18.4	0.5	0.4	67.3	72.2
Dubai, UAE	2019	1033	77.9	4.8	2.2	76.6	14.7	1.3	0.3	74.1	81.3
	2023	1306	83.7	3.7	1.8	83.2	10.7	0.3	0.2	79.6	87.2
Ontario, Canada	2019	542	74.9	8.2	1.2	72.1	14.7	2.6	1.2	70.4	79.2
	2023	596	80.1	4.0	1.1	79.3	14.7	0.8	0.2	74.1	86.7
Quebec, Canada	2019	555	84.9	5.8	1.1	82.1	7.8	2.4	0.9	80.8	88.6
	2023	545	84.3	4.6	1.7	83.3	9.1	0.4	0.8	82.4	86.1
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME2\_07 ME61232: Expression for players on teams in football league - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	58.3	55.1	18.4	12.1	8.9	3.9	1.7	55.1	61.0
	2023	1937	57.0	55.7	18.5	13.8	9.8	1.7	0.6	53.9	59.9
Chile	2019	592	41.2	37.0	27.0	12.7	13.0	6.4	3.9	40.3	42.2
	2023	642	51.1	46.0	21.2	12.1	10.8	8.1	1.8	50.0	52.0
Chinese Taipei	2019	532	66.6	66.1	18.3	8.8	6.0	0.8	0.0	64.1	69.0
	2023	453	71.0	70.8	15.1	9.3	4.5	0.2	0.0	70.3	71.4
Czech Republic	2019	671	53.2	48.6	21.5	13.2	8.0	8.5	0.1	52.8	53.6
	2023	960	56.4	52.6	19.5	11.9	9.2	5.8	1.0	55.7	57.0
Denmark	2019	466	57.9	52.5	16.9	14.7	6.4	6.9	2.5	56.2	59.7
	2023	704	62.2	58.3	14.6	12.7	8.1	4.3	2.0	64.0	60.2
England	2019	484	59.8	56.8	16.1	13.3	8.7	4.3	0.8	60.3	59.4
	2023	568	63.7	61.6	18.5	9.7	6.9	3.3	0.1	59.3	68.0
Finland	2019	676	47.0	44.6	23.8	16.4	10.1	4.3	0.6	46.5	47.5
	2023	811	50.1	48.2	24.1	14.7	9.2	3.7	0.1	50.6	49.6
France	2019	602	46.9	41.2	20.3	14.8	11.5	10.8	1.4	45.0	48.8
	2023	652	51.7	46.5	17.4	12.6	13.5	9.1	0.9	49.4	53.7
Georgia	2019	533	55.9	53.1	13.4	18.9	9.6	4.2	0.7	62.6	48.3
	2023	608	57.1	54.7	17.8	13.2	10.1	2.5	1.8	57.1	57.0
Germany	2019	489	55.8	49.9	19.9	14.0	5.7	10.1	0.4	51.1	60.2
	2023	622	58.1	55.3	18.5	12.2	9.2	4.6	0.2	57.6	58.8
Hong Kong SAR	2019	430	73.2	72.8	15.2	7.5	4.0	0.5	0.0	77.1	70.1
	2023	585	73.2	72.8	15.4	8.0	3.2	0.5	0.0	73.1	73.3
Hungary	2019	651	58.5	57.1	16.3	16.5	7.7	2.3	0.2	56.1	60.6
	2023	730	56.1	55.7	20.1	13.5	10.0	0.7	0.0	55.8	56.5
Italy	2019	541	50.8	46.1	23.7	14.2	6.7	7.3	2.0	46.8	55.2
	2023	625	52.4	47.7	24.2	12.1	7.1	8.1	0.8	49.5	55.1
Korea, Rep. of	2019	555	58.8	57.2	17.7	14.2	8.2	2.8	0.0	51.8	65.1
	2023	385	65.7	64.5	17.6	9.5	6.6	1.4	0.5	62.0	69.3
Lithuania	2019	529	59.6	56.7	23.3	11.3	3.9	4.2	0.5	59.8	59.4
	2023	641	68.7	68.2	19.3	9.2	2.5	0.4	0.2	68.0	69.4
Netherlands	2019	474	56.5	53.1	22.9	10.4	7.6	5.3	0.8	50.3	62.5
	2023	494	55.6	52.8	24.0	13.2	4.9	4.9	0.1	57.1	54.0
Norway (5)	2019	565	60.4	56.3	23.1	8.8	5.1	5.0	1.7	57.9	62.5
	2023	744	55.4	52.6	25.2	10.5	6.6	4.2	0.8	51.4	59.4
Portugal	2019	606	49.3	45.6	26.6	13.5	6.8	6.4	1.2	51.9	47.3
	2023	735	49.7	48.2	26.6	13.1	9.0	2.5	0.6	49.0	50.5
Qatar	2019	710	49.8	47.2	16.7	18.8	12.2	3.7	1.6	49.3	50.2
	2023	897	52.1	51.1	19.1	16.6	11.3	1.2	0.6	48.9	55.3
Singapore	2019	849	74.6	73.6	12.3	8.7	4.1	1.2	0.1	72.7	76.6
	2023	591	71.6	71.5	15.4	8.5	4.5	0.1	0.0	67.6	75.5
Slovak Republic	2019	608	55.5	52.1	19.2	12.9	9.6	5.9	0.2	57.9	53.5
	2023	668	56.8	55.1	18.6	13.0	10.4	2.8	0.2	57.1	56.4
Spain	2019	1365	46.0	43.5	28.1	13.1	9.9	5.2	0.2	43.8	47.6
	2023	1441	45.3	42.8	27.7	14.2	9.8	4.8	0.8	43.7	46.8

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME2\_07 ME61232: Expression for players on teams in football league - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	64.2	58.3	16.2	8.2	8.1	7.9	1.3	67.6	61.3
	2023	723	59.6	56.3	20.7	9.2	8.2	4.3	1.2	55.0	64.3
United Arab Emirates	2019	3685	54.4	52.4	18.6	14.8	10.6	2.3	1.2	53.7	55.1
	2023	5624	57.7	56.8	17.8	13.6	10.2	1.0	0.6	54.9	60.4
United States	2019	1246	63.6	61.8	18.2	10.8	6.4	1.7	1.1	62.3	64.8
	2023	1290	63.6	62.7	18.7	12.2	5.1	0.7	0.7	60.1	66.9
-----											
International Avg. (25)	2019	20362	56.7	53.6	19.8	12.9	7.9	4.9	1.0	55.7	57.7
	2023	24130	58.5	56.3	19.8	12.0	8.0	3.2	0.6	56.8	60.0
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Abu Dhabi, UAE	2019	1295	47.7	45.8	18.5	18.1	13.5	3.0	1.0	48.3	47.3
	2023	2513	52.6	51.8	19.5	15.5	11.6	1.0	0.5	49.7	55.6
Dubai, UAE	2019	1033	63.3	61.8	19.2	10.6	6.0	1.6	0.8	58.8	67.3
	2023	1305	66.6	66.0	16.4	9.7	6.9	0.7	0.3	63.0	69.7
Ontario, Canada	2019	542	59.7	56.9	17.6	11.4	9.3	3.2	1.5	54.3	64.7
	2023	596	60.2	59.0	15.8	13.8	9.5	1.8	0.2	56.6	63.7
Quebec, Canada	2019	555	57.3	53.5	20.6	12.6	6.8	5.5	1.0	56.0	58.1
	2023	545	55.3	53.8	19.9	13.0	10.6	1.9	0.8	55.1	55.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Measurement and Geometry / Knowing  
A\_ME2\_08 ME61095: Identify angle types from diagram in a table (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	61.4	36.6	58.2	3.4	1.8	62.9	60.1
	2023	1937	54.6	43.4	52.2	3.8	0.6	55.1	53.9
Chile	2019	592	29.3	65.3	27.0	3.7	4.0	30.2	28.3
	2023	642	20.6	71.1	18.5	8.4	2.1	18.6	22.4
Chinese Taipei	2019	532	83.5	16.5	83.4	0.1	0.0	86.2	81.1
	2023	453	87.7	12.3	87.7	0.0	0.0	90.1	86.0
Czech Republic	2019	671	39.3	56.8	36.8	5.9	0.5	41.6	37.0
	2023	960	41.3	53.2	37.5	8.1	1.2	42.1	40.6
Denmark	2019	466	64.1	33.2	59.2	4.3	3.4	64.4	63.7
	2023	704	55.0	41.7	51.1	4.7	2.5	58.7	50.8
England	2019	484	68.4	30.2	65.5	3.5	0.8	72.0	65.3
	2023	568	73.4	25.9	71.7	2.1	0.3	74.4	73.7
Finland	2019	676	49.3	48.8	47.4	2.7	1.0	52.8	45.5
	2023	811	53.7	45.0	52.2	2.5	0.4	60.8	46.8
France	2019	602	63.9	34.2	60.4	3.1	2.4	60.0	67.6
	2023	652	63.8	32.9	58.2	7.4	1.5	60.8	66.5
Georgia	2019	533	20.0	72.6	18.2	8.3	0.8	18.9	21.3
	2023	608	31.3	59.5	27.2	11.3	2.0	33.3	29.6
Germany	2019	489	53.2	43.4	49.3	6.7	0.6	53.1	52.7
	2023	622	56.1	41.9	53.6	4.1	0.4	55.3	57.0
Hong Kong SAR	2019	430	91.3	8.7	91.3	0.0	0.0	91.6	91.1
	2023	585	85.2	14.8	85.2	0.0	0.0	88.2	82.2
Hungary	2019	651	54.9	43.4	52.8	3.4	0.4	53.5	56.0
	2023	730	49.3	50.4	49.1	0.5	0.0	50.7	47.9
Italy	2019	541	65.6	32.2	61.6	3.7	2.4	64.5	66.9
	2023	625	61.5	35.6	56.8	6.2	1.4	65.3	57.9
Korea, Rep. of	2019	555	88.9	11.1	88.7	0.2	0.0	88.5	89.2
	2023	385	88.1	11.8	87.3	0.4	0.5	86.2	89.8
Lithuania	2019	529	45.4	52.8	43.8	2.1	1.3	50.7	40.3
	2023	641	55.9	43.5	55.3	1.0	0.2	57.2	54.6
Netherlands	2019	474	36.9	60.4	35.4	2.9	1.3	35.4	38.4
	2023	494	36.2	60.5	34.4	5.0	0.1	35.5	36.8
Norway (5)	2019	565	62.8	35.4	59.7	3.1	1.8	65.9	59.9
	2023	744	39.1	58.1	37.3	3.2	1.4	42.1	36.0
Portugal	2019	606	65.2	33.8	63.3	1.7	1.2	66.5	64.1
	2023	735	59.1	40.1	57.8	1.4	0.7	57.5	60.6
Qatar	2019	710	33.1	62.8	31.1	4.1	2.1	33.9	32.4
	2023	897	38.3	59.6	37.1	2.6	0.7	35.3	41.5
Singapore	2019	849	87.2	12.7	86.7	0.4	0.1	89.7	84.7
	2023	591	87.6	12.4	87.6	0.0	0.0	88.3	86.9
Slovak Republic	2019	608	25.4	68.0	23.2	8.5	0.4	25.2	25.6
	2023	668	30.6	64.7	28.5	6.5	0.2	32.0	29.2
Spain	2019	1366	51.7	47.1	50.4	2.0	0.4	56.9	47.6
	2023	1441	52.8	45.7	51.1	2.2	1.0	52.0	53.7

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Knowing

A\_ME2\_08 ME61095: Identify angle types from diagram in a table (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	54.9	42.2	51.5	4.3	2.0	62.4	48.3
	2023	723	53.2	44.6	50.7	3.5	1.2	51.1	55.4
United Arab Emirates	2019	3682	44.6	52.8	42.5	3.2	1.5	46.7	42.4
	2023	5625	48.9	49.4	47.2	2.7	0.7	49.4	48.4
United States	2019	1246	61.3	37.7	59.7	1.1	1.5	63.3	59.3
	2023	1290	58.4	40.7	57.2	1.2	0.8	59.5	57.4
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International Avg. (25)	2019	20360	56.1	41.6	53.9	3.3	1.3	57.5	54.7
	2023	24131	55.3	42.4	53.3	3.5	0.8	56.0	54.6
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Abu Dhabi, UAE	2019	1294	33.2	62.8	31.3	4.5	1.5	35.4	30.9
	2023	2513	38.8	58.9	37.3	3.0	0.7	39.5	38.0
Dubai, UAE	2019	1033	63.1	36.1	61.8	1.2	0.9	64.8	61.6
	2023	1306	65.9	33.6	64.9	1.1	0.4	67.6	64.4
Ontario, Canada	2019	542	66.9	31.4	63.7	3.2	1.6	67.4	66.6
	2023	596	55.4	42.7	53.1	4.1	0.2	57.2	53.0
Quebec, Canada	2019	555	72.0	27.2	69.9	1.7	1.2	73.5	70.8
	2023	545	69.4	29.9	68.0	1.3	0.8	67.9	70.8
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME2\_09 ME61264: Label points on the Snail path - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	44.0	36.4	24.3	25.9	11.3	2.1	43.1	44.7
	2023	1937	37.2	46.1	22.6	22.8	7.4	1.2	35.1	39.6
Chile	2019	592	36.5	31.9	19.4	14.2	29.1	5.4	38.5	34.7
	2023	642	30.6	43.2	22.5	12.7	18.5	3.1	26.3	34.2
Chinese Taipei	2019	532	53.7	30.9	25.5	37.7	5.8	0.1	53.4	53.9
	2023	453	58.7	28.1	25.3	45.3	1.4	0.0	62.0	56.2
Czech Republic	2019	671	53.8	27.0	23.6	33.3	15.0	1.1	53.6	54.0
	2023	960	47.3	35.6	24.1	30.6	8.1	1.5	48.0	46.6
Denmark	2019	466	55.5	25.4	22.8	34.6	13.0	4.2	52.4	58.9
	2023	704	46.4	35.6	21.4	29.5	10.6	2.9	45.4	47.7
England	2019	484	51.9	31.8	24.8	35.2	7.1	1.0	55.5	48.5
	2023	568	53.5	29.0	27.9	35.4	7.0	0.7	52.7	54.7
Finland	2019	676	59.1	23.0	27.5	39.4	9.0	1.1	62.5	55.6
	2023	811	56.6	27.5	21.4	39.3	11.3	0.5	60.5	52.6
France	2019	602	37.8	36.3	28.0	16.6	16.5	2.6	37.7	38.0
	2023	652	32.8	40.0	24.6	13.2	20.4	1.8	31.2	34.3
Georgia	2019	532	29.6	37.4	18.7	10.3	32.1	1.5	30.4	28.7
	2023	608	31.8	42.5	20.7	14.3	19.1	3.4	30.9	32.7
Germany	2019	489	41.5	35.1	23.9	21.4	18.6	1.0	39.2	43.7
	2023	622	40.2	40.8	23.0	23.6	11.6	1.0	38.1	42.5
Hong Kong SAR	2019	430	53.1	29.1	28.6	34.8	7.4	0.0	50.7	55.0
	2023	585	51.9	33.3	24.3	36.8	5.7	0.0	49.2	54.4
Hungary	2019	651	45.0	37.5	23.8	28.5	9.6	0.5	43.0	46.8
	2023	730	38.9	47.9	21.9	26.5	3.8	0.0	37.6	40.3
Italy	2019	541	45.7	32.9	26.4	25.7	12.3	2.7	42.9	48.9
	2023	625	35.6	43.3	25.0	18.4	11.9	1.5	34.1	37.1
Korea, Rep. of	2019	555	71.2	15.9	24.4	57.3	2.2	0.2	72.1	70.4
	2023	385	65.3	23.3	21.1	52.9	2.1	0.7	65.7	64.8
Lithuania	2019	529	42.8	36.7	25.5	24.3	12.2	1.3	39.1	46.5
	2023	641	39.6	45.1	23.3	25.5	5.9	0.2	37.1	42.0
Netherlands	2019	474	44.8	39.7	22.8	30.1	5.9	1.5	44.2	45.4
	2023	494	42.3	43.2	22.5	28.6	5.6	0.1	42.4	42.1
Norway (5)	2019	565	54.3	26.1	26.5	33.5	11.5	2.4	55.7	53.1
	2023	744	47.9	33.5	24.9	29.8	10.3	1.5	51.7	43.9
Portugal	2019	606	48.2	30.8	29.0	27.6	11.3	1.3	50.9	46.0
	2023	735	41.4	40.4	27.7	24.4	6.6	1.0	38.1	44.7
Qatar	2019	710	29.4	40.9	12.1	13.5	30.2	3.3	29.0	29.9
	2023	897	24.9	55.9	16.9	12.9	13.2	1.1	24.9	25.0
Singapore	2019	849	64.3	22.2	24.7	49.9	3.0	0.1	65.1	63.5
	2023	591	60.9	27.0	23.5	48.7	0.8	0.0	60.4	61.4
Slovak Republic	2019	608	49.3	30.2	24.5	29.0	15.9	0.4	48.3	50.1
	2023	668	45.3	36.6	28.6	27.9	6.6	0.2	45.6	45.1
Spain	2019	1366	43.9	34.4	29.5	23.7	11.7	0.7	45.2	42.8
	2023	1441	41.0	39.7	26.3	23.5	9.4	1.1	41.8	40.1

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME2\_09 ME61264: Label points on the Snail path - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	57.4	22.8	22.2	34.7	17.6	2.7	56.1	58.7
	2023	723	56.7	26.7	20.5	38.1	13.2	1.5	53.6	59.8
United Arab Emirates	2019	3687	34.7	41.7	16.7	18.2	21.3	2.1	34.3	35.1
	2023	5625	36.6	48.0	19.6	23.6	7.7	1.1	35.7	37.5
United States	2019	1246	35.3	47.2	23.3	20.5	7.5	1.5	32.0	38.4
	2023	1290	33.8	51.0	21.0	21.0	6.0	1.0	30.6	36.9
-----										
International Avg. (25)	2019	20364	47.3	32.1	23.9	28.8	13.5	1.6	47.0	47.6
	2023	24131	43.9	38.5	23.2	28.2	9.0	1.1	43.2	44.6
-----										
Abu Dhabi, UAE	2019	1296	23.3	48.8	13.2	10.2	25.8	2.0	23.8	22.6
	2023	2513	29.4	55.5	16.9	18.1	8.3	1.2	29.2	29.6
Dubai, UAE	2019	1033	46.5	35.7	25.1	29.4	8.7	1.3	45.5	47.4
	2023	1306	52.0	33.1	25.4	36.9	3.9	0.6	51.1	52.8
Ontario, Canada	2019	542	41.2	39.0	22.6	23.9	12.9	1.7	40.6	41.6
	2023	596	37.0	46.5	22.5	22.7	7.5	0.8	35.4	39.5
Quebec, Canada	2019	555	50.1	32.8	26.9	33.0	5.5	1.8	49.9	50.2
	2023	545	39.6	43.4	23.6	24.4	7.2	1.3	35.8	43.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning

A\_ME2\_10 ME61108: Choose cardboard for Julia's hexagonal box - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	55.5	18.1	52.8	15.0	9.4	2.1	2.8	53.3	57.3
	2023	1937	50.9	22.5	49.8	16.8	8.7	0.7	1.4	52.6	49.1
Chile	2019	592	50.6	22.3	46.2	12.2	10.5	2.3	6.5	54.6	46.6
	2023	642	48.0	27.6	45.7	16.3	5.7	0.9	3.9	48.3	47.7
Chinese Taipei	2019	532	56.9	20.0	56.8	14.3	8.8	0.1	0.1	58.5	55.4
	2023	453	59.2	17.3	59.0	15.6	7.8	0.2	0.0	56.1	61.5
Czech Republic	2019	671	49.4	25.4	47.2	12.4	10.6	2.9	1.6	53.2	45.5
	2023	960	48.2	23.8	46.7	13.4	13.0	1.6	1.5	47.6	48.8
Denmark	2019	466	42.3	23.2	38.7	19.2	10.4	3.9	4.6	42.6	42.0
	2023	704	50.4	22.2	48.2	16.1	9.1	1.3	3.0	55.1	44.7
England	2019	484	45.4	18.0	43.5	23.2	11.1	2.6	1.6	48.6	42.5
	2023	568	46.9	21.9	45.5	19.0	10.5	2.2	1.0	46.6	47.7
Finland	2019	676	48.3	23.6	45.8	14.3	11.1	3.0	2.2	50.2	46.3
	2023	811	53.4	20.3	52.2	17.1	8.1	1.7	0.7	55.2	51.7
France	2019	602	41.7	26.9	39.2	17.5	10.6	2.9	2.9	45.3	38.2
	2023	652	40.5	28.0	38.6	16.0	12.7	1.9	2.8	38.5	42.3
Georgia	2019	534	37.9	31.2	36.0	15.5	12.3	3.1	2.0	37.8	38.0
	2023	608	41.6	31.4	39.5	15.3	8.7	1.4	3.7	39.7	43.5
Germany	2019	489	50.3	20.2	48.1	16.7	10.5	2.4	2.0	48.0	52.7
	2023	622	50.8	19.6	49.5	19.6	8.8	1.3	1.2	46.4	55.5
Hong Kong SAR	2019	430	58.7	22.0	58.4	13.8	5.3	0.4	0.0	58.1	59.1
	2023	585	59.3	19.7	59.0	13.6	7.2	0.4	0.2	57.5	61.1
Hungary	2019	651	51.3	22.0	50.3	15.2	10.6	1.4	0.5	49.3	53.0
	2023	730	48.6	22.8	48.5	18.3	10.3	0.1	0.0	52.3	44.6
Italy	2019	541	48.2	22.1	45.6	19.1	7.9	2.4	2.9	50.0	46.1
	2023	625	44.8	26.4	43.0	15.9	10.7	2.1	1.9	47.1	42.6
Korea, Rep. of	2019	555	69.3	14.9	68.9	9.6	6.1	0.4	0.2	68.7	69.8
	2023	385	59.1	19.9	58.5	13.0	7.7	0.3	0.7	55.8	62.2
Lithuania	2019	529	56.2	19.4	54.7	16.3	6.9	1.3	1.3	55.0	57.4
	2023	641	59.0	17.5	58.7	15.2	8.0	0.3	0.2	57.5	60.5
Netherlands	2019	474	49.1	23.6	47.3	15.8	9.7	2.0	1.6	52.5	45.6
	2023	494	52.3	18.8	51.3	20.3	7.6	1.6	0.3	52.0	52.5
Norway (5)	2019	565	46.7	24.6	44.4	15.6	10.7	1.6	3.1	50.5	43.2
	2023	744	52.5	21.5	51.3	16.1	8.8	0.5	1.8	56.1	48.8
Portugal	2019	606	56.7	17.4	54.4	17.5	6.6	2.7	1.5	58.6	55.2
	2023	735	56.8	16.6	55.9	18.4	7.6	0.5	1.0	53.5	60.1
Qatar	2019	710	33.6	34.4	31.5	13.7	14.0	2.9	3.5	33.0	34.2
	2023	897	36.4	31.5	35.3	17.1	13.1	1.3	1.6	37.7	35.1
Singapore	2019	849	57.3	19.3	57.0	14.8	8.4	0.2	0.2	56.2	58.4
	2023	591	59.7	16.7	59.6	14.7	8.9	0.2	0.0	60.9	58.5
Slovak Republic	2019	608	44.1	29.3	43.5	14.3	11.4	0.8	0.7	42.5	45.6
	2023	668	44.5	27.2	43.9	17.3	10.3	1.1	0.2	42.9	46.2
Spain	2019	1365	46.3	25.2	44.7	13.5	13.1	2.4	1.0	45.0	47.3
	2023	1441	46.4	23.5	45.2	15.8	12.9	1.3	1.3	44.8	47.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning

A\_ME2\_10 ME61108: Choose cardboard for Julia's hexagonal box - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	48.1	23.1	44.9	13.4	12.0	2.3	4.4	49.7	46.7
	2023	723	50.1	23.0	48.1	16.9	7.9	1.8	2.2	50.2	50.1
United Arab Emirates	2019	3682	41.9	27.8	40.0	16.2	11.5	1.8	2.7	42.8	41.0
	2023	5625	46.6	27.7	45.5	15.4	8.9	1.0	1.5	47.5	45.8
United States	2019	1246	42.0	29.9	40.6	15.6	10.7	1.0	2.3	41.0	42.8
	2023	1290	46.2	27.6	45.1	15.0	10.0	0.8	1.5	42.6	49.6
-----											
International Avg. (25)	2019	20360	49.1	23.4	47.2	15.4	10.0	2.0	2.1	49.8	48.4
	2023	24131	50.1	23.0	48.9	16.3	9.3	1.1	1.3	49.8	50.3
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Abu Dhabi, UAE	2019	1294	34.1	32.6	32.5	15.6	14.6	2.4	2.2	34.7	33.5
	2023	2513	41.4	31.2	40.3	15.8	9.9	1.2	1.5	41.3	41.6
Dubai, UAE	2019	1033	53.0	22.4	51.4	14.6	8.7	1.6	1.4	54.6	51.5
	2023	1306	55.6	21.7	54.8	15.0	7.1	0.8	0.7	57.4	54.0
Ontario, Canada	2019	542	58.3	17.2	55.4	13.3	9.2	2.5	2.4	56.1	60.3
	2023	596	48.5	24.2	47.5	16.8	9.4	0.8	1.2	52.7	43.4
Quebec, Canada	2019	555	58.4	17.8	56.5	16.2	6.2	1.2	2.2	57.7	58.9
	2023	545	56.9	18.3	55.8	16.4	7.5	0.6	1.3	58.1	55.8
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing

A\_ME2\_11A ME61211A: Fruit market - pieces of fruit sold on Monday - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	54.4	42.7	51.0	3.0	3.2	52.0	56.6
	2023	1937	52.7	44.4	49.5	4.4	1.7	49.9	55.3
Chile	2019	592	24.6	66.9	21.9	4.3	7.0	23.6	25.7
	2023	640	43.5	47.5	36.6	11.8	4.1	39.5	47.0
Chinese Taipei	2019	532	70.2	29.6	69.8	0.6	0.1	67.6	72.6
	2023	453	79.1	20.4	77.0	2.4	0.2	81.9	76.9
Czech Republic	2019	671	20.1	74.7	18.8	3.8	2.6	17.6	22.7
	2023	958	20.8	70.5	18.5	9.3	1.8	22.8	19.0
Denmark	2019	466	35.2	59.6	32.4	2.1	6.0	33.3	37.2
	2023	704	44.6	50.8	40.9	5.0	3.3	40.9	49.0
England	2019	484	59.7	38.3	56.8	2.7	2.3	63.1	56.6
	2023	568	64.5	33.9	61.6	3.3	1.2	62.0	68.4
Finland	2019	676	46.9	50.5	44.6	2.1	2.8	46.6	47.2
	2023	811	53.4	44.2	50.6	4.3	0.9	57.9	48.8
France	2019	602	23.3	71.0	21.5	4.0	3.5	17.2	29.3
	2023	651	31.1	59.6	26.9	10.0	3.4	28.6	33.3
Georgia	2019	533	30.9	62.7	28.0	6.8	2.6	30.4	31.4
	2023	608	49.9	43.3	43.1	9.6	4.0	54.0	45.8
Germany	2019	489	45.8	51.0	43.1	3.5	2.4	41.5	49.4
	2023	621	48.7	48.4	45.9	4.3	1.4	45.8	52.0
Hong Kong SAR	2019	430	81.4	18.5	81.3	0.2	0.0	80.5	82.2
	2023	583	74.9	24.2	72.2	3.4	0.2	75.7	74.1
Hungary	2019	651	22.1	76.1	21.6	1.5	0.8	17.1	26.3
	2023	728	24.3	73.3	23.5	3.2	0.0	22.1	26.6
Italy	2019	541	34.8	61.6	32.9	2.0	3.6	31.2	38.8
	2023	623	42.8	53.2	39.8	5.0	2.1	33.0	52.2
Korea, Rep. of	2019	555	77.4	22.4	76.8	0.6	0.2	73.9	80.5
	2023	385	73.5	25.9	72.1	1.3	0.7	65.9	80.9
Lithuania	2019	529	53.3	44.6	50.9	3.1	1.4	51.0	55.5
	2023	641	59.6	39.5	58.3	2.0	0.2	58.3	60.9
Netherlands	2019	474	61.7	36.2	58.5	3.5	1.8	58.2	65.2
	2023	493	64.5	32.9	59.8	6.3	1.1	61.0	68.1
Norway (5)	2019	565	49.4	48.1	46.9	1.6	3.4	49.2	49.5
	2023	743	53.9	43.0	50.3	4.6	2.1	53.5	54.4
Portugal	2019	606	57.9	40.1	55.1	2.6	2.2	53.7	61.2
	2023	735	58.1	40.8	56.7	1.0	1.4	51.4	65.0
Qatar	2019	710	27.0	66.3	24.5	5.1	4.1	28.3	25.7
	2023	897	38.2	54.7	33.9	9.3	2.2	33.9	42.9
Singapore	2019	849	77.4	22.4	76.9	0.4	0.2	75.6	79.3
	2023	591	74.9	24.5	73.0	2.5	0.0	71.6	78.2
Slovak Republic	2019	608	21.7	75.6	21.0	2.8	0.7	19.0	24.3
	2023	668	28.5	66.3	26.4	7.0	0.3	28.6	28.4
Spain	2019	1365	29.4	67.6	28.2	2.5	1.6	28.6	30.0
	2023	1440	32.8	63.0	30.8	4.5	1.6	29.7	36.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing

A\_ME2\_11A ME61211A: Fruit market - pieces of fruit sold on Monday - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	31.8	62.8	29.3	3.3	4.6	31.2	32.3
	2023	723	35.1	59.8	32.4	5.1	2.7	28.2	42.3
United Arab Emirates	2019	3687	38.2	57.7	35.6	3.7	2.9	37.0	39.4
	2023	5625	45.4	49.0	40.8	8.3	1.9	43.7	47.0
United States	2019	1246	56.9	40.3	53.2	3.8	2.7	50.7	62.7
	2023	1290	54.1	41.5	48.9	7.9	1.7	51.9	56.3
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International Avg. (25)	2019	20364	45.3	51.5	43.2	2.8	2.5	43.1	47.3
	2023	24116	50.0	46.2	46.8	5.4	1.6	47.6	52.4
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Abu Dhabi, UAE	2019	1296	25.3	69.5	23.6	4.5	2.4	24.1	26.6
	2023	2513	35.9	56.2	31.4	10.4	2.0	35.2	36.5
Dubai, UAE	2019	1033	62.5	36.1	60.1	2.0	1.8	59.1	65.4
	2023	1306	63.8	34.3	60.4	4.3	1.1	58.9	68.0
Ontario, Canada	2019	542	60.5	36.9	56.6	3.2	3.2	60.7	60.3
	2023	596	55.7	41.8	52.6	3.9	1.6	52.5	58.7
Quebec, Canada	2019	555	49.6	47.5	46.9	3.2	2.4	45.2	53.6
	2023	545	51.5	46.1	49.0	3.5	1.3	53.0	50.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Data / Applying

A\_ME2\_11B ME61211B: Fruit market - apples sold on Tuesday - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1949	46.9	23.7	41.3	12.5	10.6	6.8	5.2	39.0	53.6
	2023	1937	48.3	24.7	45.8	11.0	13.4	3.1	1.9	43.2	53.0
Chile	2019	592	34.5	15.1	30.0	19.9	22.0	5.0	8.1	31.9	37.0
	2023	642	48.9	22.4	43.9	13.3	10.2	4.3	5.8	47.9	49.7
Chinese Taipei	2019	532	65.4	20.6	63.9	5.2	8.0	2.2	0.1	61.8	68.6
	2023	453	62.7	24.9	62.4	4.0	8.2	0.3	0.2	62.1	63.2
Czech Republic	2019	671	37.8	6.0	33.7	16.3	33.3	6.8	3.9	38.8	36.6
	2023	960	34.6	7.7	30.7	16.4	34.1	8.1	3.0	38.4	31.2
Denmark	2019	466	41.8	11.2	36.3	12.2	27.1	5.5	7.6	39.1	44.7
	2023	704	50.5	10.9	46.8	12.7	22.4	2.7	4.6	48.9	52.2
England	2019	484	57.0	18.2	53.8	8.4	14.0	2.6	3.0	56.7	57.4
	2023	568	60.9	20.5	58.1	8.0	8.9	2.8	1.7	55.7	66.4
Finland	2019	676	51.3	19.5	47.2	12.2	13.0	4.0	4.0	50.8	51.9
	2023	811	54.2	22.0	51.2	8.5	12.9	4.0	1.4	51.7	56.5
France	2019	602	39.1	10.5	35.0	20.5	23.4	5.1	5.4	37.2	41.1
	2023	652	38.8	14.3	33.4	17.5	20.9	8.4	5.4	39.4	38.2
Georgia	2019	534	42.0	17.1	34.8	18.0	12.9	13.5	3.6	36.6	47.6
	2023	608	52.5	19.3	46.0	10.0	12.2	6.7	5.6	54.0	51.0
Germany	2019	489	49.7	16.7	45.1	12.7	16.3	5.3	3.9	43.6	54.9
	2023	622	48.8	19.4	45.5	11.7	16.5	4.3	2.7	46.3	51.7
Hong Kong SAR	2019	430	74.8	15.0	73.9	3.3	6.6	1.2	0.0	77.2	72.8
	2023	585	70.6	15.8	70.3	5.1	8.4	0.2	0.2	70.2	71.1
Hungary	2019	651	36.5	9.0	34.4	20.3	30.5	4.5	1.2	34.9	37.8
	2023	730	37.1	8.9	35.3	17.7	33.1	4.4	0.5	38.3	35.9
Italy	2019	541	49.2	14.9	44.2	15.6	15.2	5.5	4.7	47.1	51.5
	2023	625	49.3	16.3	44.7	14.2	15.6	6.9	2.4	46.9	51.5
Korea, Rep. of	2019	555	64.5	24.9	63.5	4.4	5.7	1.0	0.5	59.6	68.7
	2023	385	69.7	19.3	67.3	3.6	6.3	2.8	0.7	61.9	77.4
Lithuania	2019	529	51.9	23.4	49.6	10.9	11.7	2.4	1.9	52.7	51.1
	2023	641	59.4	18.0	58.0	8.3	13.3	1.8	0.6	59.8	59.1
Netherlands	2019	474	55.6	26.3	52.9	7.8	8.2	2.1	2.6	49.8	61.1
	2023	494	59.5	20.3	57.0	8.4	10.2	2.5	1.7	56.1	62.6
Norway (5)	2019	565	51.5	14.5	46.8	9.8	19.8	4.8	4.3	46.9	55.4
	2023	744	54.3	20.7	50.9	9.0	13.0	3.3	3.1	55.8	52.9
Portugal	2019	606	60.0	21.4	55.3	7.8	7.6	4.2	3.7	57.6	61.9
	2023	735	52.6	24.2	49.6	8.1	12.4	4.1	1.6	47.7	57.6
Qatar	2019	710	42.2	16.8	37.1	15.0	19.1	6.8	5.2	41.3	43.0
	2023	897	48.1	15.5	44.9	13.3	19.6	3.8	3.0	41.5	54.9
Singapore	2019	849	76.7	11.9	75.6	4.6	6.5	1.1	0.4	72.9	80.6
	2023	591	71.9	16.7	71.3	4.7	6.4	0.8	0.0	68.2	75.6
Slovak Republic	2019	608	39.2	10.0	36.7	18.5	28.6	4.5	1.8	34.6	43.2
	2023	668	43.5	10.3	41.1	15.9	27.1	3.8	1.7	45.4	41.6
Spain	2019	1365	39.8	12.0	37.6	17.5	27.4	3.1	2.5	40.2	39.4
	2023	1441	42.7	13.9	39.9	15.6	24.0	3.9	2.7	40.9	44.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying

A\_ME2\_11B ME61211B: Fruit market - apples sold on Tuesday - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	554	43.0	12.2	38.3	11.9	26.7	4.5	6.4	45.4	40.9
	2023	723	43.0	11.3	39.6	15.1	26.0	4.8	3.3	40.8	45.2
United Arab Emirates	2019	3685	46.9	17.3	42.7	14.0	17.1	5.1	3.8	45.2	48.5
	2023	5625	52.1	15.6	48.9	12.0	17.3	3.8	2.5	49.1	54.9
United States	2019	1246	51.4	24.3	48.4	10.2	11.2	2.3	3.7	46.3	56.1
	2023	1290	51.4	24.1	48.8	9.5	12.5	2.9	2.2	47.7	54.8
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International Avg. (25)	2019	20363	49.9	16.5	46.3	12.4	16.9	4.4	3.5	47.5	52.2
	2023	24131	52.2	17.5	49.3	10.9	16.2	3.8	2.3	50.3	54.1
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Abu Dhabi, UAE	2019	1296	38.2	16.9	34.7	18.3	20.8	5.8	3.5	37.8	38.5
	2023	2513	44.5	15.1	41.5	15.0	21.6	4.3	2.6	43.0	46.0
Dubai, UAE	2019	1033	60.4	19.4	57.7	7.4	11.1	1.9	2.5	58.5	62.0
	2023	1306	65.1	16.3	62.6	8.0	9.3	2.2	1.6	60.6	68.9
Ontario, Canada	2019	542	48.0	25.5	41.6	11.9	7.5	8.2	5.2	38.2	56.7
	2023	596	50.4	25.0	47.9	11.0	11.0	3.1	1.9	50.1	50.0
Quebec, Canada	2019	555	46.2	24.1	42.7	11.9	13.7	2.6	5.1	40.6	50.7
	2023	545	45.1	27.4	43.2	9.9	15.3	2.9	1.3	35.2	54.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME4\_01 ME61240: Place value expansion (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	38.6	61.0	38.3	0.7	0.1	33.5	43.5
	2023	1883	43.7	56.1	43.6	0.2	0.0	36.1	51.2
Chile	2019	602	14.4	84.3	14.2	1.1	0.5	13.1	15.7
	2023	650	16.1	82.2	15.8	1.7	0.3	12.4	19.6
Chinese Taipei	2019	531	65.2	34.7	65.1	0.2	0.0	64.1	66.2
	2023	446	76.9	23.1	76.9	0.0	0.0	75.7	78.2
Czech Republic	2019	681	39.2	60.5	38.9	0.4	0.2	35.2	42.7
	2023	948	43.1	56.4	42.7	0.7	0.1	39.0	47.3
Denmark	2019	461	36.4	62.5	35.8	1.1	0.6	36.1	36.7
	2023	707	40.8	57.9	40.0	2.1	0.0	40.7	40.9
England	2019	499	40.0	59.5	39.7	0.9	0.0	38.2	41.8
	2023	569	50.2	49.8	50.2	0.0	0.0	42.7	57.1
Finland	2019	679	35.7	63.7	35.3	0.6	0.4	31.2	39.9
	2023	767	40.5	59.0	40.2	0.8	0.0	37.3	43.9
France	2019	595	32.1	66.9	31.6	1.4	0.2	26.7	36.6
	2023	663	38.5	61.2	38.4	0.3	0.1	34.6	42.6
Georgia	2019	539	30.9	66.4	29.7	3.2	0.7	22.6	40.2
	2023	616	25.9	72.2	25.3	1.7	0.8	20.1	32.9
Germany	2019	492	42.4	57.0	41.9	1.0	0.0	40.8	44.0
	2023	626	41.8	58.0	41.7	0.3	0.0	35.0	48.8
Hong Kong SAR	2019	418	53.9	45.8	53.5	0.5	0.2	54.6	53.6
	2023	571	58.9	41.0	58.7	0.2	0.0	53.9	64.3
Hungary	2019	648	58.9	41.0	58.7	0.4	0.0	54.8	62.7
	2023	738	67.1	32.8	66.8	0.5	0.0	63.5	70.8
Italy	2019	535	28.6	70.9	28.4	0.6	0.1	20.9	36.0
	2023	620	32.0	67.4	31.7	0.9	0.0	20.4	42.2
Korea, Rep. of	2019	554	51.6	48.3	51.6	0.1	0.0	45.8	57.3
	2023	363	60.6	39.3	60.3	0.5	0.0	55.4	67.0
Lithuania	2019	538	30.4	68.6	29.9	1.5	0.0	20.4	39.2
	2023	627	38.2	61.7	38.2	0.0	0.2	29.1	46.0
Netherlands	2019	475	34.3	64.6	33.7	1.0	0.6	24.7	43.6
	2023	503	35.3	64.4	35.2	0.2	0.2	31.9	39.3
Norway (5)	2019	556	35.0	64.0	34.5	0.8	0.7	35.2	34.8
	2023	727	42.7	57.0	42.4	0.3	0.2	35.6	49.4
Portugal	2019	609	14.1	85.5	14.0	0.4	0.0	11.2	16.8
	2023	728	19.5	80.3	19.5	0.0	0.2	13.7	24.4
Qatar	2019	710	15.9	83.1	15.7	1.2	0.0	9.9	21.8
	2023	891	21.9	77.7	21.7	0.4	0.2	15.4	27.3
Singapore	2019	857	66.7	33.3	66.6	0.1	0.0	60.8	72.5
	2023	599	57.2	42.8	57.2	0.0	0.0	54.2	60.0
Slovak Republic	2019	605	26.7	72.6	26.5	0.9	0.0	21.4	31.6
	2023	663	28.7	70.9	28.6	0.5	0.0	21.5	35.8
Spain	2019	1372	31.4	67.8	31.0	1.2	0.0	24.8	37.4
	2023	1409	20.9	77.9	20.6	1.4	0.1	15.4	26.0

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME4\_01 ME61240: Place value expansion (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	29.4	69.6	29.0	0.8	0.6	24.8	33.4
	2023	696	33.3	66.0	32.9	1.0	0.1	31.3	35.4
United Arab Emirates	2019	3689	19.0	80.1	18.8	0.9	0.2	15.7	22.5
	2023	5586	25.2	74.6	25.2	0.2	0.1	20.0	30.0
United States	2019	1242	37.5	62.1	37.3	0.3	0.4	33.1	41.6
	2023	1301	42.6	57.2	42.5	0.2	0.1	36.2	49.1
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International Avg. (25)	2019	20389	36.3	63.0	36.0	0.8	0.2	32.0	40.5
	2023	23897	40.1	59.5	39.8	0.6	0.1	34.8	45.2
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Abu Dhabi, UAE	2019	1289	12.7	85.9	12.5	1.3	0.2	10.2	15.5
	2023	2479	20.2	79.6	20.2	0.1	0.1	14.7	25.3
Dubai, UAE	2019	1046	29.6	70.2	29.5	0.2	0.2	28.2	31.0
	2023	1288	36.3	63.7	36.3	0.1	0.0	29.4	42.6
Ontario, Canada	2019	540	34.7	64.7	34.4	1.0	0.0	28.5	40.0
	2023	595	37.2	62.7	37.1	0.2	0.0	28.6	46.9
Quebec, Canada	2019	540	53.7	46.1	53.4	0.4	0.1	49.1	58.6
	2023	532	59.9	40.1	59.8	0.1	0.0	54.9	63.8
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying  
A\_ME4\_02 ME61254: Complete the table for Mia's input-output game (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	39.6	58.4	38.3	3.2	0.2	41.0	38.2
	2023	1883	44.1	54.7	43.1	2.1	0.1	44.7	43.6
Chile	2019	602	31.2	65.0	29.5	4.8	0.8	33.8	28.6
	2023	650	28.3	67.3	26.6	5.7	0.4	27.7	28.9
Chinese Taipei	2019	531	66.2	33.5	65.7	0.8	0.0	64.9	67.3
	2023	446	71.0	28.8	70.7	0.5	0.0	73.1	68.7
Czech Republic	2019	681	56.2	40.7	52.2	7.0	0.2	57.1	55.4
	2023	948	53.4	44.1	50.6	5.2	0.1	51.2	55.5
Denmark	2019	461	57.6	40.4	54.8	4.2	0.6	58.1	57.1
	2023	707	55.3	43.1	53.3	3.5	0.2	54.8	55.8
England	2019	499	55.1	43.1	52.9	3.8	0.2	59.6	50.9
	2023	569	56.4	42.2	54.5	3.3	0.0	58.2	54.8
Finland	2019	679	54.6	43.9	52.8	3.0	0.4	54.9	54.3
	2023	767	54.9	43.6	53.0	3.4	0.0	58.6	51.1
France	2019	595	32.9	57.3	28.0	14.5	0.2	33.4	32.4
	2023	663	39.6	55.4	36.3	8.2	0.1	41.8	37.2
Georgia	2019	537	43.3	47.6	36.3	15.3	0.9	41.0	45.6
	2023	616	53.7	42.8	49.7	6.4	1.1	57.6	49.1
Germany	2019	492	45.8	49.9	42.1	8.0	0.0	47.3	44.3
	2023	626	47.1	50.6	45.1	4.4	0.0	48.9	45.3
Hong Kong SAR	2019	418	72.4	27.3	71.5	1.0	0.2	78.6	67.2
	2023	571	58.3	41.6	58.1	0.3	0.0	53.8	63.2
Hungary	2019	648	57.5	41.8	56.6	1.7	0.0	60.0	55.2
	2023	738	55.1	44.2	54.3	1.5	0.0	56.7	53.5
Italy	2019	535	55.9	41.7	53.0	5.0	0.3	54.6	57.2
	2023	620	57.8	41.2	56.6	2.2	0.0	54.4	60.8
Korea, Rep. of	2019	554	74.8	25.1	74.5	0.3	0.0	78.7	71.6
	2023	363	77.0	22.8	76.4	0.8	0.0	69.4	86.6
Lithuania	2019	538	61.4	37.0	58.8	4.3	0.0	62.5	60.4
	2023	627	73.3	26.4	72.5	0.9	0.2	77.2	70.0
Netherlands	2019	475	42.9	53.1	39.9	6.5	0.6	46.2	39.6
	2023	503	47.4	50.9	45.9	3.0	0.2	45.4	48.3
Norway (5)	2019	556	52.7	45.1	50.2	3.6	1.1	53.8	51.7
	2023	727	54.5	43.9	52.6	3.3	0.2	49.7	59.1
Portugal	2019	609	40.1	58.3	38.9	2.7	0.1	40.5	39.7
	2023	728	40.6	58.0	39.7	2.1	0.2	38.0	42.8
Qatar	2019	710	34.9	63.6	34.1	2.2	0.2	36.3	33.4
	2023	891	43.2	55.8	42.4	1.6	0.2	43.9	42.6
Singapore	2019	857	68.7	31.2	68.7	0.1	0.0	69.3	68.2
	2023	599	70.0	30.0	70.0	0.0	0.0	71.9	68.2
Slovak Republic	2019	605	45.8	51.9	43.8	4.2	0.0	44.0	47.4
	2023	663	47.3	50.7	45.6	3.6	0.0	41.8	52.7
Spain	2019	1372	51.8	46.6	50.0	3.2	0.2	52.2	51.4
	2023	1409	58.1	40.4	56.1	3.4	0.1	58.4	57.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying  
A\_ME4\_02 ME61254: Complete the table for Mia's input-output game (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	43.7	51.0	39.7	8.6	0.6	44.2	43.3
	2023	696	46.1	51.0	43.6	5.3	0.1	46.2	46.0
United Arab Emirates	2019	3683	44.2	54.4	43.1	2.0	0.4	46.3	42.2
	2023	5571	50.1	49.5	49.7	0.7	0.1	50.0	50.1
United States	2019	1242	49.7	49.9	49.3	0.4	0.4	51.0	48.4
	2023	1301	48.4	51.1	47.9	0.9	0.1	48.2	48.6
International Avg. (25)	2019	20381	51.2	46.3	49.0	4.4	0.3	52.4	50.0
	2023	23882	53.2	45.2	51.8	2.9	0.1	52.9	53.6
Abu Dhabi, UAE	2019	1286	34.8	63.6	34.0	1.9	0.5	36.7	33.1
	2023	2480	41.2	58.4	40.9	0.5	0.1	41.3	41.1
Dubai, UAE	2019	1046	58.5	41.0	57.8	1.1	0.2	61.3	55.7
	2023	1283	64.8	35.0	64.5	0.5	0.0	63.0	66.5
Ontario, Canada	2019	540	37.3	60.9	36.2	2.8	0.1	39.3	35.5
	2023	595	43.4	55.6	42.7	1.7	0.0	39.4	48.3
Quebec, Canada	2019	540	45.3	52.4	43.5	4.0	0.1	47.7	42.5
	2023	532	44.7	54.3	43.9	1.9	0.0	50.3	39.8

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_ME4\_03 ME61244: Choose true Statement about 2 and 3 digit numbers - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	65.2	11.0	12.8	63.4	10.0	1.9	0.9	64.0	66.4
	2023	1881	65.6	11.2	12.9	65.2	10.0	0.5	0.2	65.0	66.3
Chile	2019	602	49.3	17.5	14.9	47.6	16.4	2.6	0.9	51.7	47.0
	2023	650	58.4	16.4	13.7	57.2	10.6	1.5	0.6	63.4	53.8
Chinese Taipei	2019	531	80.3	4.5	7.7	79.9	7.3	0.6	0.0	78.9	81.5
	2023	446	84.1	3.0	4.3	83.9	8.6	0.0	0.3	83.6	84.7
Czech Republic	2019	681	62.4	12.4	13.6	61.1	10.8	1.8	0.3	63.0	61.9
	2023	948	60.3	14.5	17.4	59.6	7.4	1.0	0.1	61.3	59.2
Denmark	2019	461	59.2	11.9	16.7	55.3	9.6	5.9	0.6	59.7	58.7
	2023	707	63.0	13.0	15.5	61.6	7.7	1.8	0.4	59.5	66.8
England	2019	499	78.0	5.9	8.9	76.9	7.0	1.2	0.2	78.1	77.9
	2023	569	75.6	8.0	6.5	74.7	9.5	1.0	0.2	75.8	75.1
Finland	2019	679	58.8	8.2	16.1	57.5	16.0	1.8	0.4	60.7	57.0
	2023	767	58.0	6.9	19.9	57.4	14.8	1.0	0.0	58.1	57.8
France	2019	595	49.2	12.1	15.8	46.2	19.8	5.7	0.4	43.5	53.6
	2023	663	48.6	11.9	17.0	47.6	21.4	1.9	0.1	45.3	51.9
Georgia	2019	539	67.2	11.8	12.9	65.1	7.1	2.0	1.1	65.9	68.4
	2023	616	69.3	11.8	11.2	68.0	7.2	0.5	1.3	70.2	68.2
Germany	2019	492	74.6	6.7	10.1	71.6	7.5	3.5	0.6	75.7	73.5
	2023	626	70.3	9.3	13.0	69.8	7.3	0.6	0.0	66.9	73.7
Hong Kong SAR	2019	418	84.5	4.9	5.9	83.9	4.6	0.5	0.2	85.8	84.1
	2023	571	82.0	5.7	7.2	81.8	5.0	0.4	0.0	78.3	86.2
Hungary	2019	648	76.0	5.9	9.7	75.1	8.1	1.2	0.0	76.3	75.7
	2023	738	77.0	5.7	10.4	76.8	6.7	0.3	0.0	77.9	76.1
Italy	2019	535	71.7	8.0	13.1	70.1	6.5	1.2	1.0	72.7	70.7
	2023	620	72.7	7.2	10.8	72.1	9.1	0.8	0.0	72.5	72.8
Korea, Rep. of	2019	554	76.4	8.2	8.1	75.9	7.2	0.6	0.0	73.7	79.5
	2023	363	79.3	7.9	8.4	78.7	4.4	0.7	0.0	74.5	85.2
Lithuania	2019	538	79.6	6.1	8.5	78.6	5.5	1.3	0.0	76.1	82.7
	2023	627	82.5	5.6	6.9	81.6	4.8	0.8	0.2	83.4	81.7
Netherlands	2019	475	68.1	8.6	13.5	65.8	8.8	2.6	0.6	64.3	71.7
	2023	503	73.3	5.5	12.8	73.0	8.2	0.2	0.2	72.6	74.3
Norway (5)	2019	556	65.0	12.3	11.1	62.5	10.2	2.6	1.4	63.2	66.6
	2023	727	61.3	12.1	15.7	59.8	10.0	2.0	0.5	60.5	62.1
Portugal	2019	609	68.1	9.5	12.8	66.7	9.0	1.9	0.1	67.3	68.9
	2023	728	70.7	10.0	10.6	70.4	8.6	0.1	0.3	66.4	74.2
Qatar	2019	710	53.6	18.0	14.5	52.4	12.8	1.9	0.3	57.2	50.1
	2023	891	57.5	15.3	13.6	56.4	12.8	1.5	0.5	52.6	61.6
Singapore	2019	857	89.0	3.6	3.7	88.8	3.8	0.2	0.0	90.4	87.5
	2023	599	88.3	2.5	4.8	88.3	4.3	0.0	0.0	88.9	87.8
Slovak Republic	2019	605	77.0	5.3	10.0	76.8	7.6	0.2	0.0	76.9	77.2
	2023	663	71.5	9.6	12.7	70.8	6.0	1.0	0.0	70.4	72.6
Spain	2019	1372	74.3	8.2	10.6	72.0	6.2	2.9	0.2	73.6	74.9
	2023	1409	73.8	8.8	10.6	73.0	6.6	0.9	0.2	73.1	74.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Reasoning

A\_ME4\_03 ME61244: Choose true Statement about 2 and 3 digit numbers - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	56.7	9.5	17.9	54.7	14.4	2.7	0.8	54.9	58.3
	2023	696	58.5	10.4	18.4	57.5	12.0	1.7	0.1	57.7	59.4
United Arab Emirates	2019	3687	57.3	14.4	13.5	56.1	13.8	1.6	0.5	56.2	58.6
	2023	5589	63.4	12.9	12.5	62.9	10.9	0.6	0.2	62.3	64.5
United States	2019	1242	73.5	8.6	10.1	72.7	7.5	0.7	0.4	74.5	72.4
	2023	1301	68.3	9.0	12.8	67.7	9.6	0.7	0.2	65.0	71.6
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International Avg. (25)	2019	20387	68.6	9.3	11.7	67.1	9.5	2.0	0.4	68.2	69.0
	2023	23898	69.3	9.4	12.0	68.6	8.9	0.9	0.2	68.2	70.5
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Abu Dhabi, UAE	2019	1288	48.3	16.9	14.8	47.1	18.8	1.7	0.7	47.5	49.1
	2023	2480	57.3	14.5	14.9	56.6	12.9	0.8	0.2	56.7	57.8
Dubai, UAE	2019	1046	73.7	8.6	8.8	72.5	8.5	1.4	0.2	75.4	71.9
	2023	1289	76.7	7.5	8.1	76.7	7.7	0.0	0.0	74.6	78.7
Ontario, Canada	2019	540	69.4	11.2	10.8	67.6	7.8	1.4	1.3	69.3	69.6
	2023	594	71.0	11.6	10.0	70.8	7.2	0.3	0.0	68.5	73.7
Quebec, Canada	2019	540	59.0	9.5	15.5	57.3	14.8	2.7	0.2	60.5	57.2
	2023	531	55.0	11.8	17.3	54.5	15.4	1.0	0.0	55.4	54.8
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Number / Knowing

A\_ME4\_04 ME61041: Identify number between 1.4 and 1.78 - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	37.5	14.3	36.6	35.0	11.5	1.1	1.5	31.7	43.3
	2023	1883	45.8	13.5	45.4	32.0	8.3	0.6	0.2	32.1	59.5
Chile	2019	602	25.5	21.5	24.3	22.1	27.4	3.9	0.9	21.4	29.6
	2023	650	28.4	23.2	27.1	22.4	22.8	3.9	0.6	24.2	32.3
Chinese Taipei	2019	531	69.3	17.0	69.3	10.4	3.3	0.0	0.0	61.1	76.2
	2023	446	77.7	13.0	77.5	6.6	2.6	0.0	0.3	73.6	82.4
Czech Republic	2019	681	37.0	17.6	35.7	28.7	14.7	3.0	0.3	25.1	47.4
	2023	948	39.0	19.8	38.3	23.6	16.5	1.6	0.1	27.6	50.5
Denmark	2019	461	44.4	17.6	42.8	28.0	8.0	2.8	0.7	24.0	61.9
	2023	707	54.6	16.8	54.0	24.2	3.8	0.6	0.5	39.9	70.5
England	2019	499	55.0	16.3	53.9	23.9	3.8	2.0	0.2	44.9	64.6
	2023	569	59.5	17.6	59.2	17.8	5.0	0.2	0.2	53.3	65.0
Finland	2019	679	59.4	10.2	58.2	23.0	6.7	1.6	0.4	47.2	71.2
	2023	767	57.9	13.5	57.5	22.2	6.0	0.8	0.0	49.0	67.2
France	2019	595	39.1	9.8	37.0	37.3	10.5	5.0	0.4	29.5	46.8
	2023	663	45.9	9.2	45.2	33.9	10.2	1.4	0.1	38.4	53.6
Georgia	2019	538	35.3	20.0	31.3	19.8	17.6	10.1	1.1	31.8	38.7
	2023	616	39.0	24.7	36.9	16.2	16.9	4.0	1.3	38.6	39.4
Germany	2019	492	43.6	13.8	42.7	32.5	8.9	1.4	0.7	34.7	52.9
	2023	626	47.1	12.9	46.4	32.3	6.9	1.2	0.2	33.2	61.3
Hong Kong SAR	2019	418	59.3	8.9	58.5	18.4	13.0	1.2	0.2	58.9	60.0
	2023	571	60.4	12.5	59.9	11.5	15.3	0.8	0.0	58.4	62.5
Hungary	2019	648	37.9	17.4	37.5	31.1	12.8	1.2	0.0	36.1	39.6
	2023	738	41.1	16.8	40.7	29.7	11.9	0.8	0.1	33.5	48.9
Italy	2019	535	39.8	13.1	37.9	24.3	20.0	3.6	1.0	38.0	41.5
	2023	620	43.3	15.5	42.8	24.0	16.7	1.0	0.0	34.2	51.3
Korea, Rep. of	2019	554	81.4	10.7	80.9	4.4	3.4	0.6	0.0	77.6	84.6
	2023	363	77.3	17.0	77.2	3.9	1.8	0.1	0.0	74.7	80.5
Lithuania	2019	538	42.2	20.6	41.2	20.5	15.5	2.2	0.0	32.1	50.9
	2023	627	49.7	20.3	49.3	19.7	9.9	0.6	0.2	36.4	60.8
Netherlands	2019	475	42.2	13.9	40.6	35.3	6.5	3.1	0.6	26.9	57.2
	2023	502	55.4	16.8	55.1	22.5	5.0	0.4	0.2	41.1	66.8
Norway (5)	2019	556	47.2	28.6	44.9	16.1	5.4	3.5	1.4	37.8	55.2
	2023	727	47.7	23.1	47.2	23.7	4.8	0.7	0.6	33.2	61.5
Portugal	2019	609	45.5	12.8	44.7	31.1	9.7	1.5	0.3	37.6	52.7
	2023	728	44.9	15.9	44.7	27.5	11.5	0.2	0.3	35.4	52.8
Qatar	2019	710	32.3	20.7	31.4	26.4	18.8	2.2	0.3	30.7	33.8
	2023	891	39.9	24.7	39.2	18.9	15.4	1.2	0.6	31.7	46.9
Singapore	2019	857	75.8	15.5	75.4	5.6	3.0	0.5	0.0	73.2	78.2
	2023	598	72.4	17.9	72.3	6.8	2.9	0.2	0.0	69.7	75.0
Slovak Republic	2019	605	37.4	18.6	36.2	23.0	19.0	3.3	0.0	27.5	46.2
	2023	663	47.4	14.5	46.3	19.0	18.0	2.3	0.0	42.0	52.6
Spain	2019	1372	46.9	10.9	46.0	29.8	11.4	1.8	0.2	36.8	55.9
	2023	1409	48.4	14.2	48.1	25.2	11.9	0.3	0.3	41.0	55.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME4\_04 ME61041: Identify number between 1.4 and 1.78 - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	33.1	18.3	32.0	33.5	12.7	2.6	0.8	21.0	43.4
	2023	696	45.7	16.2	44.7	29.2	7.7	2.0	0.1	28.4	63.7
United Arab Emirates	2019	3687	34.7	20.2	33.9	24.3	19.4	1.6	0.6	30.9	38.7
	2023	5588	46.2	18.2	45.9	20.8	14.5	0.2	0.3	40.9	51.0
United States	2019	1242	42.7	20.6	42.0	25.8	10.0	0.9	0.6	36.2	49.1
	2023	1301	46.1	22.5	45.8	20.7	10.3	0.4	0.3	36.8	55.6
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International Avg. (25)	2019	20386	45.8	16.4	44.6	24.4	11.7	2.4	0.5	38.1	52.8
	2023	23897	50.4	17.2	49.9	21.4	10.3	1.0	0.3	41.9	58.7
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Abu Dhabi, UAE	2019	1289	28.0	22.1	27.2	25.0	23.1	1.9	0.7	24.7	31.4
	2023	2480	38.5	19.6	38.2	22.3	19.1	0.3	0.5	33.1	43.4
Dubai, UAE	2019	1046	44.5	16.2	43.9	27.6	11.0	1.0	0.3	41.2	47.8
	2023	1288	60.1	14.9	60.1	18.6	6.4	0.0	0.0	54.0	65.8
Ontario, Canada	2019	540	30.1	15.4	29.3	38.6	14.1	0.6	2.0	26.2	33.4
	2023	595	42.7	14.4	42.4	34.1	8.3	0.7	0.0	31.0	56.3
Quebec, Canada	2019	540	55.5	9.7	54.5	27.5	6.4	1.3	0.6	45.6	66.8
	2023	532	55.7	10.7	55.4	25.9	7.5	0.2	0.3	38.1	70.1
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME4\_05 ME61173: Find the value of w in number sentence - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	53.4	43.4	49.7	5.4	1.5	51.0	55.7
	2023	1879	53.2	45.0	51.2	3.4	0.4	53.4	53.1
Chile	2019	602	49.7	44.6	44.1	10.1	1.2	51.2	48.3
	2023	648	44.3	49.6	39.5	9.8	1.0	45.0	43.7
Chinese Taipei	2019	531	73.7	26.0	72.9	1.0	0.0	68.9	77.8
	2023	446	78.0	21.9	77.7	0.2	0.3	79.2	76.7
Czech Republic	2019	681	66.2	32.0	62.7	5.0	0.3	63.6	68.4
	2023	945	68.5	30.2	65.8	3.9	0.1	69.0	68.1
Denmark	2019	461	69.3	27.5	62.1	9.6	0.7	68.9	69.6
	2023	706	67.7	30.6	64.3	4.5	0.5	66.7	68.8
England	2019	499	67.2	30.9	63.2	5.7	0.3	62.3	71.9
	2023	569	66.5	32.2	64.1	3.5	0.2	62.6	70.3
Finland	2019	679	66.1	31.4	61.3	6.9	0.4	65.7	66.4
	2023	767	67.9	30.1	63.5	6.4	0.0	69.4	66.4
France	2019	595	54.3	35.5	42.2	21.9	0.4	50.9	56.9
	2023	657	58.5	35.7	50.2	13.8	0.3	57.4	59.5
Georgia	2019	539	74.2	23.2	66.7	8.8	1.3	71.4	77.2
	2023	615	74.9	23.8	71.3	3.2	1.6	74.9	74.9
Germany	2019	492	62.2	34.9	57.4	7.0	0.7	61.8	62.5
	2023	625	63.2	34.7	59.6	5.6	0.2	61.0	65.4
Hong Kong SAR	2019	418	80.8	19.0	80.0	0.8	0.2	82.7	79.9
	2023	570	81.1	18.7	79.9	1.4	0.0	78.4	84.0
Hungary	2019	648	67.7	31.4	66.0	2.5	0.0	70.0	65.6
	2023	738	66.2	33.3	65.1	1.5	0.1	65.4	67.0
Italy	2019	535	71.9	25.0	63.9	10.2	1.0	72.0	71.8
	2023	620	62.9	32.8	55.4	11.8	0.0	59.1	66.0
Korea, Rep. of	2019	554	73.8	25.7	72.6	1.7	0.0	70.4	76.6
	2023	363	82.0	17.4	79.2	3.5	0.0	79.6	85.0
Lithuania	2019	538	67.0	32.2	65.4	2.4	0.0	64.5	69.1
	2023	627	70.7	29.2	70.3	0.4	0.2	66.1	74.5
Netherlands	2019	475	73.9	24.3	68.6	6.5	0.6	71.3	76.5
	2023	503	72.5	26.7	70.3	2.8	0.2	72.7	71.9
Norway (5)	2019	556	73.5	24.6	68.4	5.3	1.7	71.7	75.1
	2023	726	66.4	32.1	63.5	3.8	0.7	67.4	65.5
Portugal	2019	609	60.3	37.5	57.1	5.0	0.3	57.8	62.6
	2023	726	63.8	33.8	59.6	6.3	0.3	60.5	66.5
Qatar	2019	710	38.0	58.1	35.6	5.8	0.5	36.8	39.1
	2023	886	50.3	47.4	48.0	3.9	0.6	43.0	56.6
Singapore	2019	857	80.5	19.4	80.1	0.4	0.1	75.3	85.5
	2023	599	75.8	24.1	75.7	0.2	0.0	74.2	77.4
Slovak Republic	2019	605	55.7	42.7	53.7	3.7	0.0	51.1	60.0
	2023	663	56.2	42.6	54.6	2.8	0.0	51.6	60.7
Spain	2019	1372	45.7	46.7	39.3	13.9	0.2	44.4	46.8
	2023	1408	57.0	37.4	49.6	12.8	0.3	54.3	59.5

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Knowing

A\_ME4\_05 ME61173: Find the value of w in number sentence - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	68.3	29.9	64.5	4.7	0.8	62.9	72.9
	2023	696	65.0	33.5	62.1	4.3	0.1	62.3	67.7
United Arab Emirates	2019	3690	49.7	48.2	47.6	3.5	0.7	47.9	51.5
	2023	5580	57.3	42.0	56.3	1.3	0.4	54.9	59.6
United States	2019	1242	67.8	31.6	66.4	1.3	0.7	66.4	69.2
	2023	1301	66.4	33.1	65.2	1.3	0.4	63.6	69.1
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International Avg. (25)	2019	20390	64.4	33.0	60.5	6.0	0.5	62.4	66.3
	2023	23863	65.5	32.7	62.5	4.5	0.3	63.7	67.1
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Abu Dhabi, UAE	2019	1289	44.4	53.5	42.7	3.1	0.7	41.6	46.9
	2023	2473	50.0	49.0	49.1	1.3	0.6	46.1	53.6
Dubai, UAE	2019	1046	60.0	38.8	58.2	2.8	0.3	59.5	60.5
	2023	1288	71.8	28.2	71.6	0.2	0.0	71.8	71.9
Ontario, Canada	2019	540	54.1	42.8	50.4	4.8	2.0	51.6	56.2
	2023	594	52.1	46.4	50.5	2.9	0.3	50.5	54.0
Quebec, Canada	2019	540	56.9	40.5	53.5	5.4	0.6	56.1	57.7
	2023	532	58.0	40.2	55.5	4.0	0.3	62.7	54.3
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME4\_06 ME61252: Expression to find number of books Luke read - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	30.0	8.4	10.2	49.5	29.2	1.1	1.5	22.9	37.1
	2023	1883	35.2	7.9	8.4	48.0	34.9	0.3	0.6	32.0	38.2
Chile	2019	602	17.9	26.1	31.6	20.3	17.0	3.8	1.2	19.4	16.4
	2023	650	17.5	22.9	26.5	31.5	17.1	0.7	1.3	14.1	20.5
Chinese Taipei	2019	531	53.8	0.4	1.0	44.5	53.4	0.6	0.0	53.1	54.3
	2023	446	57.0	0.2	0.6	42.1	56.8	0.0	0.3	53.3	61.2
Czech Republic	2019	681	35.9	4.7	2.4	55.5	35.0	1.6	0.8	30.5	40.5
	2023	948	37.9	4.5	2.1	55.3	37.8	0.1	0.1	33.2	42.6
Denmark	2019	461	43.0	7.1	4.8	43.9	42.1	1.4	0.7	40.7	44.9
	2023	707	43.2	5.9	6.2	43.8	42.5	1.0	0.7	38.6	48.2
England	2019	499	50.3	5.5	4.8	38.5	49.3	1.4	0.5	47.8	52.7
	2023	569	53.6	4.9	3.2	38.0	53.4	0.2	0.2	52.2	55.6
Finland	2019	679	45.7	5.9	5.1	41.7	44.4	2.4	0.5	41.7	49.5
	2023	767	42.1	9.1	6.6	41.9	41.8	0.6	0.1	43.8	40.3
France	2019	595	28.0	10.8	15.9	41.8	26.6	3.1	1.8	20.9	33.8
	2023	663	35.5	10.2	12.0	41.8	35.3	0.1	0.6	34.3	36.8
Georgia	2019	537	39.4	13.1	10.1	35.6	38.2	1.7	1.3	39.9	38.9
	2023	616	39.3	9.6	9.2	40.7	38.6	0.1	1.8	38.0	40.9
Germany	2019	492	54.4	5.3	5.2	34.0	53.1	1.6	0.7	50.8	58.1
	2023	626	51.3	7.0	6.3	35.3	51.0	0.3	0.2	43.9	58.8
Hong Kong SAR	2019	418	58.4	1.6	1.6	38.1	58.1	0.4	0.2	60.5	57.2
	2023	571	61.6	0.9	1.8	35.7	61.6	0.0	0.0	59.1	64.4
Hungary	2019	648	29.6	5.6	2.4	61.9	29.4	0.5	0.3	26.6	32.4
	2023	738	39.5	6.7	2.5	50.9	39.2	0.5	0.1	38.8	40.1
Italy	2019	535	34.9	10.4	3.7	48.9	33.8	2.3	1.0	31.6	38.1
	2023	620	38.5	11.4	6.7	43.2	38.4	0.3	0.0	33.2	43.3
Korea, Rep. of	2019	554	31.8	2.6	0.6	64.8	31.7	0.2	0.0	30.1	33.6
	2023	363	39.7	1.7	1.1	57.5	39.7	0.0	0.0	38.9	40.7
Lithuania	2019	538	51.0	5.8	1.5	41.2	50.4	1.2	0.0	49.5	52.3
	2023	627	66.6	2.2	1.6	29.5	66.4	0.1	0.2	62.5	70.0
Netherlands	2019	475	50.6	4.0	4.5	38.9	48.7	3.1	0.8	46.9	54.5
	2023	503	56.0	4.3	2.2	37.4	55.8	0.1	0.2	53.3	58.1
Norway (5)	2019	556	49.2	5.6	5.0	38.8	47.7	1.1	1.9	43.8	53.7
	2023	727	53.7	4.5	5.3	36.0	53.2	0.2	0.8	46.0	61.2
Portugal	2019	609	33.7	12.1	17.1	36.3	33.3	0.8	0.4	31.0	36.1
	2023	727	33.5	12.1	15.6	38.5	33.4	0.2	0.3	26.0	39.8
Qatar	2019	710	23.3	26.5	11.3	36.6	22.6	2.0	0.9	19.3	27.4
	2023	891	25.6	23.6	11.1	38.5	25.1	0.6	1.1	21.0	29.5
Singapore	2019	857	73.6	1.1	1.5	23.8	73.5	0.1	0.1	72.1	75.1
	2023	599	70.9	3.1	1.5	24.5	70.9	0.0	0.0	68.0	73.7
Slovak Republic	2019	605	38.4	6.9	2.7	51.3	37.9	1.1	0.1	35.4	41.0
	2023	663	40.8	6.0	3.5	49.5	40.6	0.4	0.0	36.0	45.5
Spain	2019	1372	24.3	19.0	17.7	38.4	24.1	0.7	0.2	21.1	27.2
	2023	1409	26.9	15.5	14.6	42.2	26.6	0.4	0.6	21.9	31.6

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME4\_06 ME61252: Expression to find number of books Luke read - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	46.5	6.9	7.8	37.4	45.4	1.7	0.8	43.1	49.6
	2023	696	45.0	6.0	9.0	39.4	44.6	0.6	0.4	45.6	44.4
United Arab Emirates	2019	3687	27.3	17.8	9.8	43.8	26.8	1.0	0.9	24.1	30.6
	2023	5589	31.9	17.1	8.3	42.1	31.7	0.3	0.5	27.7	35.8
United States	2019	1242	43.1	5.4	2.9	47.8	42.5	0.7	0.7	41.1	45.2
	2023	1301	43.7	5.1	3.7	47.1	43.3	0.2	0.7	41.4	45.9
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International Avg. (25)	2019	20385	40.6	8.7	7.2	42.1	39.8	1.4	0.7	37.7	43.2
	2023	23899	43.5	8.1	6.8	41.2	43.2	0.3	0.4	40.1	46.7
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Abu Dhabi, UAE	2019	1289	22.8	22.1	12.1	41.5	22.4	0.9	1.1	17.9	27.5
	2023	2480	27.9	22.4	9.1	39.9	27.6	0.4	0.6	23.0	32.3
Dubai, UAE	2019	1046	38.3	8.7	5.5	46.6	37.8	1.0	0.4	37.4	39.3
	2023	1289	45.4	6.5	5.6	42.4	45.3	0.3	0.0	39.1	51.0
Ontario, Canada	2019	540	32.4	8.9	10.2	46.5	31.5	0.8	2.0	26.0	37.9
	2023	595	34.0	8.5	8.5	48.4	33.7	0.3	0.5	33.1	34.6
Quebec, Canada	2019	540	27.2	5.5	10.9	55.2	26.8	1.0	0.6	20.9	34.6
	2023	532	34.3	6.0	9.2	50.1	34.1	0.1	0.5	27.7	39.5
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME4\_07 ME61261: Find the next number for Ian's number pattern - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	41.4	55.9	39.5	3.0	1.5	37.9	44.8
	2023	1883	46.1	52.2	44.6	2.6	0.7	44.8	47.3
Chile	2019	602	19.7	70.4	17.3	10.6	1.6	20.4	19.0
	2023	646	23.8	69.3	21.7	7.7	1.3	23.3	24.3
Chinese Taipei	2019	531	65.0	34.3	63.7	1.9	0.0	64.1	65.7
	2023	446	67.5	32.2	67.0	0.5	0.3	72.3	62.0
Czech Republic	2019	681	47.1	48.1	42.8	7.8	1.2	47.5	46.7
	2023	946	44.7	52.5	42.5	4.9	0.1	44.7	44.7
Denmark	2019	461	49.9	44.8	44.6	9.6	0.9	53.6	46.8
	2023	707	47.4	50.5	45.4	3.1	1.0	48.3	46.4
England	2019	499	58.0	39.9	55.1	4.1	1.0	56.0	59.9
	2023	569	60.5	38.4	58.8	2.7	0.2	62.0	59.3
Finland	2019	679	47.3	49.8	44.7	5.1	0.5	43.6	50.9
	2023	767	50.7	46.8	48.2	4.9	0.1	50.2	51.3
France	2019	595	31.8	56.7	26.4	14.9	2.0	27.9	34.8
	2023	660	38.2	56.2	34.7	8.5	0.6	37.3	39.1
Georgia	2019	541	42.3	49.2	36.1	13.1	1.5	40.3	44.5
	2023	615	54.8	41.4	50.2	6.6	1.8	61.4	47.0
Germany	2019	492	43.5	51.2	39.5	8.5	0.8	45.8	41.3
	2023	624	43.5	54.0	41.6	4.3	0.2	44.2	42.9
Hong Kong SAR	2019	418	62.7	36.5	61.5	1.8	0.2	64.9	61.5
	2023	570	66.3	32.8	64.6	2.6	0.0	64.6	68.1
Hungary	2019	648	48.7	49.0	46.6	4.1	0.3	51.8	45.9
	2023	735	51.3	47.8	50.3	1.3	0.6	49.7	52.9
Italy	2019	535	44.0	52.5	41.3	5.1	1.1	41.2	46.7
	2023	619	51.8	46.3	49.8	3.9	0.0	48.8	54.5
Korea, Rep. of	2019	554	70.6	28.7	69.0	2.3	0.0	67.4	73.3
	2023	363	73.9	25.5	72.2	2.3	0.0	70.3	78.5
Lithuania	2019	538	50.2	47.3	47.7	5.0	0.0	50.4	50.1
	2023	627	64.2	35.1	62.8	1.9	0.2	64.1	64.2
Netherlands	2019	475	52.4	43.9	48.3	6.9	0.9	51.7	53.1
	2023	503	53.3	45.5	51.9	2.5	0.2	51.3	54.4
Norway (5)	2019	556	60.1	38.0	57.1	3.0	1.9	60.2	60.0
	2023	727	50.4	47.8	48.6	2.9	0.8	45.8	54.7
Portugal	2019	609	38.2	60.1	37.1	2.4	0.4	36.2	40.0
	2023	727	44.7	53.4	43.1	3.1	0.4	42.3	46.6
Qatar	2019	710	27.6	67.3	25.7	5.9	1.2	27.4	27.8
	2023	887	37.7	59.4	36.0	3.2	1.4	32.6	42.2
Singapore	2019	857	70.7	29.1	70.3	0.5	0.1	69.3	72.1
	2023	598	70.4	29.4	70.2	0.4	0.0	71.7	69.3
Slovak Republic	2019	605	38.0	58.9	36.2	4.9	0.1	38.0	38.1
	2023	662	41.2	56.7	39.7	3.4	0.1	40.7	41.7
Spain	2019	1372	44.9	51.0	41.5	7.3	0.2	44.9	44.9
	2023	1406	47.4	49.0	44.1	6.1	0.8	47.4	47.4

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Number / Applying

A\_ME4\_07 ME61261: Find the next number for Ian's number pattern - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	46.8	49.4	43.5	5.9	1.2	45.1	48.3
	2023	696	46.5	50.3	43.8	5.4	0.5	45.4	47.7
United Arab Emirates	2019	3692	37.5	60.2	36.0	2.9	0.9	36.4	38.6
	2023	5581	45.4	53.3	44.3	1.7	0.7	43.9	46.8
United States	2019	1242	52.1	46.9	51.0	1.3	0.8	51.9	52.4
	2023	1299	49.0	49.8	47.9	1.6	0.7	46.7	51.4
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International Avg. (25)	2019	20394	47.6	48.8	44.9	5.5	0.8	47.0	48.3
	2023	23863	50.8	47.0	49.0	3.5	0.5	50.1	51.4
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Abu Dhabi, UAE	2019	1290	24.6	72.4	23.6	2.9	1.1	23.2	26.1
	2023	2476	34.4	63.7	33.4	2.0	0.9	32.1	36.4
Dubai, UAE	2019	1046	59.5	39.4	58.0	2.2	0.4	59.8	59.2
	2023	1287	65.8	33.9	65.3	0.6	0.3	65.7	66.1
Ontario, Canada	2019	540	42.8	55.1	41.2	1.6	2.0	35.9	48.5
	2023	595	45.9	52.1	44.2	3.0	0.6	46.1	45.8
Quebec, Canada	2019	540	41.1	55.8	39.0	4.5	0.6	41.0	41.2
	2023	532	47.9	51.0	46.9	1.6	0.5	47.4	48.4
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent



Mathematics: Measurement and Geometry / Applying  
A\_ME4\_08 ME61224: Draw angle MNP larger than a right angle - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1926	29.0	67.7	27.6	3.0	1.7	27.8	30.0
	2023	1883	29.1	68.6	28.1	2.5	0.8	29.5	28.6
Chile	2019	602	14.1	81.4	13.3	3.3	2.0	15.5	12.6
	2023	650	11.0	82.8	10.2	5.2	1.7	11.3	10.7
Chinese Taipei	2019	531	44.1	55.9	44.1	0.0	0.0	50.6	38.7
	2023	446	67.8	32.1	67.4	0.2	0.3	71.3	63.6
Czech Republic	2019	681	13.7	82.0	13.0	3.8	1.2	11.7	15.3
	2023	948	13.9	82.5	13.4	3.6	0.5	13.6	14.3
Denmark	2019	461	29.0	66.4	27.1	5.0	1.5	35.7	23.4
	2023	707	30.4	66.3	29.0	3.1	1.6	36.3	24.2
England	2019	499	40.8	57.7	39.9	1.1	1.4	39.4	42.2
	2023	569	53.7	45.6	52.8	1.4	0.2	53.0	54.2
Finland	2019	679	15.4	79.2	14.4	5.9	0.5	19.6	11.3
	2023	767	26.0	71.3	25.0	3.4	0.3	27.5	24.4
France	2019	595	17.2	78.8	16.4	2.3	2.5	18.9	15.8
	2023	663	18.6	76.4	17.5	5.4	0.7	18.5	18.7
Georgia	2019	540	19.6	70.1	17.1	11.2	1.7	15.9	23.2
	2023	616	22.9	69.8	20.7	7.2	2.3	21.9	24.0
Germany	2019	492	9.3	85.0	8.7	5.4	1.0	10.2	8.3
	2023	626	15.7	79.7	14.8	5.3	0.2	16.4	14.9
Hong Kong SAR	2019	418	55.1	44.7	54.9	0.0	0.4	60.4	51.4
	2023	570	50.1	49.8	50.0	0.2	0.0	51.8	48.3
Hungary	2019	648	16.0	81.8	15.6	2.3	0.3	15.1	16.9
	2023	738	22.6	75.4	22.0	1.7	0.8	22.5	22.8
Italy	2019	535	39.7	56.7	37.3	4.2	1.8	46.7	33.3
	2023	620	48.4	49.9	46.7	3.4	0.0	45.4	51.0
Korea, Rep. of	2019	554	70.9	28.9	70.6	0.5	0.0	76.4	65.9
	2023	363	75.7	24.3	75.7	0.0	0.0	73.5	78.5
Lithuania	2019	538	19.3	78.3	18.7	3.0	0.0	21.7	17.3
	2023	627	32.3	66.4	31.6	1.8	0.2	29.3	34.8
Netherlands	2019	475	3.2	92.5	3.1	3.1	1.2	2.3	4.1
	2023	503	3.6	93.8	3.5	1.9	0.8	3.7	3.5
Norway (5)	2019	556	36.5	61.0	35.0	1.9	2.1	41.4	32.2
	2023	727	18.3	76.5	17.1	5.1	1.2	18.8	17.8
Portugal	2019	609	34.5	63.8	33.6	2.0	0.6	36.7	32.5
	2023	728	36.6	61.9	35.7	1.7	0.7	36.6	36.5
Qatar	2019	710	15.7	80.8	15.1	2.7	1.4	16.4	15.1
	2023	891	23.9	73.0	22.9	2.2	1.9	23.1	24.6
Singapore	2019	857	81.1	18.9	81.0	0.1	0.1	83.7	78.6
	2023	599	80.7	19.3	80.7	0.0	0.0	81.5	79.9
Slovak Republic	2019	605	7.9	87.8	7.5	4.6	0.1	6.4	9.3
	2023	663	13.4	82.3	12.7	4.9	0.1	12.3	14.4
Spain	2019	1372	28.9	69.2	28.1	2.2	0.4	33.7	24.7
	2023	1409	31.3	65.0	29.6	4.0	1.4	33.0	29.7

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Applying  
A\_ME4\_08 ME61224: Draw angle MNP larger than a right angle - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	25.8	70.5	24.5	3.6	1.4	28.9	23.2
	2023	696	28.6	67.7	27.2	4.6	0.5	30.0	27.2
United Arab Emirates	2019	3694	30.9	66.4	29.8	2.7	1.2	31.9	30.0
	2023	5589	36.8	61.4	35.7	2.0	1.0	36.4	37.1
United States	2019	1242	44.6	54.3	43.7	1.1	0.9	46.8	42.6
	2023	1301	40.0	58.5	39.0	1.5	1.0	40.9	39.2
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International Avg. (25)	2019	20392	29.7	67.2	28.8	3.0	1.0	31.8	27.9
	2023	23899	33.2	64.0	32.4	2.9	0.7	33.5	32.9
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Abu Dhabi, UAE	2019	1291	17.5	79.0	16.8	2.9	1.4	17.4	17.6
	2023	2480	24.8	72.9	24.0	1.9	1.2	22.3	27.1
Dubai, UAE	2019	1046	52.6	46.3	51.5	1.6	0.6	56.2	49.0
	2023	1289	58.8	40.7	58.0	1.1	0.3	59.3	58.4
Ontario, Canada	2019	539	34.3	62.3	32.6	3.1	2.0	33.9	34.8
	2023	595	30.6	67.4	29.7	2.2	0.7	30.3	30.9
Quebec, Canada	2019	540	34.0	64.0	32.9	2.2	0.9	33.2	34.7
	2023	532	36.9	61.3	35.8	2.4	0.5	39.6	34.7
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning  
A\_ME4\_09 ME61077: View of building from above - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	59.4	57.5	15.9	19.2	4.2	1.3	1.9	53.8	64.9
	2023	1883	57.6	56.9	15.1	22.7	4.0	0.4	0.8	50.7	64.3
Chile	2019	602	53.7	50.8	15.6	22.0	6.1	3.0	2.5	50.2	57.5
	2023	650	48.7	47.0	18.5	23.8	7.3	1.4	2.0	42.9	53.9
Chinese Taipei	2019	531	76.0	75.8	8.1	11.7	4.1	0.3	0.0	73.7	77.9
	2023	446	76.7	76.5	8.9	11.0	3.4	0.0	0.3	76.1	77.5
Czech Republic	2019	681	73.6	71.1	9.1	13.5	2.9	2.1	1.2	67.9	78.8
	2023	948	70.4	69.7	10.3	15.8	3.2	0.4	0.6	64.6	76.1
Denmark	2019	461	86.0	80.1	2.9	6.8	3.3	5.4	1.5	85.5	86.5
	2023	707	79.6	78.1	4.9	11.0	4.1	0.2	1.8	77.3	82.1
England	2019	499	68.5	66.6	9.7	16.8	4.0	1.5	1.4	66.3	70.7
	2023	569	63.5	63.1	11.1	18.9	6.3	0.4	0.2	61.1	65.8
Finland	2019	679	86.2	83.9	5.7	5.1	2.6	2.2	0.5	89.8	82.7
	2023	767	88.3	87.4	4.6	3.5	3.5	0.8	0.3	88.8	87.8
France	2019	595	58.4	54.6	13.0	20.3	5.6	3.6	2.9	52.3	63.5
	2023	663	61.9	60.2	10.9	21.2	5.0	1.8	0.8	60.7	63.1
Georgia	2019	538	42.3	39.9	16.7	34.7	3.1	3.2	2.4	37.9	47.0
	2023	616	45.9	43.5	16.4	28.3	6.5	1.8	3.5	44.9	47.2
Germany	2019	492	77.5	74.8	7.6	11.7	2.5	2.0	1.4	74.3	80.7
	2023	626	74.3	73.7	8.7	13.0	3.7	0.3	0.5	69.7	79.1
Hong Kong SAR	2019	418	80.4	79.5	7.6	8.6	3.2	0.7	0.4	80.4	80.1
	2023	571	75.9	75.8	7.2	14.2	2.7	0.1	0.0	73.8	78.1
Hungary	2019	648	67.0	66.0	11.8	14.9	5.8	1.3	0.3	68.8	65.3
	2023	738	68.6	67.8	12.7	14.3	4.1	0.2	0.8	65.4	71.7
Italy	2019	535	62.7	60.1	11.8	18.1	5.9	2.3	1.8	60.0	65.2
	2023	620	66.7	65.8	11.5	16.6	4.8	1.1	0.3	60.2	72.4
Korea, Rep. of	2019	554	88.1	87.7	4.3	5.8	1.8	0.4	0.0	87.4	88.6
	2023	363	83.5	83.1	5.4	9.2	1.8	0.5	0.0	82.0	85.5
Lithuania	2019	538	75.2	74.3	12.3	9.9	2.2	1.2	0.0	70.7	79.2
	2023	627	79.0	78.7	9.7	9.1	2.0	0.2	0.2	79.6	78.6
Netherlands	2019	475	83.3	81.1	4.6	8.1	3.6	1.4	1.2	78.0	88.4
	2023	503	81.7	81.1	5.1	8.3	4.7	0.0	0.8	79.7	84.1
Norway (5)	2019	556	82.7	79.8	6.1	7.7	2.9	1.4	2.1	82.8	82.6
	2023	727	75.9	74.3	6.9	12.3	4.3	0.3	1.8	70.3	81.4
Portugal	2019	609	36.2	34.9	26.8	31.0	3.7	2.3	1.3	29.9	42.0
	2023	728	40.5	40.0	19.3	35.6	3.9	0.4	0.8	37.9	42.7
Qatar	2019	710	39.2	37.6	14.9	40.0	3.4	2.6	1.5	38.5	39.8
	2023	891	41.0	40.0	12.8	41.2	3.6	0.4	1.9	36.5	44.8
Singapore	2019	857	84.5	84.0	5.1	8.5	1.8	0.5	0.1	82.7	86.3
	2023	599	84.0	83.4	6.3	6.1	3.5	0.7	0.0	81.9	86.1
Slovak Republic	2019	605	64.6	62.7	10.6	19.7	4.2	2.7	0.1	59.0	69.7
	2023	663	68.5	68.0	11.0	16.7	3.6	0.4	0.2	65.7	71.2
Spain	2019	1372	48.7	47.6	14.1	31.3	4.8	1.6	0.7	45.0	52.0
	2023	1409	53.7	52.4	13.4	27.3	4.5	0.9	1.6	52.4	54.9

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Measurement and Geometry / Reasoning  
A\_ME4\_09 ME61077: View of building from above - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	75.1	72.2	7.9	12.0	4.0	2.4	1.4	70.6	79.0
	2023	696	77.3	76.6	7.1	11.3	4.0	0.5	0.5	80.0	74.5
United Arab Emirates	2019	3690	41.5	40.3	16.4	36.9	3.6	1.5	1.2	40.4	42.6
	2023	5589	48.6	47.6	14.1	32.4	3.8	0.9	1.2	46.9	50.2
United States	2019	1242	64.6	63.6	11.8	18.4	4.6	0.7	0.9	60.8	68.4
	2023	1301	61.6	60.4	12.0	21.4	4.3	0.6	1.3	56.2	67.1
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International Avg. (25)	2019	20389	67.0	65.1	10.8	17.3	3.8	1.9	1.1	64.3	69.6
	2023	23900	66.9	66.0	10.5	17.8	4.1	0.6	0.9	64.2	69.6
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Abu Dhabi, UAE	2019	1288	35.8	34.6	16.4	41.6	4.0	2.0	1.4	36.3	35.5
	2023	2480	42.7	41.8	16.5	35.8	3.8	0.9	1.3	40.4	44.9
Dubai, UAE	2019	1046	59.6	58.5	13.2	23.7	2.8	1.0	0.7	58.6	60.5
	2023	1289	63.1	62.7	11.2	21.5	3.9	0.2	0.5	61.4	64.7
Ontario, Canada	2019	540	60.6	58.7	14.4	19.6	4.1	1.1	2.1	56.1	64.5
	2023	595	57.2	56.5	15.1	23.1	4.2	0.4	0.7	49.5	65.7
Quebec, Canada	2019	540	54.2	53.1	20.5	19.7	4.5	1.2	0.9	48.5	60.6
	2023	532	50.3	49.8	19.9	25.8	3.4	0.6	0.5	43.8	55.6
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing

A\_ME4\_10A ME61069A: Time for Ahmed to read 10 pages - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	72.2	26.8	69.6	1.3	2.2	72.5	71.9
	2023	1883	68.5	30.7	66.8	1.3	1.1	68.6	68.4
Chile	2019	602	56.0	41.2	52.5	2.5	3.8	53.9	58.2
	2023	650	59.1	38.0	55.0	4.2	2.7	59.7	58.6
Chinese Taipei	2019	531	88.7	11.3	88.7	0.0	0.0	90.7	87.1
	2023	446	84.1	15.9	83.9	0.0	0.3	86.1	81.8
Czech Republic	2019	681	71.5	27.0	67.7	3.5	1.7	66.1	76.1
	2023	948	66.2	32.5	63.7	3.1	0.7	65.0	67.3
Denmark	2019	461	78.6	20.1	74.0	3.1	2.8	85.3	73.0
	2023	707	79.1	20.3	77.0	0.8	1.9	79.2	79.0
England	2019	499	81.9	17.6	79.6	1.2	1.6	80.2	83.5
	2023	569	77.2	22.6	76.6	0.5	0.4	79.3	75.4
Finland	2019	679	74.2	24.8	71.3	3.1	0.8	75.5	73.0
	2023	767	69.5	29.4	66.9	3.3	0.4	71.2	67.7
France	2019	595	59.7	35.9	53.2	6.6	4.3	59.7	59.7
	2023	659	60.0	37.8	56.7	4.2	1.2	61.7	58.2
Georgia	2019	539	55.5	37.8	47.1	12.3	2.7	55.4	55.6
	2023	616	55.1	39.9	48.9	6.6	4.6	57.1	52.7
Germany	2019	492	66.0	31.6	61.2	4.0	3.2	61.8	70.3
	2023	626	62.0	36.6	59.6	3.2	0.7	61.2	62.8
Hong Kong SAR	2019	418	84.7	15.3	84.4	0.0	0.4	86.9	82.8
	2023	571	78.3	21.5	77.7	0.7	0.0	76.6	80.2
Hungary	2019	648	62.1	36.9	60.6	2.0	0.5	62.3	61.9
	2023	738	63.3	35.9	62.1	1.1	1.0	58.4	68.3
Italy	2019	535	64.7	33.6	61.8	1.8	2.8	62.6	66.8
	2023	619	63.9	34.7	61.4	3.2	0.7	59.0	68.2
Korea, Rep. of	2019	554	86.1	13.9	85.9	0.2	0.0	87.4	84.8
	2023	363	82.0	17.9	81.6	0.5	0.0	80.8	83.6
Lithuania	2019	538	73.8	25.8	72.7	1.2	0.3	73.3	74.2
	2023	627	74.1	25.7	73.8	0.3	0.2	72.5	75.6
Netherlands	2019	475	67.5	30.7	64.0	3.7	1.6	65.4	69.7
	2023	503	67.0	32.2	65.4	1.6	0.8	64.8	69.1
Norway (5)	2019	556	77.1	21.6	72.8	2.8	2.8	79.5	75.1
	2023	727	73.3	25.5	70.2	2.2	2.0	71.6	75.0
Portugal	2019	609	67.8	31.4	66.3	0.7	1.6	64.9	70.4
	2023	728	68.1	31.3	66.7	1.1	1.0	66.9	69.1
Qatar	2019	710	54.4	43.4	51.8	2.6	2.2	60.4	48.4
	2023	891	58.0	39.9	55.2	2.7	2.2	56.5	59.3
Singapore	2019	857	89.5	10.5	89.0	0.4	0.1	91.2	87.8
	2023	599	87.3	12.7	87.3	0.0	0.0	88.2	86.4
Slovak Republic	2019	605	64.7	34.2	62.5	3.1	0.2	60.6	68.3
	2023	662	63.0	35.8	61.0	2.7	0.5	64.3	61.8
Spain	2019	1372	67.1	31.5	64.3	2.7	1.6	67.9	66.4
	2023	1409	67.5	30.8	64.0	3.4	1.8	68.3	66.7

DIFF = Percent correct

Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Knowing

A\_ME4\_10A ME61069A: Time for Ahmed to read 10 pages - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	74.7	23.8	70.5	3.5	2.2	76.5	73.3
	2023	696	71.6	27.5	69.3	2.5	0.7	70.9	72.3
United Arab Emirates	2019	3692	60.3	38.2	58.1	2.0	1.7	60.6	60.1
	2023	5589	61.6	37.1	59.6	1.6	1.7	61.0	62.2
United States	2019	1242	73.0	26.5	71.9	0.6	1.0	74.1	72.1
	2023	1301	63.8	35.1	61.7	1.5	1.7	61.7	65.9
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International Avg. (25)	2019	20392	70.9	27.7	68.1	2.6	1.7	71.0	70.8
	2023	23894	69.0	29.9	66.9	2.1	1.1	68.4	69.4
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Abu Dhabi, UAE	2019	1291	51.3	46.5	49.0	2.5	2.0	54.0	48.6
	2023	2480	53.3	45.0	51.4	1.9	1.7	53.3	53.4
Dubai, UAE	2019	1046	80.0	19.6	78.2	1.2	1.0	79.0	81.0
	2023	1289	80.0	19.8	78.9	0.7	0.6	78.3	81.6
Ontario, Canada	2019	540	71.3	27.8	69.0	0.7	2.4	75.6	67.7
	2023	595	67.5	31.8	66.1	1.0	1.0	70.0	64.5
Quebec, Canada	2019	540	78.8	20.7	76.9	1.2	1.2	78.0	79.6
	2023	532	71.8	27.6	70.3	1.3	0.8	68.5	74.5
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DIFF = Percent correct

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Mathematics: Data / Applying  
A\_ME4\_10B ME61069B: Number of pages Ahmed reads in 60 minutes - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Canada	2019	1929	53.4	44.3	50.8	1.7	3.1	46.5	60.3
	2023	1883	50.0	47.3	47.3	3.7	1.8	45.2	54.7
Chile	2019	602	41.1	53.6	37.4	3.5	5.5	38.4	43.9
	2023	650	37.6	56.6	34.2	4.7	4.5	32.0	42.8
Chinese Taipei	2019	531	65.9	34.1	65.9	0.0	0.0	60.6	70.4
	2023	446	67.5	32.5	67.3	0.0	0.3	67.1	67.9
Czech Republic	2019	681	58.2	39.1	54.4	2.0	4.5	53.3	62.5
	2023	948	50.1	47.5	47.6	3.1	1.8	45.9	54.1
Denmark	2019	461	66.0	31.6	61.3	1.9	5.2	66.0	65.9
	2023	707	56.4	41.2	53.4	2.9	2.4	52.6	60.5
England	2019	499	60.6	37.7	58.1	2.1	2.1	55.0	66.0
	2023	569	56.0	42.8	54.5	2.0	0.7	50.0	61.6
Finland	2019	679	57.9	39.9	54.9	1.9	3.3	55.7	60.0
	2023	767	53.5	44.3	50.9	3.0	1.8	51.6	55.5
France	2019	595	47.8	44.9	41.2	4.7	9.2	50.5	45.6
	2023	662	45.6	49.3	41.3	6.0	3.5	38.4	53.1
Georgia	2019	539	44.5	46.2	37.0	7.9	8.9	42.5	46.5
	2023	616	47.4	44.7	40.3	7.9	7.1	50.5	43.6
Germany	2019	492	52.6	43.4	48.1	3.7	4.9	48.3	56.9
	2023	626	53.2	43.6	49.6	4.2	2.5	46.5	60.1
Hong Kong SAR	2019	418	69.3	30.5	68.8	0.4	0.4	70.6	68.0
	2023	571	70.0	29.7	69.3	1.0	0.0	68.6	71.5
Hungary	2019	648	46.7	50.9	44.6	2.3	2.1	46.2	47.2
	2023	738	46.0	52.2	44.5	1.4	1.9	42.3	49.8
Italy	2019	535	46.8	49.4	43.6	3.5	3.5	44.7	48.8
	2023	619	50.5	46.0	47.0	4.2	2.8	44.7	55.6
Korea, Rep. of	2019	554	65.5	34.2	65.0	0.6	0.2	65.9	64.8
	2023	363	72.0	27.8	71.5	0.2	0.5	66.6	78.9
Lithuania	2019	538	54.3	44.3	52.7	2.2	0.8	46.4	61.3
	2023	627	59.1	40.3	58.2	1.3	0.2	56.0	61.7
Netherlands	2019	475	53.0	43.9	49.5	2.4	4.2	52.1	53.9
	2023	503	52.3	46.2	50.6	1.5	1.6	47.5	56.5
Norway (5)	2019	556	60.3	36.9	56.2	1.6	5.3	62.6	58.4
	2023	727	61.5	36.3	58.0	2.7	3.0	58.7	64.2
Portugal	2019	609	57.4	41.1	55.5	1.2	2.2	53.8	60.6
	2023	728	52.4	45.9	50.5	1.9	1.8	50.4	54.0
Qatar	2019	710	33.1	62.4	30.9	3.1	3.6	33.7	32.6
	2023	891	41.5	54.5	38.6	3.4	3.6	36.5	45.8
Singapore	2019	857	65.5	34.3	65.2	0.1	0.4	66.7	64.4
	2023	599	62.5	37.5	62.4	0.2	0.0	63.8	61.2
Slovak Republic	2019	605	50.3	47.6	48.1	2.8	1.6	44.8	55.3
	2023	661	55.0	42.5	51.9	3.7	1.8	53.8	56.2
Spain	2019	1372	46.4	50.6	43.9	2.7	2.9	39.6	52.5
	2023	1409	47.9	48.4	44.5	3.2	4.0	42.3	53.1

DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent

Mathematics: Data / Applying  
A\_ME4\_10B ME61069B: Number of pages Ahmed reads in 60 minutes - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Sweden	2019	573	60.7	35.8	55.3	4.9	4.0	57.0	63.8
	2023	696	58.5	39.6	55.9	2.1	2.5	56.3	60.8
United Arab Emirates	2019	3694	40.6	56.4	38.5	2.1	3.0	36.5	44.8
	2023	5589	45.0	51.7	42.3	3.3	2.7	41.0	48.7
United States	2019	1242	52.1	46.9	51.1	0.7	1.3	45.0	58.9
	2023	1301	49.0	48.8	47.0	1.8	2.4	42.6	55.6
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International Avg. (25)	2019	20394	54.0	43.2	51.1	2.4	3.3	51.3	56.5
	2023	23896	53.6	43.9	51.1	2.8	2.2	50.0	57.1
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Abu Dhabi, UAE	2019	1292	32.6	63.3	30.6	2.3	3.8	28.5	36.6
	2023	2480	38.1	57.5	35.4	4.2	3.0	34.0	41.9
Dubai, UAE	2019	1046	58.8	39.9	56.9	2.0	1.2	55.2	62.5
	2023	1289	58.7	40.3	57.3	1.5	0.9	55.3	61.9
Ontario, Canada	2019	540	50.6	47.2	48.5	1.2	3.1	39.9	59.7
	2023	595	46.0	51.1	43.6	4.0	1.4	43.4	49.2
Quebec, Canada	2019	540	59.8	38.8	57.8	1.4	1.9	55.4	64.6
	2023	532	53.8	43.8	51.0	3.7	1.5	45.8	60.2
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DIFF = Percent correct  
Because of missing gender information, some totals may appear inconsistent