

Science: Biology / Applying

SP04_01 SP72002: Unusual characteristics of echidna - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	50.0	17.6	16.1	15.2	48.9	2.1	0.1	51.6	48.6
	2023	1559	48.3	20.5	13.4	15.9	46.5	3.5	0.2	48.5	48.1
Kuwait	2019	660	38.7	26.5	19.2	14.3	37.8	2.2	0.0	37.3	40.3
	2023	1078	40.6	24.4	18.9	12.9	38.5	5.1	0.2	44.1	37.1
South Africa (9)	2019	2972	32.5	22.8	28.7	14.9	32.0	1.5	0.1	32.3	32.7
	2023	2988	32.5	21.1	29.0	15.9	31.9	1.8	0.3	31.3	32.8
International Avg. (3)	2019	4488	40.4	22.3	21.3	14.8	39.6	1.9	0.0	40.4	40.5
	2023	5625	40.5	22.0	20.5	14.9	38.9	3.5	0.2	41.3	39.3

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

Science: Biology / Knowing

SP04_03 SP72021: Origin of new cells as organisms grow - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	68.7	14.7	66.7	7.3	8.3	2.7	0.3	75.6	62.5
	2023	1559	60.1	18.0	56.3	9.8	9.5	6.0	0.4	61.7	58.6
Kuwait	2019	659	41.3	28.9	39.5	14.9	12.3	4.4	0.0	41.1	41.5
	2023	1078	39.5	30.2	37.0	12.9	13.5	6.1	0.3	41.0	38.0
South Africa (9)	2019	2972	32.0	17.3	30.6	24.6	23.0	4.3	0.2	32.6	31.4
	2023	2991	30.4	17.3	28.8	23.3	25.5	4.5	0.7	27.6	32.9
International Avg. (3)	2019	4487	47.4	20.3	45.6	15.6	14.6	3.8	0.2	49.8	45.1
	2023	5628	43.3	21.8	40.7	15.3	16.2	5.6	0.4	43.4	43.2

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

Science: Biology / Applying
SP04_04 SP72082: How fewer vehicles affects air quality - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	40.4	58.7	39.7	1.2	0.3	47.8	33.7
	2023	1559	33.1	65.4	32.4	1.6	0.7	39.4	27.2
Kuwait	2019	659	41.2	58.2	40.7	1.1	0.0	47.4	34.1
	2023	1077	36.2	62.0	35.1	2.6	0.3	39.1	33.3
South Africa (9)	2019	2972	12.7	84.8	12.3	2.6	0.4	13.7	11.6
	2023	2992	17.4	79.4	16.8	2.9	1.0	19.0	15.5
International Avg. (3)	2019	4487	31.4	67.2	30.9	1.6	0.2	36.3	26.5
	2023	5628	28.9	68.9	28.1	2.4	0.6	32.5	25.3

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

Science: Biology / Applying

SP04_05 SP72066: Identify predators in diagram - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	40.6	21.9	27.9	38.6	6.6	4.6	0.3	41.3	40.0
	2023	1559	39.6	26.4	22.8	35.9	5.6	8.6	0.8	38.9	40.3
Kuwait	2019	659	39.4	21.8	26.2	37.1	9.0	6.0	0.0	38.6	40.4
	2023	1077	43.1	24.4	20.2	40.0	8.3	6.6	0.5	43.4	42.8
South Africa (9)	2019	2972	18.8	27.6	32.3	18.1	18.0	3.6	0.4	16.8	21.1
	2023	2981	19.6	27.2	33.8	18.7	15.9	3.2	1.2	19.5	19.8
International Avg. (3)	2019	4487	33.0	23.8	28.8	31.3	11.2	4.7	0.2	32.2	33.8
	2023	5617	34.1	26.0	25.6	31.5	9.9	6.1	0.8	33.9	34.3

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

Science: Biology / Knowing

SP04_06 SP72063: How carbon gets into wood - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	28.6	25.8	27.2	30.5	11.5	4.2	0.7	27.4	29.6
	2023	1559	24.5	19.9	23.2	36.3	15.0	4.7	0.9	20.2	28.6
Kuwait	2019	662	30.7	30.8	29.8	26.0	10.5	2.9	0.0	28.8	32.9
	2023	1078	30.6	29.0	29.6	27.1	11.1	2.6	0.7	29.8	31.3
South Africa (9)	2019	2972	31.4	24.7	30.8	28.6	13.8	1.4	0.7	27.5	35.7
	2023	2990	27.4	23.4	26.5	30.5	16.2	1.4	2.0	27.9	27.2
International Avg. (3)	2019	4490	30.2	27.1	29.3	28.4	12.0	2.8	0.5	27.9	32.7
	2023	5627	27.5	24.1	26.4	31.3	14.1	2.9	1.2	26.0	29.0

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

Science: Chemistry / Knowing

SP04_07 SP72102: Subatomic particle not included in diagram - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	83.3	14.2	71.1	14.0	0.7	85.9	80.9
	2023	1559	78.3	16.2	58.4	24.4	1.0	82.6	73.7
Kuwait	2019	662	51.8	43.0	46.3	10.6	0.1	56.2	46.4
	2023	1075	48.7	44.9	42.6	11.6	0.9	46.8	50.9
South Africa (9)	2019	2972	34.3	60.3	31.4	7.4	0.8	37.1	31.1
	2023	2990	33.4	61.4	30.8	5.5	2.3	36.1	30.3

International Avg. (3)	2019	4490	56.5	39.2	49.6	10.7	0.6	59.8	52.8
	2023	5624	53.5	40.8	44.0	13.8	1.4	55.2	51.6

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

Science: Chemistry / Reasoning

SP04_08A SP72141A: Best measurement to answer George's question - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	35.4	34.1	18.7	46.4	0.8	39.4	31.4
	2023	1559	27.3	30.1	11.3	57.6	1.0	29.5	25.0
Kuwait	2019	662	36.5	29.8	17.1	52.9	0.1	38.2	34.0
	2023	1077	34.0	24.8	12.8	61.3	1.1	38.3	27.8
South Africa (9)	2019	2975	9.4	78.1	8.1	12.8	1.0	10.7	8.1
	2023	2992	12.8	76.5	11.2	9.9	2.4	14.7	10.7
International Avg. (3)	2019	4493	27.1	47.3	14.6	37.4	0.6	29.4	24.5
	2023	5628	24.7	43.8	11.8	42.9	1.5	27.5	21.2

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

Science: Chemistry / Reasoning

SP04_08B SP72141B: Variables George should hold constant - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	36.6	38.2	13.9	19.2	27.9	0.8	41.2	32.4
	2023	1559	23.5	38.3	11.6	7.7	41.1	1.2	25.6	21.3
Kuwait	2019	662	35.7	36.3	28.1	13.9	21.3	0.3	37.5	33.4
	2023	1077	12.6	57.5	8.9	4.5	27.7	1.4	14.0	10.6
South Africa (9)	2019	2975	7.0	75.0	5.0	3.3	15.1	1.6	7.7	6.3
	2023	2992	8.5	74.1	8.4	3.1	11.3	3.1	8.5	8.7
International Avg. (3)	2019	4493	26.4	49.8	15.7	12.1	21.5	0.9	28.8	24.0
	2023	5628	14.9	56.7	9.7	5.1	26.7	1.9	16.0	13.6

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

Science: Chemistry / Applying

SP04_09 SP72921: Combining Solution 2 and Solution 3 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	15.0	82.1	14.5	2.6	0.8	17.3	12.9
	2023	1559	7.5	88.8	7.2	2.8	1.3	9.3	5.8
Kuwait	2019	660	22.4	75.8	21.8	2.1	0.3	27.1	16.9
	2023	1076	11.6	83.5	10.9	4.1	1.4	14.7	8.4
South Africa (9)	2019	2975	4.9	90.4	4.6	3.3	1.7	5.1	4.7
	2023	2991	8.7	84.2	8.0	4.3	3.4	9.4	7.9

International Avg. (3)	2019	4491	14.1	82.8	13.7	2.6	0.9	16.5	11.5
	2023	5626	9.2	85.5	8.7	3.7	2.0	11.1	7.4

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

Science: Physics / Applying

SP04_10 SP72234: Energy transfer during temperature change - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	17.6	31.8	22.1	24.0	16.7	4.4	0.9	14.3	20.5
	2023	1559	19.8	27.6	24.8	23.5	18.7	3.8	1.6	19.7	19.8
Kuwait	2019	660	19.0	29.8	23.6	25.9	18.5	1.9	0.3	19.6	18.3
	2023	1078	20.9	26.7	23.6	24.9	19.9	3.3	1.6	21.0	20.8
South Africa (9)	2019	2975	17.4	29.4	21.2	28.2	16.6	2.6	1.9	17.4	17.4
	2023	2989	20.2	28.6	19.0	27.0	18.9	2.8	3.7	20.9	19.6
International Avg. (3)	2019	4491	18.0	30.4	22.3	26.0	17.3	3.0	1.0	17.1	18.7
	2023	5626	20.3	27.6	22.4	25.2	19.2	3.3	2.3	20.5	20.1

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

Science: Physics / Reasoning

SP04_11 SP72251: Where Megan should stand - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	41.9	40.5	11.8	23.9	20.6	2.1	1.1	41.2	42.5
	2023	1559	39.3	37.7	15.1	25.1	17.9	2.3	1.9	35.6	42.8
Kuwait	2019	662	34.0	33.5	14.4	30.9	19.8	1.1	0.4	31.4	36.9
	2023	1077	33.0	31.8	16.5	27.4	20.8	1.9	1.6	30.9	35.0
South Africa (9)	2019	2975	26.1	25.2	21.5	26.1	23.8	1.1	2.3	25.0	27.2
	2023	2987	25.8	24.2	22.2	26.7	21.0	1.6	4.4	23.4	27.7
International Avg. (3)	2019	4493	34.0	33.1	15.9	27.0	21.4	1.4	1.3	32.5	35.5
	2023	5623	32.7	31.2	17.9	26.4	19.9	1.9	2.6	30.0	35.2

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

Science: Physics / Knowing

SP04_12 SP72284: Force represented by arrow in picture - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	52.8	41.3	46.2	11.0	1.4	54.4	51.4
	2023	1559	47.8	40.2	36.8	20.8	2.2	48.8	46.9
Kuwait	2019	662	54.4	40.8	48.7	10.1	0.4	53.3	55.9
	2023	1077	50.2	41.7	42.1	14.3	1.9	47.1	53.9
South Africa (9)	2019	2975	34.1	60.4	31.2	5.9	2.5	31.8	36.5
	2023	2992	32.0	60.9	28.6	5.7	4.8	30.0	34.0

International Avg. (3)	2019	4493	47.1	47.5	42.1	9.0	1.5	46.5	47.9
	2023	5628	43.4	47.6	35.9	13.6	3.0	42.0	44.9

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

Science: Earth Science / Applying
SP04_13 SP72345: Reduce, reuse, recycle (DERIVED) - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	42.4	34.0	42.7	19.5	2.1	1.8	45.9	39.3
	2023	1559	36.3	41.2	32.5	16.4	6.2	3.7	39.3	33.4
Kuwait	2019	657	35.0	41.4	41.0	12.9	4.0	0.7	38.4	31.1
	2023	1077	31.6	47.4	32.3	13.3	4.6	2.4	35.6	27.5
South Africa (9)	2019	2975	18.1	63.7	24.3	4.7	4.3	3.1	18.7	17.5
	2023	2995	17.6	62.3	21.7	4.8	5.2	6.1	18.4	16.8
International Avg. (3)	2019	4488	31.9	46.4	36.0	12.3	3.5	1.8	34.3	29.3
	2023	5631	28.5	50.3	28.8	11.5	5.3	4.1	31.1	25.9

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

Science: Earth Science / Applying
SP04_13A SP72345A: Reduce, reuse, or recycle - items with little packaging - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	76.0	72.2	12.6	10.1	3.2	1.8	74.6	77.4
	2023	1559	70.3	61.1	13.8	12.0	9.4	3.7	74.2	66.6
Kuwait	2019	660	78.0	73.3	13.4	7.2	5.4	0.7	81.5	74.1
	2023	1078	73.5	66.7	14.5	9.5	6.8	2.4	75.1	71.8
South Africa (9)	2019	2975	58.5	52.0	21.4	15.5	7.9	3.1	59.0	57.9
	2023	2995	57.7	48.9	23.1	12.7	9.2	6.1	58.3	56.6
International Avg. (3)	2019	4491	70.9	65.9	15.8	11.0	5.5	1.8	71.7	69.8
	2023	5632	67.2	58.9	17.2	11.4	8.5	4.1	69.2	65.0

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

Science: Earth Science / Applying
SP04_13B SP72345B: Reduce, reuse, or recycle - refilling plastic water bottles - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	81.2	6.1	77.4	11.8	2.9	1.8	82.5	80.0
	2023	1559	76.9	6.8	67.6	13.4	8.5	3.7	78.0	75.9
Kuwait	2019	660	70.5	4.6	65.3	22.7	6.7	0.7	73.7	66.7
	2023	1077	65.1	7.2	58.9	24.3	7.1	2.4	67.7	62.3
South Africa (9)	2019	2975	54.7	9.8	48.7	30.5	8.0	3.1	56.0	53.3
	2023	2995	54.0	8.9	45.7	30.1	9.2	6.1	55.4	51.9

International Avg. (3)	2019	4491	68.8	6.8	63.8	21.7	5.9	1.8	70.8	66.7
	2023	5631	65.3	7.7	57.4	22.6	8.3	4.1	67.0	63.4

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

Science: Earth Science / Applying

SP04_13C SP72345C: Reduce, reuse, or recycle - recharging batteries - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	75.9	12.4	71.8	10.4	3.6	1.8	77.2	74.7
	2023	1559	72.7	11.4	62.6	12.1	10.2	3.7	71.6	73.8
Kuwait	2019	659	73.8	10.5	67.9	13.6	7.3	0.7	77.3	69.7
	2023	1077	75.5	8.9	66.6	12.7	9.3	2.4	78.1	72.8
South Africa (9)	2019	2975	61.4	21.8	54.0	12.1	9.0	3.1	60.8	62.0
	2023	2995	58.1	21.6	48.3	13.3	10.7	6.1	60.1	56.6

International Avg. (3)	2019	4490	70.4	14.9	64.6	12.0	6.6	1.8	71.8	68.8
	2023	5631	68.8	13.9	59.2	12.7	10.1	4.1	69.9	67.7

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

Science: Earth Science / Applying
SP04_13D SP72345D: Reduce, reuse, or recycle - new cardboard from old boxes - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	84.0	4.3	10.8	79.1	4.0	1.8	87.8	80.4
	2023	1559	75.6	8.5	12.8	65.9	9.1	3.7	79.6	71.6
Kuwait	2019	659	79.2	9.5	9.9	74.2	5.7	0.7	86.0	71.4
	2023	1077	77.3	5.9	14.7	70.1	6.9	2.4	81.2	73.0
South Africa (9)	2019	2975	63.5	10.9	21.9	57.1	7.0	3.1	64.9	62.1
	2023	2995	60.8	10.8	22.7	51.9	8.5	6.1	64.0	57.0
International Avg. (3)	2019	4490	75.6	8.2	14.2	70.1	5.6	1.8	79.6	71.3
	2023	5631	71.2	8.4	16.7	62.6	8.1	4.1	74.9	67.2

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

Science: Earth Science / Applying
SP04_13E SP72345E: Reduce, reuse, or recycle - composting - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	49.0	17.9	30.4	46.5	3.4	1.8	53.4	45.0
	2023	1559	51.3	20.4	22.1	44.8	9.0	3.7	50.9	51.7
Kuwait	2019	661	47.8	22.2	26.3	44.4	6.4	0.7	48.1	47.4
	2023	1077	49.1	20.8	24.8	43.9	8.2	2.4	53.2	44.5
South Africa (9)	2019	2975	22.7	43.7	24.4	20.1	8.8	3.1	22.8	22.7
	2023	2995	25.3	38.9	24.0	21.3	9.7	6.1	24.8	25.3

International Avg. (3)	2019	4492	39.8	27.9	27.1	37.0	6.2	1.8	41.4	38.4
	2023	5631	41.9	26.7	23.6	36.6	9.0	4.1	43.0	40.5

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

Science: Earth Science / Applying
SP04_13F SP72345F: Reduce, reuse, or recycle - using solar energy panels - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	69.1	64.9	22.4	6.7	4.2	1.8	71.2	67.1
	2023	1559	65.9	57.0	21.3	8.1	9.8	3.7	71.1	60.8
Kuwait	2019	660	51.6	47.8	31.8	13.0	6.8	0.7	51.7	51.6
	2023	1078	47.7	42.3	33.3	13.1	8.9	2.4	48.1	47.3
South Africa (9)	2019	2975	48.0	41.7	34.1	11.1	10.0	3.1	48.7	47.3
	2023	2995	52.0	43.5	30.3	9.9	10.2	6.1	52.8	51.0
International Avg. (3)	2019	4491	56.2	51.5	29.4	10.3	7.0	1.8	57.2	55.3
	2023	5632	55.2	47.6	28.3	10.4	9.7	4.1	57.3	53.0

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

Science: Earth Science / Applying
SP04_13G SP72345G: Reduce, reuse, or recycle - windows from glass bottles - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	61.4	10.6	26.1	58.4	3.1	1.8	61.6	61.3
	2023	1559	57.4	12.8	24.3	50.1	9.0	3.7	61.3	53.6
Kuwait	2019	660	63.2	12.6	21.9	59.3	5.5	0.7	68.0	57.7
	2023	1077	58.9	15.8	21.2	53.1	7.5	2.4	64.2	53.3
South Africa (9)	2019	2975	59.1	12.7	23.6	52.5	8.0	3.1	62.9	54.9
	2023	2995	56.0	12.4	24.9	47.4	9.2	6.1	58.8	53.5
International Avg. (3)	2019	4491	61.2	12.0	23.9	56.7	5.6	1.8	64.2	57.9
	2023	5631	57.4	13.7	23.5	50.2	8.6	4.1	61.4	53.5

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

Science: Earth Science / Reasoning

SP04_14 SP72349: Why an area floods more often after a forest is cleared - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	63.5	60.5	12.7	9.1	13.1	2.4	2.2	62.7	64.1
	2023	1559	56.6	50.7	14.7	14.0	10.2	5.0	5.4	60.1	53.2
Kuwait	2019	661	49.8	48.6	25.6	14.7	8.6	1.3	1.3	52.4	46.9
	2023	1074	47.6	44.6	22.1	16.8	10.1	2.6	3.7	48.5	46.7
South Africa (9)	2019	2975	39.3	36.8	25.1	17.2	14.4	1.6	4.9	39.1	39.6
	2023	2986	40.8	36.5	21.4	17.2	14.4	2.1	8.4	37.2	44.4
International Avg. (3)	2019	4492	50.9	48.6	21.1	13.7	12.0	1.8	2.8	51.4	50.2
	2023	5619	48.3	44.0	19.4	16.0	11.6	3.2	5.8	48.6	48.1

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

Science: Earth Science / Knowing

SP04_15 SP72363: How the Sun produces light - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	50.2	8.7	18.3	47.6	20.1	2.4	2.9	53.4	47.4
	2023	1559	49.3	10.4	18.7	43.9	16.0	4.1	6.8	50.4	48.3
Kuwait	2019	661	49.6	17.3	19.4	47.9	12.1	1.3	2.0	51.5	47.3
	2023	1074	50.6	15.4	16.4	47.3	14.4	2.0	4.4	53.2	47.9
South Africa (9)	2019	2975	41.4	19.3	18.1	38.2	16.8	2.2	5.4	42.1	40.5
	2023	2986	40.5	19.2	18.7	36.1	15.3	1.0	9.7	41.8	39.8
International Avg. (3)	2019	4492	47.1	15.1	18.6	44.6	16.3	1.9	3.4	49.0	45.1
	2023	5619	46.8	15.0	17.9	42.5	15.2	2.4	7.0	48.4	45.4

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

Science: Biology / Applying
SP08_01 SP72070: Symbiosis between crocodiles and birds - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	84.7	1.3	12.5	1.4	84.4	0.3	0.0	82.5	86.5
	2023	1551	76.5	2.0	18.2	2.7	74.2	2.6	0.3	74.4	78.4
Kuwait	2019	653	48.6	5.2	37.3	7.4	47.4	2.4	0.2	45.1	52.8
	2023	1077	36.0	5.8	49.5	6.9	34.9	2.7	0.3	32.9	39.0
South Africa (9)	2019	2981	40.6	4.8	52.4	1.8	40.4	0.6	0.1	41.3	39.9
	2023	2976	36.7	4.8	55.0	3.0	36.4	0.8	0.1	35.5	38.5
International Avg. (3)	2019	4483	58.0	3.8	34.1	3.6	57.4	1.1	0.1	56.3	59.8
	2023	5604	49.7	4.2	40.9	4.2	48.5	2.0	0.2	47.6	52.0

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

Science: Biology / Knowing

SP08_02 SP72400: Match organs to body systems - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	52.7	47.0	52.4	0.6	0.0	53.7	51.8
	2023	1551	44.5	54.4	43.7	1.5	0.3	44.5	44.5
Kuwait	2019	653	60.9	38.0	59.2	2.6	0.2	67.8	52.5
	2023	1077	54.4	44.1	52.6	3.0	0.3	62.7	46.1
South Africa (9)	2019	2981	14.7	79.4	13.7	6.8	0.2	15.5	13.8
	2023	2978	11.2	83.8	10.6	5.6	0.1	12.4	9.8

International Avg. (3)	2019	4483	42.8	54.8	41.7	3.3	0.1	45.6	39.4
	2023	5606	36.7	60.8	35.6	3.4	0.2	39.9	33.5

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

Science: Biology / Knowing

SP08_03 SP72024: Removal of chloroplasts from a plant cell - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	54.8	17.7	6.9	18.9	52.8	3.6	0.0	61.3	49.3
	2023	1551	42.6	18.8	11.0	23.5	39.6	6.8	0.3	45.4	40.0
Kuwait	2019	652	58.1	12.9	9.2	18.7	56.4	2.6	0.2	64.4	50.4
	2023	1077	56.7	15.1	9.7	16.7	54.3	4.0	0.3	61.2	52.1
South Africa (9)	2019	2981	35.5	15.5	11.3	36.7	35.0	1.4	0.2	39.9	30.7
	2023	2975	34.7	17.0	9.5	37.4	33.9	2.1	0.1	34.2	34.9
International Avg. (3)	2019	4482	49.5	15.4	9.1	24.8	48.1	2.5	0.1	55.2	43.5
	2023	5603	44.6	17.0	10.1	25.9	42.6	4.3	0.2	47.0	42.4

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

Science: Biology / Applying

SP08_04 SP72462: Largest transfer of energy in energy pyramid - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	60.3	13.3	11.1	59.0	14.4	2.1	0.0	65.6	55.8
	2023	1551	56.6	15.2	12.6	53.7	13.3	4.8	0.3	54.2	58.8
Kuwait	2019	653	39.7	21.1	19.0	39.0	19.1	1.3	0.3	39.6	39.9
	2023	1077	35.9	23.6	19.9	34.7	18.5	2.9	0.4	34.5	37.2
South Africa (9)	2019	2981	34.0	20.8	21.8	33.5	22.4	1.1	0.3	32.8	35.4
	2023	2972	31.9	25.0	22.3	31.5	19.8	1.3	0.1	31.7	32.2
International Avg. (3)	2019	4483	44.7	18.4	17.3	43.9	18.7	1.5	0.2	46.0	43.7
	2023	5600	41.5	21.3	18.2	40.0	17.2	3.0	0.3	40.1	42.7

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

Science: Biology / Knowing
SP08_05 SP72443: Human DNA - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	54.8	23.6	53.8	10.8	10.1	1.7	0.0	61.2	49.2
	2023	1551	58.7	21.7	57.3	9.6	9.0	2.0	0.4	59.8	57.7
Kuwait	2019	653	60.9	15.1	59.8	6.0	17.3	1.5	0.3	66.7	54.0
	2023	1077	56.6	13.1	55.1	6.3	22.7	2.1	0.7	56.0	57.2
South Africa (9)	2019	2981	34.6	34.5	34.0	14.0	15.8	1.2	0.4	34.4	34.8
	2023	2975	29.9	39.1	29.3	12.6	17.2	1.4	0.3	31.4	28.3
International Avg. (3)	2019	4483	50.1	24.4	49.2	10.3	14.4	1.5	0.2	54.1	46.0
	2023	5603	48.4	24.7	47.2	9.5	16.3	1.8	0.5	49.1	47.8

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

Science: Biology / Reasoning

SP08_06 SP72903: Relationship among grass, mice, and snakes in an ecosystem - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	29.6	37.9	20.6	10.0	31.5	0.0	31.4	28.1
	2023	1551	26.1	35.5	11.3	8.9	43.9	0.4	26.8	25.4
Kuwait	2019	653	31.1	46.9	12.8	17.7	22.2	0.3	31.9	29.9
	2023	1078	21.6	42.3	13.7	6.7	36.6	0.7	20.3	23.2
South Africa (9)	2019	2981	9.9	74.0	11.0	3.2	11.4	0.4	10.3	9.4
	2023	2978	9.1	77.9	8.8	3.8	9.1	0.4	10.1	8.1

International Avg. (3)	2019	4483	23.5	52.9	14.8	10.3	21.7	0.2	24.5	22.4
	2023	5607	18.9	51.9	11.3	6.5	29.9	0.5	19.1	18.9

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

Science: Chemistry / Reasoning

SP08_07 SP72145: John's mixture separation steps - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	14.3	84.2	14.1	1.7	0.0	21.1	8.4
	2023	1551	12.8	84.9	12.5	2.1	0.5	15.3	10.6
Kuwait	2019	653	10.4	86.7	10.0	2.9	0.3	12.9	7.3
	2023	1078	6.8	88.7	6.4	4.2	0.8	7.7	5.8
South Africa (9)	2019	2981	8.3	89.3	8.1	2.1	0.5	8.6	8.1
	2023	2978	8.4	88.4	8.1	3.0	0.5	10.3	6.8
International Avg. (3)	2019	4483	11.0	86.7	10.7	2.2	0.3	14.2	7.9
	2023	5607	9.3	87.3	9.0	3.1	0.6	11.1	7.7

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

Science: Chemistry / Applying

SP08_08 SP72100: Number of hydrogen atoms in Diagram A - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	51.7	30.0	5.8	50.5	11.4	2.3	0.0	54.5	49.3
	2023	1551	49.2	26.8	10.7	47.6	11.6	2.8	0.6	53.0	45.7
Kuwait	2019	653	44.9	30.2	6.5	44.2	17.5	1.3	0.3	46.0	43.7
	2023	1078	47.6	26.6	7.6	46.4	16.9	1.8	0.8	48.0	47.3
South Africa (9)	2019	2981	33.7	33.9	10.2	33.1	21.1	1.1	0.6	36.2	30.9
	2023	2974	35.1	34.1	9.4	34.7	20.6	0.6	0.5	36.8	33.4
International Avg. (3)	2019	4483	43.4	31.4	7.5	42.6	16.6	1.5	0.3	45.6	41.3
	2023	5603	44.0	29.2	9.2	42.9	16.3	1.7	0.6	45.9	42.1

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

Science: Chemistry / Applying

SP08_10 SP72137: How carbon dioxide extinguishes a fire - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	52.2	14.2	51.1	22.7	9.8	2.0	0.2	50.7	53.5
	2023	1551	54.6	13.6	52.6	20.1	9.9	3.0	0.8	54.0	55.2
Kuwait	2019	653	52.8	13.8	51.2	26.8	5.2	2.3	0.7	53.3	52.2
	2023	1081	55.7	12.8	54.0	23.1	7.0	2.4	0.8	56.7	54.8
South Africa (9)	2019	2981	23.1	29.9	22.2	34.6	9.4	2.8	1.2	22.4	23.8
	2023	2972	23.4	30.5	22.8	33.4	10.5	1.9	0.9	22.3	24.6
International Avg. (3)	2019	4483	42.7	19.3	41.5	28.0	8.1	2.3	0.7	42.1	43.2
	2023	5604	44.6	18.9	43.1	25.5	9.2	2.4	0.8	44.3	44.9

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

Science: Physics / Knowing

SP08_11 SP72298: Information Kerry needs to calculate her average speed - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	15.1	58.2	10.3	31.1	0.3	22.1	8.7
	2023	1551	10.4	50.9	5.9	42.3	0.9	14.7	6.6
Kuwait	2019	653	29.3	61.0	25.3	13.0	0.7	26.7	33.0
	2023	1081	39.2	48.1	31.0	20.0	1.0	39.3	39.0
South Africa (9)	2019	2981	25.0	65.8	21.9	10.6	1.7	27.9	21.5
	2023	2977	25.0	68.3	22.7	7.9	1.1	25.9	24.3

International Avg. (3)	2019	4483	23.1	61.7	19.2	18.2	0.9	25.6	21.1
	2023	5609	24.9	55.7	19.9	23.4	1.0	26.6	23.3

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

Science: Physics / Applying
SP08_12 SP72215: Masses of melted and solid cheese - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	20.5	71.2	12.6	13.6	2.0	0.5	26.3	15.4
	2023	1551	9.5	82.3	11.4	3.5	1.6	1.2	10.9	8.2
Kuwait	2019	653	14.7	77.1	11.6	8.5	2.1	0.7	15.6	13.6
	2023	1081	7.0	86.1	6.5	3.4	2.7	1.3	6.7	7.3
South Africa (9)	2019	2981	14.6	74.5	17.7	5.4	0.7	1.7	15.1	14.0
	2023	2977	10.6	79.5	13.2	3.6	2.3	1.4	10.6	10.2
International Avg. (3)	2019	4483	16.6	74.3	13.9	9.2	1.6	1.0	19.0	14.4
	2023	5609	9.0	82.6	10.3	3.5	2.2	1.3	9.4	8.6

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

Science: Physics / Reasoning

SP08_13 SP72260: Components Julia must use to build a circuit - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	20.9	77.2	20.5	1.8	0.5	19.6	22.1
	2023	1551	22.7	73.3	21.6	3.8	1.3	18.9	26.4
Kuwait	2019	652	41.7	54.7	39.1	5.3	0.9	44.7	37.9
	2023	1079	30.3	65.8	28.6	4.3	1.3	29.9	30.7
South Africa (9)	2019	2981	28.1	66.0	25.8	6.3	2.0	28.3	28.0
	2023	2977	27.5	66.1	25.1	7.1	1.7	24.8	29.9

International Avg. (3)	2019	4482	30.3	66.0	28.5	4.5	1.1	30.9	29.3
	2023	5607	26.8	68.4	25.1	5.1	1.4	24.5	29.0

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

Science: Physics / Knowing

SP08_14 SP72265: Statements about magnets (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	47.4	51.6	46.5	1.2	0.6	49.8	45.3
	2023	1551	47.4	50.6	45.5	2.3	1.7	49.7	45.2
Kuwait	2019	652	32.3	64.5	30.8	3.1	1.7	34.3	29.9
	2023	1081	32.0	65.0	30.6	2.9	1.5	33.0	30.9
South Africa (9)	2019	2981	20.1	75.9	19.2	2.0	2.9	22.4	17.6
	2023	2978	20.2	76.5	19.3	2.1	2.0	18.9	21.5
International Avg. (3)	2019	4482	33.3	64.0	32.1	2.1	1.7	35.5	30.9
	2023	5610	33.2	64.0	31.8	2.4	1.7	33.9	32.5

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

Science: Physics / Knowing

SP08_14A SP72265A: Statements about magnets - like poles repel - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	91.8	89.4	8.0	2.0	0.6	92.8	90.9
	2023	1551	90.3	86.1	9.3	2.9	1.7	91.3	89.3
Kuwait	2019	652	77.3	73.0	21.5	3.8	1.7	78.7	75.5
	2023	1081	75.5	71.3	23.1	4.0	1.5	74.2	76.9
South Africa (9)	2019	2981	78.5	73.7	20.2	3.2	2.9	81.0	75.7
	2023	2978	76.9	72.9	21.9	3.2	2.0	78.2	76.3

International Avg. (3)	2019	4482	82.5	78.7	16.6	3.0	1.7	84.1	80.7
	2023	5610	80.9	76.8	18.1	3.4	1.7	81.2	80.8

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

Science: Physics / Knowing

SP08_14B SP72265B: Statements about magnets - plastics are magnetic - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	89.3	10.3	86.7	2.4	0.6	91.3	87.6
	2023	1551	89.2	10.3	84.8	3.2	1.7	90.3	88.2
Kuwait	2019	652	87.4	11.9	82.8	3.6	1.7	89.3	85.1
	2023	1081	87.9	11.4	82.7	4.4	1.5	89.4	86.4
South Africa (9)	2019	2981	84.5	14.6	79.7	2.8	2.9	84.7	84.4
	2023	2978	81.2	17.9	77.2	3.0	2.0	81.1	81.4
International Avg. (3)	2019	4482	87.1	12.3	83.1	2.9	1.7	88.5	85.7
	2023	5610	86.1	13.2	81.6	3.5	1.7	86.9	85.3

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

Science: Physics / Knowing

SP08_14C SP72265C: Statements about magnets - strong magnets attract more - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	92.0	88.8	7.7	2.9	0.6	93.9	90.4
	2023	1551	90.3	85.3	9.2	3.8	1.7	92.1	88.5
Kuwait	2019	652	88.4	83.5	11.0	3.8	1.7	91.8	84.2
	2023	1081	90.0	85.3	9.5	3.7	1.5	91.4	88.6
South Africa (9)	2019	2981	86.0	80.8	13.2	3.1	2.9	88.0	83.6
	2023	2978	84.7	80.5	14.5	3.0	2.0	84.2	85.1

International Avg. (3)	2019	4482	88.8	84.4	10.6	3.3	1.7	91.2	86.1
	2023	5610	88.3	83.7	11.1	3.5	1.7	89.3	87.4

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

Science: Physics / Knowing

SP08_14D SP72265D: Statements about magnets - attract wood - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	96.2	3.7	92.8	2.9	0.6	98.3	94.4
	2023	1551	95.6	4.1	90.6	3.6	1.7	97.8	93.6
Kuwait	2019	652	92.3	7.2	86.8	4.2	1.7	95.8	88.0
	2023	1081	92.7	6.9	87.8	3.8	1.5	95.4	90.0
South Africa (9)	2019	2981	89.9	9.5	84.5	3.1	2.9	89.8	90.0
	2023	2978	87.9	11.5	83.1	3.5	2.0	88.7	87.3
International Avg. (3)	2019	4482	92.8	6.8	88.0	3.4	1.7	94.6	90.8
	2023	5610	92.1	7.5	87.1	3.6	1.7	94.0	90.3

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

Science: Physics / Knowing

SP08_14E SP72265E: Statements about magnets - size and strength - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	60.5	38.2	58.4	2.8	0.6	58.6	62.1
	2023	1551	59.1	38.7	56.0	3.6	1.7	59.7	58.6
Kuwait	2019	652	49.5	47.8	46.9	3.6	1.7	49.1	50.0
	2023	1081	48.9	48.3	46.1	4.1	1.5	48.1	49.6
South Africa (9)	2019	2981	34.2	61.9	32.2	3.0	2.9	35.5	32.7
	2023	2978	35.2	61.5	33.5	3.1	2.0	33.2	37.0
International Avg. (3)	2019	4482	48.1	49.3	45.8	3.1	1.7	47.8	48.3
	2023	5610	47.7	49.5	45.2	3.6	1.7	47.0	48.4

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

Science: Earth Science / Reasoning

SP08_15 SP72347: Area that would most benefit from desalination plant - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	26.5	25.9	24.3	14.3	33.3	1.0	1.0	24.8	27.9
	2023	1551	23.5	22.2	26.4	15.0	30.9	3.4	2.2	20.2	26.5
Kuwait	2019	652	29.2	27.9	22.1	19.9	25.9	2.1	2.1	28.6	29.8
	2023	1080	26.9	25.8	26.1	19.9	24.0	2.3	2.0	30.1	23.8
South Africa (9)	2019	2981	21.8	20.4	41.7	15.8	15.9	2.3	3.8	21.7	21.8
	2023	2975	24.6	23.4	41.7	16.3	14.0	1.9	2.6	23.5	25.5
International Avg. (3)	2019	4482	25.8	24.8	29.4	16.7	25.0	1.8	2.3	25.0	26.5
	2023	5606	25.0	23.8	31.4	17.0	22.9	2.5	2.3	24.6	25.2

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

Science: Earth Science / Knowing

SP08_16 SP72351: Why oil, gas, and coal are nonrenewable resources - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	43.9	43.8	34.3	20.6	1.3	54.7	33.4
	2023	1551	34.9	41.3	22.1	33.9	2.7	38.4	31.5
Kuwait	2019	652	16.8	67.8	13.7	16.3	2.2	15.8	18.2
	2023	1081	14.7	58.0	10.0	29.8	2.1	13.1	16.7
South Africa (9)	2019	2981	10.2	77.8	8.9	8.9	4.4	12.3	7.8
	2023	2978	12.8	78.2	11.5	7.3	3.1	12.8	12.8
International Avg. (3)	2019	4482	23.7	63.1	19.0	15.3	2.6	27.6	19.8
	2023	5610	20.8	59.2	14.5	23.7	2.6	21.5	20.3

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

Science: Earth Science / Applying

SP08_17 SP72367: Main cause of changing tides - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	30.4	28.6	4.9	58.5	1.9	3.6	2.4	25.6	34.5
	2023	1551	32.0	30.2	8.7	52.4	3.2	2.0	3.6	25.4	38.0
Kuwait	2019	652	34.9	33.8	4.6	54.1	4.1	0.8	2.6	31.6	39.0
	2023	1081	36.1	34.5	6.0	51.0	4.1	1.6	2.6	28.3	43.7
South Africa (9)	2019	2981	25.9	24.1	15.1	42.8	11.1	2.0	4.9	24.2	27.8
	2023	2972	25.8	24.6	16.1	43.8	10.8	1.3	3.5	23.0	28.9
International Avg. (3)	2019	4482	30.4	28.8	8.2	51.8	5.7	2.1	3.3	27.2	33.7
	2023	5604	31.3	29.8	10.2	49.1	6.0	1.6	3.2	25.6	36.9

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

Science: Biology / Knowing

SP09_01 SP62099: Cell development in young animals - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	62.9	14.1	61.5	13.6	8.4	2.3	0.1	69.7	56.8
	2023	1557	58.1	15.4	55.8	17.1	7.8	3.9	0.0	60.3	56.1
Kuwait	2019	648	39.9	27.8	38.9	22.8	8.1	2.3	0.1	38.2	41.7
	2023	1082	31.5	33.6	30.9	23.9	9.7	1.8	0.1	31.7	31.4
South Africa (9)	2019	2970	16.9	29.8	16.3	27.1	23.5	2.9	0.5	16.7	17.1
	2023	2936	16.2	28.0	15.8	28.5	25.0	2.6	0.1	15.0	17.6
International Avg. (3)	2019	4465	39.9	23.9	38.9	21.2	13.3	2.5	0.2	41.6	38.5
	2023	5575	35.3	25.7	34.2	23.1	14.1	2.8	0.1	35.6	35.0

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

Science: Biology / Knowing

SP09_02 SP62095: Fill in organ names - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	8.5	81.4	10.7	2.7	5.1	0.1	7.5	9.4
	2023	1557	13.9	70.3	14.3	5.4	9.9	0.0	17.7	10.3
Kuwait	2019	649	31.9	53.5	23.5	18.9	4.0	0.1	36.3	26.6
	2023	1082	19.8	66.9	16.2	10.4	6.4	0.1	19.5	20.1
South Africa (9)	2019	2970	15.8	71.0	13.9	7.7	6.9	0.5	16.8	14.7
	2023	2940	12.9	75.5	12.7	5.8	5.9	0.1	14.6	11.1

International Avg. (3)	2019	4466	18.8	68.7	16.0	9.8	5.3	0.2	20.2	16.9
	2023	5579	15.6	70.9	14.4	7.2	7.4	0.1	17.3	13.9

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

Science: Biology / Knowing

SP09_03 SP62106: Characteristics of young rabbits - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	75.6	13.6	7.4	2.9	73.8	2.3	0.1	80.1	71.5
	2023	1556	70.5	15.9	7.3	5.0	67.4	4.4	0.0	73.7	67.6
Kuwait	2019	649	59.2	24.1	8.2	7.6	57.9	2.1	0.1	63.9	53.8
	2023	1083	53.7	30.2	8.2	7.0	52.6	1.9	0.1	54.3	53.0
South Africa (9)	2019	2970	50.9	21.8	18.1	7.6	49.3	2.4	0.7	55.4	45.9
	2023	2939	50.3	22.4	18.5	7.7	49.2	2.0	0.2	55.7	45.5
International Avg. (3)	2019	4466	61.9	19.8	11.2	6.0	60.4	2.3	0.3	66.5	57.1
	2023	5578	58.2	22.8	11.3	6.6	56.4	2.8	0.1	61.2	55.4

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

Science: Biology / Reasoning

SP09_04 SP62064: Bones of a bird are hollow - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	67.3	27.4	56.5	16.0	0.2	68.3	66.5
	2023	1557	65.0	26.1	48.5	25.1	0.2	64.9	65.1
Kuwait	2019	649	61.6	32.9	52.9	14.0	0.1	62.9	60.0
	2023	1082	61.8	29.0	46.9	23.8	0.2	60.3	63.4
South Africa (9)	2019	2970	40.2	52.1	35.0	12.2	0.8	38.6	42.1
	2023	2940	30.0	63.3	27.1	9.3	0.3	30.8	28.8

International Avg. (3)	2019	4466	56.4	37.5	48.1	14.0	0.4	56.6	56.2
	2023	5579	52.2	39.5	40.8	19.4	0.3	52.0	52.4

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

Science: Physics / Applying
SP09_05 SP62132: Water and tea graphs - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	38.4	16.7	15.0	36.1	26.1	5.9	0.2	36.7	39.9
	2023	1557	37.0	16.4	16.5	33.2	23.8	9.7	0.4	34.5	39.3
Kuwait	2019	648	40.3	18.0	23.8	39.3	16.3	2.4	0.1	39.8	41.0
	2023	1083	42.8	22.8	18.2	41.6	14.5	2.6	0.3	40.1	45.6
South Africa (9)	2019	2970	43.2	17.9	20.7	42.0	16.5	1.8	0.9	43.0	43.5
	2023	2939	44.3	17.8	19.4	43.1	17.0	2.3	0.3	42.0	46.9
International Avg. (3)	2019	4465	40.7	17.5	19.9	39.1	19.7	3.4	0.4	39.8	41.5
	2023	5579	41.3	19.0	18.0	39.3	18.4	4.9	0.4	38.8	43.9

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

Science: Physics / Reasoning

SP09_06 SP62163: Truck sank into the mud - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	2.8	89.1	2.6	8.1	0.2	1.8	3.7
	2023	1557	4.3	83.3	3.7	12.5	0.5	4.6	4.0
Kuwait	2019	649	6.2	84.2	5.6	10.1	0.1	5.0	7.7
	2023	1082	11.1	72.9	9.1	17.8	0.3	12.3	9.6
South Africa (9)	2019	2970	1.5	93.1	1.4	4.3	1.3	1.3	1.8
	2023	2940	2.5	93.7	2.4	3.4	0.5	2.1	2.9

International Avg. (3)	2019	4466	3.5	88.8	3.2	7.5	0.5	2.7	4.4
	2023	5579	5.9	83.3	5.1	11.2	0.5	6.4	5.5

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

Science: Physics / Reasoning

SP09_07 SP62153: Flashlight on blue ball - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	39.9	18.3	13.3	37.8	25.2	5.0	0.3	38.8	40.9
	2023	1557	39.5	15.2	17.0	36.6	23.8	6.8	0.5	39.3	39.7
Kuwait	2019	648	40.5	12.2	22.3	39.4	23.3	2.7	0.1	38.0	43.4
	2023	1083	36.0	15.4	21.4	34.4	24.4	3.9	0.5	37.0	35.0
South Africa (9)	2019	2970	36.9	17.5	21.0	35.3	21.9	2.8	1.5	34.9	39.2
	2023	2938	38.9	15.6	21.1	37.2	21.7	3.6	0.7	37.3	40.7
International Avg. (3)	2019	4465	39.1	16.0	18.9	37.5	23.5	3.5	0.6	37.2	41.2
	2023	5578	38.1	15.4	19.8	36.1	23.3	4.8	0.6	37.8	38.5

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

Science: Chemistry / Knowing

SP09_08 SP62018: Element, compound, mixture (DERIVED) - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	6.7	87.7	6.7	3.2	1.9	0.5	4.6	8.7
	2023	1557	7.6	85.3	7.3	3.7	3.0	0.7	8.2	7.1
Kuwait	2019	647	23.7	67.8	13.4	16.4	2.2	0.1	26.8	20.1
	2023	1081	14.7	78.0	10.7	9.0	1.7	0.5	13.9	15.5
South Africa (9)	2019	2970	5.7	86.6	5.7	2.6	3.4	1.9	5.5	5.9
	2023	2941	5.7	87.2	5.6	2.7	3.5	1.0	5.4	6.1
International Avg. (3)	2019	4464	12.0	80.7	8.6	7.4	2.5	0.8	12.3	11.6
	2023	5579	9.4	83.5	7.9	5.1	2.7	0.7	9.1	9.6

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

Science: Chemistry / Knowing

SP09_08A SP62018A: Element, compound, mixture: sugar - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	35.7	37.5	34.2	24.2	3.6	0.5	35.6	35.7
	2023	1557	35.1	38.9	32.9	21.9	5.6	0.7	34.8	35.4
Kuwait	2019	649	47.9	32.6	46.2	17.7	3.3	0.1	53.1	41.9
	2023	1082	37.9	40.1	36.5	19.6	3.3	0.5	38.0	37.8
South Africa (9)	2019	2970	26.8	14.0	25.0	54.2	4.9	1.9	24.5	29.6
	2023	2941	29.3	15.2	27.5	51.2	5.1	1.0	28.5	30.3

International Avg. (3)	2019	4466	36.8	28.0	35.1	32.0	3.9	0.8	37.8	35.7
	2023	5580	34.1	31.4	32.3	30.9	4.7	0.7	33.7	34.5

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

Science: Chemistry / Knowing

SP09_08B SP62018B: Element, compound, mixture: iron - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	61.7	58.3	25.5	10.6	5.1	0.5	66.3	57.5
	2023	1557	57.0	53.1	28.3	11.7	6.2	0.7	55.7	58.2
Kuwait	2019	649	67.0	64.2	25.1	6.5	3.9	0.1	69.2	64.4
	2023	1081	61.1	57.9	30.2	6.6	4.8	0.5	59.9	62.4
South Africa (9)	2019	2970	64.3	59.8	27.6	5.5	5.2	1.9	63.5	65.4
	2023	2941	65.1	61.0	25.5	7.2	5.4	1.0	66.8	63.4
International Avg. (3)	2019	4466	64.3	60.8	26.1	7.6	4.8	0.8	66.3	62.4
	2023	5579	61.1	57.3	28.0	8.5	5.4	0.7	60.8	61.3

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

Science: Chemistry / Knowing

SP09_08C SP62018C: Element, compound, mixture: air - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	26.2	23.0	46.2	24.6	5.6	0.5	24.4	28.0
	2023	1557	28.3	27.3	39.2	26.2	6.7	0.7	29.4	27.3
Kuwait	2019	648	46.9	24.9	25.8	44.9	4.3	0.1	51.6	41.4
	2023	1082	39.5	25.9	31.3	37.3	5.0	0.5	38.2	40.8
South Africa (9)	2019	2970	23.0	26.8	43.1	20.8	7.5	1.9	23.5	22.3
	2023	2941	20.4	30.4	42.2	18.6	7.8	1.0	18.5	22.3

International Avg. (3)	2019	4465	32.0	24.9	38.4	30.1	5.8	0.8	33.2	30.6
	2023	5580	29.4	27.8	37.6	27.4	6.5	0.7	28.7	30.1

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

Science: Chemistry / Knowing

SP09_08D SP62018D: Element, compound, mixture: sodium bicarb - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	41.2	29.8	38.0	24.6	7.1	0.5	39.0	43.1
	2023	1557	36.3	31.3	32.6	25.8	9.6	0.7	37.7	35.0
Kuwait	2019	648	53.2	16.0	51.1	28.8	3.9	0.1	57.9	47.9
	2023	1082	49.9	14.0	47.5	33.8	4.3	0.5	50.4	49.3
South Africa (9)	2019	2970	32.4	19.7	30.1	43.1	5.3	1.9	32.2	32.7
	2023	2941	33.0	18.8	30.8	43.8	5.6	1.0	33.1	32.8
International Avg. (3)	2019	4465	42.3	21.8	39.7	32.2	5.4	0.8	43.0	41.2
	2023	5580	39.7	21.4	36.9	34.5	6.5	0.7	40.4	39.0

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

Science: Chemistry / Knowing

SP09_08E SP62018E: Element, compound, mixture: cobalt - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	38.4	34.2	27.2	27.7	10.3	0.5	36.1	40.5
	2023	1557	36.9	32.5	30.5	25.2	11.2	0.7	37.5	36.3
Kuwait	2019	649	48.8	46.2	25.2	23.2	5.2	0.1	49.2	48.4
	2023	1082	38.6	36.2	28.2	29.5	5.6	0.5	38.0	39.1
South Africa (9)	2019	2970	38.1	35.0	34.0	23.0	6.1	1.9	39.9	35.9
	2023	2941	36.9	34.1	34.6	23.7	6.6	1.0	37.4	36.0

International Avg. (3)	2019	4466	41.8	38.5	28.8	24.7	7.2	0.8	41.7	41.6
	2023	5580	37.4	34.3	31.1	26.1	7.8	0.7	37.7	37.1

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

Science: Physics / Applying
SP09_09 SP62143: Heating water in test tube - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	7.4	63.1	5.0	31.3	0.5	4.1	10.6
	2023	1557	13.2	48.0	7.3	43.9	0.7	15.3	11.2
Kuwait	2019	649	7.9	77.3	6.6	15.6	0.5	8.4	7.2
	2023	1081	5.9	67.8	4.2	27.3	0.6	5.6	6.3
South Africa (9)	2019	2970	7.2	84.2	6.5	7.0	2.3	5.8	8.8
	2023	2940	4.2	87.9	3.9	6.9	1.4	3.5	5.1

International Avg. (3)	2019	4466	7.5	74.9	6.0	18.0	1.1	6.1	8.9
	2023	5578	7.8	67.9	5.1	26.1	0.9	8.1	7.5

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

Science: Chemistry / Applying
SP09_10 SP62276: Iron object changes color - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	42.8	56.0	41.9	1.6	0.6	51.9	34.6
	2023	1557	34.4	63.9	33.5	1.8	0.8	36.4	32.6
Kuwait	2019	649	31.4	66.3	30.3	2.4	1.0	38.1	23.8
	2023	1080	18.9	77.6	18.1	3.4	0.8	22.9	14.8
South Africa (9)	2019	2970	15.9	79.1	14.9	3.2	2.8	16.6	15.1
	2023	2940	20.3	74.7	19.0	4.2	2.1	22.1	18.1

International Avg. (3)	2019	4466	30.0	67.1	29.0	2.4	1.5	35.5	24.5
	2023	5577	24.5	72.1	23.5	3.2	1.2	27.1	21.8

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

Science: Chemistry / Reasoning

SP09_11 SP62050: Cabbage juice pH indicators - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	14.5	76.7	13.0	9.4	0.8	20.0	9.8
	2023	1557	8.7	84.1	8.1	7.0	0.8	10.8	6.9
Kuwait	2019	649	16.0	80.5	15.4	2.7	1.4	20.5	10.9
	2023	1080	15.5	81.3	14.9	2.9	1.0	18.9	11.9
South Africa (9)	2019	2970	17.1	76.9	15.8	3.9	3.3	19.6	14.1
	2023	2940	12.9	80.8	12.0	4.8	2.4	15.1	11.0

International Avg. (3)	2019	4466	15.9	78.0	14.8	5.3	1.9	20.0	11.6
	2023	5577	12.4	82.1	11.6	4.9	1.4	14.9	9.9

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

Science: Earth Science / Knowing
SP09_12 SP62205: Gases in Earth's atmosphere - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	35.7	34.3	26.9	12.9	22.1	2.2	1.8	39.6	32.1
	2023	1557	34.7	33.4	30.0	11.8	21.1	2.4	1.3	33.8	35.5
Kuwait	2019	649	35.3	34.5	30.3	8.3	24.6	0.9	1.4	38.5	31.7
	2023	1084	32.6	31.6	40.8	5.8	18.8	1.9	1.1	27.0	38.2
South Africa (9)	2019	2970	12.0	11.2	46.3	14.8	21.1	2.3	4.3	11.5	12.5
	2023	2933	9.6	9.0	47.0	13.0	24.5	3.5	2.9	9.7	9.5
International Avg. (3)	2019	4466	27.6	26.6	34.5	12.0	22.6	1.8	2.5	29.9	25.4
	2023	5574	25.6	24.7	39.3	10.2	21.5	2.6	1.8	23.5	27.7

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

Science: Earth Science / Knowing

SP09_13 SP62190: Disadvantage of solar energy - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	32.7	15.2	30.4	17.0	30.4	5.0	2.0	26.3	38.4
	2023	1557	33.9	17.2	25.7	19.6	32.1	3.7	1.6	30.9	36.6
Kuwait	2019	649	52.4	12.2	21.7	12.5	51.1	1.1	1.4	57.8	46.3
	2023	1083	48.3	14.3	23.8	11.7	46.6	2.1	1.4	46.1	50.5
South Africa (9)	2019	2970	38.5	16.5	21.8	18.6	35.6	2.6	4.7	38.6	38.3
	2023	2937	41.7	17.5	20.6	16.3	38.9	3.2	3.4	42.9	40.9
International Avg. (3)	2019	4466	41.2	14.6	24.7	16.0	39.0	2.9	2.7	40.9	41.0
	2023	5577	41.3	16.3	23.4	15.9	39.2	3.0	2.1	40.0	42.7

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

Science: Earth Science / Knowing

SP09_14A SP62024A: Forming layered rock - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	70.3	66.6	8.6	8.9	10.7	2.0	3.3	74.3	66.8
	2023	1557	64.3	61.2	10.4	11.6	11.9	2.8	2.1	68.9	60.2
Kuwait	2019	649	49.4	47.2	16.6	13.4	18.4	2.9	1.4	52.8	45.4
	2023	1083	53.8	50.0	12.7	13.9	16.4	5.3	1.7	56.8	50.8
South Africa (9)	2019	2970	25.9	23.7	18.4	28.0	21.3	3.2	5.4	25.5	26.4
	2023	2936	28.8	27.0	17.8	26.9	22.3	2.4	3.6	29.7	27.6
International Avg. (3)	2019	4466	48.5	45.8	14.5	16.8	16.8	2.7	3.4	50.9	46.2
	2023	5576	49.0	46.1	13.6	17.5	16.8	3.5	2.5	51.8	46.2

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

Science: Earth Science / Applying
SP09_14B SP62024B: Shaping rock formations - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	5.2	54.0	3.0	38.5	4.5	3.6	6.9
	2023	1557	11.9	43.2	5.9	47.5	3.5	10.9	13.0
Kuwait	2019	649	13.6	73.4	11.6	11.9	3.1	15.7	10.7
	2023	1080	10.3	71.7	8.2	16.7	3.4	10.7	9.8
South Africa (9)	2019	2970	10.0	75.6	8.4	9.1	6.9	9.3	10.9
	2023	2938	9.6	82.1	8.7	5.2	4.0	10.1	9.0

International Avg. (3)	2019	4466	9.6	67.7	7.6	19.8	4.8	9.6	9.5
	2023	5575	10.6	65.7	7.6	23.1	3.6	10.6	10.6

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

Science: Biology / Knowing

SP10_01 SP72033: Functions of different types of cells - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	28.6	60.3	18.7	18.6	2.2	0.2	31.4	26.0
	2023	1558	25.1	64.0	14.8	16.6	4.3	0.3	26.8	23.6
Kuwait	2019	637	32.7	58.9	11.5	25.7	3.7	0.2	35.4	29.7
	2023	1067	23.7	65.9	11.8	16.4	5.8	0.1	23.7	23.6
South Africa (9)	2019	2967	10.6	78.4	7.8	5.8	7.9	0.1	10.6	10.6
	2023	2944	12.0	78.8	6.7	7.9	6.6	0.1	13.4	10.8
International Avg. (3)	2019	4453	24.0	65.9	12.7	16.7	4.6	0.1	25.8	22.1
	2023	5569	20.3	69.6	11.1	13.6	5.6	0.2	21.3	19.3

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

Science: Biology / Applying

SP10_02 SP72440: Inherited and acquired traits (bird) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	76.1	23.4	74.7	1.7	0.2	81.5	71.2
	2023	1558	73.1	25.8	70.0	3.8	0.3	77.2	69.1
Kuwait	2019	637	56.4	42.8	55.5	1.4	0.4	64.2	48.1
	2023	1067	46.3	53.0	45.7	1.2	0.1	47.3	45.3
South Africa (9)	2019	2967	35.0	62.3	33.5	4.1	0.2	36.0	33.8
	2023	2946	36.3	61.5	35.1	3.3	0.1	38.1	35.0
International Avg. (3)	2019	4453	55.9	42.8	54.6	2.4	0.2	60.6	51.0
	2023	5571	51.9	46.8	50.3	2.8	0.2	54.2	49.8

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

Science: Biology / Applying

SP10_03 SP72032: Tube with materials for cellular respiration - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	36.9	35.1	17.2	35.1	7.9	4.4	0.3	38.1	35.7
	2023	1558	35.8	32.7	18.8	33.7	8.7	5.7	0.4	35.6	36.0
Kuwait	2019	637	42.7	23.7	19.1	41.8	13.3	1.7	0.4	41.3	44.2
	2023	1068	43.6	31.6	14.6	42.4	8.6	2.5	0.2	45.4	41.8
South Africa (9)	2019	2967	33.5	31.5	24.2	33.0	9.7	1.4	0.3	34.1	32.9
	2023	2944	32.9	33.1	23.8	32.4	9.2	1.4	0.0	31.3	34.0
International Avg. (3)	2019	4453	37.7	30.1	20.2	36.6	10.3	2.5	0.3	37.8	37.6
	2023	5570	37.4	32.5	19.1	36.1	8.9	3.2	0.2	37.4	37.3

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

Science: Biology / Reasoning

SP10_04 SP72031: Plant heights in woodlice habitats - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	22.7	25.3	22.9	26.6	22.0	2.8	0.3	21.3	24.1
	2023	1558	21.0	26.1	25.9	22.0	19.7	5.8	0.5	20.9	21.2
Kuwait	2019	637	38.7	15.5	22.4	22.1	37.9	1.6	0.4	44.0	32.9
	2023	1067	34.8	16.3	23.2	23.7	33.8	2.3	0.5	36.4	33.2
South Africa (9)	2019	2967	35.5	13.0	29.4	20.9	34.8	1.6	0.3	39.2	31.1
	2023	2942	35.0	13.5	27.7	22.8	34.5	1.3	0.0	38.6	31.4
International Avg. (3)	2019	4453	32.3	17.9	24.9	23.2	31.6	2.0	0.3	34.8	29.4
	2023	5567	30.3	18.7	25.6	22.9	29.4	3.1	0.3	32.0	28.6

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

Science: Biology / Applying

SP10_05 SP72086: Place organisms in energy pyramid - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	23.2	73.0	22.1	4.6	0.3	20.1	26.2
	2023	1558	27.6	68.6	26.1	4.8	0.5	24.8	30.1
Kuwait	2019	635	39.0	60.1	38.5	1.0	0.4	34.4	44.0
	2023	1067	45.9	52.6	44.6	2.2	0.6	34.5	57.7
South Africa (9)	2019	2967	31.2	67.4	30.6	1.7	0.3	28.2	34.8
	2023	2943	27.8	71.0	27.4	1.5	0.1	25.8	30.6
International Avg. (3)	2019	4451	31.2	66.8	30.4	2.4	0.3	27.5	35.0
	2023	5568	33.8	64.1	32.7	2.8	0.4	28.4	39.5

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

Science: Biology / Applying
SP10_06 SP72005: Differences between tuna and dolphins - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	20.6	50.0	19.4	5.8	24.4	0.4	22.3	19.1
	2023	1558	18.7	44.4	17.3	3.5	34.3	0.5	20.0	17.4
Kuwait	2019	637	23.8	50.8	26.7	6.7	15.4	0.4	26.3	20.9
	2023	1067	17.6	55.8	15.6	5.8	22.2	0.6	17.7	17.6
South Africa (9)	2019	2967	6.8	81.6	7.4	2.6	8.2	0.4	6.7	7.0
	2023	2945	6.8	83.2	7.1	2.8	6.7	0.2	7.4	6.1
International Avg. (3)	2019	4453	17.1	60.8	17.8	5.0	16.0	0.4	18.4	15.6
	2023	5570	14.4	61.1	13.3	4.0	21.1	0.4	15.0	13.7

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

Science: Chemistry / Reasoning

SP10_08 SP72123: Properties of liquid in thermometer - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	53.1	18.1	51.1	8.8	18.1	3.2	0.6	54.9	51.5
	2023	1558	52.6	16.9	50.5	11.5	17.0	3.5	0.6	50.0	55.1
Kuwait	2019	637	58.1	16.1	56.9	10.7	14.3	1.5	0.5	56.9	59.4
	2023	1068	59.4	16.4	57.7	12.1	10.9	2.2	0.7	60.4	58.4
South Africa (9)	2019	2967	33.8	27.4	33.2	15.3	22.4	0.8	0.9	34.2	33.4
	2023	2943	35.1	24.8	34.6	16.5	22.6	1.2	0.2	36.4	33.6
International Avg. (3)	2019	4453	48.4	20.5	47.1	11.6	18.3	1.8	0.7	48.7	48.1
	2023	5569	49.1	19.4	47.6	13.4	16.9	2.3	0.5	48.9	49.0

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

Science: Chemistry / Knowing
SP10_09 SP72116: Elements in Group 7 - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	21.4	19.8	12.2	32.4	28.3	6.5	0.8	19.1	23.5
	2023	1558	23.9	22.6	14.7	36.7	20.7	4.6	0.6	22.9	24.7
Kuwait	2019	637	38.4	37.0	14.7	21.8	22.8	3.1	0.5	37.0	40.0
	2023	1068	39.0	37.4	11.5	26.2	20.8	3.4	0.7	39.2	38.7
South Africa (9)	2019	2967	36.6	35.8	14.9	20.9	26.0	1.4	1.0	36.8	36.5
	2023	2942	33.7	33.3	15.4	23.8	26.3	1.0	0.3	35.9	31.8
International Avg. (3)	2019	4453	32.1	30.9	14.0	25.0	25.7	3.7	0.8	31.0	33.3
	2023	5568	32.2	31.1	13.9	28.9	22.6	3.0	0.5	32.7	31.7

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

Science: Chemistry / Applying

SP10_10 SP72920: Burn rates for different logs - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	34.3	34.6	58.7	4.1	1.8	0.8	35.0	33.7
	2023	1558	24.8	50.6	46.0	1.3	1.3	0.8	27.0	22.8
Kuwait	2019	637	25.3	57.6	32.2	8.9	0.8	0.5	28.0	22.4
	2023	1067	28.8	49.0	41.9	7.3	1.1	0.7	32.0	25.4
South Africa (9)	2019	2967	32.4	35.7	61.5	1.1	0.5	1.2	33.0	31.7
	2023	2945	24.6	51.3	46.4	1.1	0.8	0.4	27.0	22.5
International Avg. (3)	2019	4453	30.7	42.6	50.8	4.7	1.0	0.8	32.0	29.3
	2023	5570	26.1	50.3	44.7	3.3	1.1	0.6	28.7	23.6

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

Science: Physics / Applying
SP10_11 SP72294: How parachute slows Skydiver B's fall - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	52.9	42.9	48.3	8.0	0.8	49.3	56.4
	2023	1558	37.9	53.3	32.5	13.2	1.0	38.1	37.7
Kuwait	2019	637	31.7	61.3	28.4	9.7	0.5	28.7	35.4
	2023	1066	43.9	47.3	37.0	15.0	0.7	40.7	47.7
South Africa (9)	2019	2967	19.1	77.3	18.3	3.0	1.4	18.1	20.4
	2023	2943	18.6	79.1	18.1	2.2	0.5	18.4	18.8
International Avg. (3)	2019	4453	34.6	60.5	31.7	6.9	0.9	32.0	37.4
	2023	5567	33.5	59.9	29.2	10.2	0.7	32.4	34.8

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

Science: Physics / Reasoning

SP10_12 SP72231: Experimental set up to test how quickly bars conduct heat - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	29.2	19.1	24.3	26.5	20.8	8.5	0.8	28.7	29.6
	2023	1558	29.2	16.2	24.0	25.2	20.9	12.4	1.4	30.5	27.9
Kuwait	2019	637	26.6	23.1	29.8	25.2	16.5	4.5	0.9	25.5	27.9
	2023	1068	31.3	22.2	27.1	28.9	14.3	6.3	1.2	31.8	30.7
South Africa (9)	2019	2967	35.0	16.2	30.3	33.2	14.9	3.6	1.8	35.3	34.8
	2023	2941	37.2	15.5	29.5	36.1	16.0	2.2	0.7	37.6	37.0
International Avg. (3)	2019	4453	30.3	19.5	28.2	28.3	17.4	5.5	1.2	29.8	30.8
	2023	5567	32.5	18.0	26.8	30.1	17.1	7.0	1.1	33.3	31.9

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

Science: Physics / Knowing

SP10_13 SP72261: Conductors or insulators (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	56.3	41.4	53.3	4.3	1.1	57.9	54.7
	2023	1558	48.9	46.7	44.8	6.6	1.9	48.4	49.4
Kuwait	2019	634	54.7	42.7	51.6	4.8	0.9	56.0	53.2
	2023	1068	47.7	48.4	44.1	6.1	1.3	46.7	48.7
South Africa (9)	2019	2967	42.3	53.9	39.5	4.4	2.3	40.3	44.7
	2023	2946	37.7	58.6	35.4	4.9	1.0	35.8	40.2
International Avg. (3)	2019	4450	51.1	46.0	48.1	4.5	1.4	51.4	50.9
	2023	5572	44.8	51.2	41.4	5.9	1.4	43.7	46.1

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

Science: Physics / Knowing

SP10_13A SP72261A: Conductors or insulators - Material 1 - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	95.8	89.7	4.0	5.3	1.1	95.4	96.1
	2023	1558	93.0	82.9	6.3	8.8	1.9	91.7	94.1
Kuwait	2019	636	94.5	88.2	5.2	5.8	0.9	96.0	92.6
	2023	1068	92.5	84.9	6.9	6.8	1.3	94.2	90.6
South Africa (9)	2019	2967	86.8	79.1	12.1	6.5	2.3	86.7	86.8
	2023	2946	85.0	77.0	13.5	8.5	1.0	83.5	86.8
International Avg. (3)	2019	4452	92.3	85.7	7.1	5.8	1.4	92.7	91.8
	2023	5572	90.2	81.6	8.9	8.0	1.4	89.8	90.5

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

Science: Physics / Knowing

SP10_13B SP72261B: Conductors or insulators - Material 2 - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	65.0	60.1	32.3	6.5	1.1	64.9	65.2
	2023	1558	60.9	53.1	34.0	10.9	1.9	60.4	61.4
Kuwait	2019	635	62.9	58.4	34.4	6.3	0.9	61.8	64.2
	2023	1068	58.7	52.3	36.8	9.5	1.3	54.4	63.4
South Africa (9)	2019	2967	59.1	51.1	35.3	11.3	2.3	57.6	61.0
	2023	2946	55.6	47.9	38.2	12.8	1.0	54.2	57.4
International Avg. (3)	2019	4451	62.4	56.5	34.0	8.0	1.4	61.4	63.5
	2023	5572	58.4	51.1	36.4	11.1	1.4	56.4	60.8

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

Science: Physics / Knowing

SP10_13C SP72261C: Conductors or insulators - Material 3 - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	89.3	9.8	81.7	7.5	1.1	92.0	86.7
	2023	1558	86.0	12.2	74.6	11.3	1.9	87.3	84.7
Kuwait	2019	634	90.3	8.9	82.8	7.4	0.9	93.8	86.2
	2023	1068	87.1	11.6	77.9	9.2	1.3	89.6	84.3
South Africa (9)	2019	2967	82.9	14.6	70.9	12.2	2.3	82.3	83.7
	2023	2946	79.9	17.2	68.1	13.7	1.0	78.4	81.4
International Avg. (3)	2019	4450	87.5	11.1	78.5	9.0	1.4	89.4	85.5
	2023	5572	84.3	13.6	73.5	11.4	1.4	85.1	83.5

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

Science: Physics / Knowing

SP10_13D SP72261D: Conductors or insulators - Material 4 - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	92.4	85.1	7.0	6.9	1.1	94.6	90.4
	2023	1558	88.1	76.9	10.4	10.7	1.9	88.7	87.4
Kuwait	2019	635	90.2	84.0	9.1	6.0	0.9	93.3	86.7
	2023	1068	87.8	78.9	11.0	8.8	1.3	90.2	85.1
South Africa (9)	2019	2967	83.4	71.3	14.2	12.1	2.3	83.0	83.8
	2023	2946	81.5	70.9	16.1	11.9	1.0	80.2	82.8
International Avg. (3)	2019	4451	88.7	80.1	10.1	8.3	1.4	90.3	86.9
	2023	5572	85.8	75.6	12.5	10.5	1.4	86.4	85.1

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

Science: Physics / Knowing

SP10_13E SP72261E: Conductors or insulators - Material 5 - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	89.8	9.3	82.0	7.6	1.1	92.4	87.3
	2023	1558	86.0	12.1	74.7	11.2	1.9	87.4	84.7
Kuwait	2019	635	87.5	11.6	81.3	6.3	0.9	91.3	83.2
	2023	1068	86.1	12.4	76.9	9.4	1.3	89.5	82.4
South Africa (9)	2019	2967	82.4	14.9	69.5	13.3	2.3	81.8	83.2
	2023	2946	79.8	17.2	67.8	13.9	1.0	78.7	81.3
International Avg. (3)	2019	4451	86.6	11.9	77.6	9.1	1.4	88.5	84.6
	2023	5572	84.0	13.9	73.1	11.5	1.4	85.2	82.8

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

Science: Physics / Knowing

SP10_14 SP72220: Stone's position with greatest kinetic energy - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	26.1	13.3	38.8	19.6	25.4	1.7	1.2	20.2	31.7
	2023	1558	21.3	15.4	38.2	22.2	20.5	1.7	2.0	18.4	23.9
Kuwait	2019	637	18.9	8.6	39.5	30.9	18.4	1.1	1.4	17.0	21.1
	2023	1068	17.4	13.1	36.9	30.3	16.9	1.3	1.5	14.3	20.5
South Africa (9)	2019	2967	18.2	18.1	42.7	17.6	17.5	0.9	3.1	18.4	17.9
	2023	2939	19.0	18.9	39.8	20.8	18.6	0.7	1.3	18.4	19.2
International Avg. (3)	2019	4453	21.1	13.3	40.3	22.7	20.4	1.3	1.9	18.5	23.6
	2023	5565	19.2	15.8	38.3	24.4	18.7	1.2	1.6	17.0	21.2

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

Science: Earth Science / Knowing

SP10_15 SP72348: What must be removed from ocean water before drinking - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	72.5	23.0	60.8	15.0	1.2	70.4	74.6
	2023	1558	66.0	26.1	50.8	20.9	2.2	60.5	71.4
Kuwait	2019	636	82.2	15.2	70.4	12.8	1.6	82.5	81.8
	2023	1067	71.5	23.8	59.5	15.3	1.5	70.4	72.7
South Africa (9)	2019	2967	53.1	41.8	47.3	7.7	3.3	50.4	56.4
	2023	2943	45.5	51.0	42.6	4.9	1.5	47.6	43.8
International Avg. (3)	2019	4452	69.3	26.7	59.5	11.8	2.0	67.8	70.9
	2023	5568	61.0	33.6	51.0	13.7	1.7	59.5	62.6

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

Science: Earth Science / Reasoning

SP10_16 SP72720: Why temperature is hotter in the city center - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	849	21.5	20.5	12.5	45.1	17.4	1.6	2.9	18.6	24.2
	2023	1558	24.5	23.0	14.4	40.8	15.7	2.8	3.3	22.0	26.9
Kuwait	2019	637	22.3	21.3	17.2	20.2	36.9	1.4	3.0	20.2	24.6
	2023	1068	27.5	26.2	13.9	25.0	30.4	1.7	2.8	23.5	31.6
South Africa (9)	2019	2967	32.2	30.0	16.7	23.8	22.7	2.6	4.2	30.4	34.3
	2023	2939	34.2	32.8	18.6	22.8	21.6	2.1	2.1	35.8	33.4
International Avg. (3)	2019	4453	25.3	23.9	15.5	29.7	25.7	1.9	3.4	23.0	27.7
	2023	5565	28.7	27.3	15.6	29.5	22.6	2.2	2.7	27.1	30.6

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

Science: Biology / Knowing

SP11_01 SP62279: Healthy and balanced meal - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	22.7	22.4	10.3	40.2	26.0	1.2	0.0	26.2	19.5
	2023	1544	32.6	31.6	8.5	34.3	22.7	2.7	0.3	30.1	35.0
Kuwait	2019	648	53.8	52.9	5.7	13.6	26.0	1.8	0.0	57.1	50.2
	2023	1068	58.8	57.5	4.7	12.7	22.8	2.2	0.1	64.6	53.0
South Africa (9)	2019	2986	31.7	31.4	9.6	11.5	46.5	0.9	0.1	33.9	29.2
	2023	2985	32.4	32.0	9.6	9.1	48.1	1.2	0.1	34.8	29.6
International Avg. (3)	2019	4485	36.1	35.6	8.5	21.7	32.8	1.3	0.0	39.1	33.0
	2023	5597	41.3	40.4	7.6	18.7	31.2	2.0	0.2	43.1	39.2

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

Science: Biology / Applying
SP11_02 SP62112: Tony gets the measles - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	43.3	55.7	42.6	1.7	0.0	44.7	42.1
	2023	1544	38.5	59.9	37.5	2.2	0.3	41.5	35.5
Kuwait	2019	648	28.5	70.7	28.1	1.2	0.0	33.7	22.8
	2023	1068	27.8	70.5	27.2	2.2	0.1	28.4	27.3
South Africa (9)	2019	2986	21.0	77.2	20.6	2.2	0.1	21.1	21.0
	2023	2984	18.9	79.6	18.5	1.7	0.1	21.1	17.0

International Avg. (3)	2019	4485	31.0	67.8	30.4	1.7	0.0	33.1	28.6
	2023	5596	28.4	70.0	27.7	2.0	0.2	30.3	26.6

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

Science: Biology / Reasoning

SP11_03 SP62118: Fossils in rock layers - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	56.2	6.9	20.4	53.8	14.6	4.4	0.0	63.4	49.9
	2023	1544	48.9	7.8	23.4	45.7	16.5	6.2	0.3	48.7	49.2
Kuwait	2019	648	41.0	13.3	26.7	39.8	17.3	3.0	0.0	39.6	42.5
	2023	1067	33.6	16.6	25.2	32.4	22.2	3.5	0.1	35.9	31.3
South Africa (9)	2019	2986	31.6	10.2	30.8	30.2	24.4	4.2	0.3	30.7	32.7
	2023	2986	29.7	10.9	31.4	28.6	25.4	3.4	0.2	31.5	27.9
International Avg. (3)	2019	4485	42.9	10.1	25.9	41.2	18.8	3.8	0.1	44.6	41.7
	2023	5597	37.4	11.8	26.7	35.6	21.4	4.3	0.2	38.7	36.1

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

Science: Biology / Knowing

SP11_04 SP62093: Mammals in cold weather - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	30.6	34.9	32.3	6.4	26.2	0.3	30.3	31.0
	2023	1544	29.8	32.8	27.3	6.1	33.3	0.6	29.3	30.3
Kuwait	2019	648	45.6	30.8	32.6	23.1	13.5	0.0	50.0	40.2
	2023	1068	47.0	23.6	32.0	19.1	25.0	0.2	47.3	46.6
South Africa (9)	2019	2986	23.2	53.7	21.0	8.9	15.9	0.5	22.9	23.5
	2023	2985	22.0	59.4	18.9	10.0	11.3	0.5	24.4	19.7
International Avg. (3)	2019	4485	33.1	39.8	28.6	12.8	18.5	0.3	34.4	31.6
	2023	5597	32.9	38.6	26.1	11.7	23.2	0.4	33.6	32.2

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

Science: Biology / Knowing

SP11_05 SP62089: Symbiosis between two organisms - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	22.7	8.1	46.7	20.1	22.0	2.4	0.6	23.2	22.3
	2023	1544	21.8	12.7	42.4	18.9	20.6	4.8	0.7	22.2	21.5
Kuwait	2019	648	25.3	14.0	47.4	10.5	24.4	3.5	0.2	27.8	22.7
	2023	1067	20.2	13.6	49.1	14.0	19.4	3.6	0.3	19.3	21.0
South Africa (9)	2019	2986	23.6	19.9	38.3	14.8	22.5	3.8	0.8	25.3	21.6
	2023	2981	22.7	20.3	38.8	15.9	22.0	2.6	0.5	25.0	20.5
International Avg. (3)	2019	4485	23.9	14.0	44.1	15.1	23.0	3.2	0.5	25.4	22.2
	2023	5592	21.6	15.5	43.4	16.3	20.7	3.7	0.5	22.2	21.0

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

Science: Chemistry / Knowing
SP11_06 SP62006: Atoms in nitric acid - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	14.3	59.6	10.0	29.6	0.8	12.6	15.9
	2023	1544	15.5	53.1	9.7	36.4	0.7	15.8	15.2
Kuwait	2019	648	43.2	51.4	39.0	9.4	0.2	47.0	38.7
	2023	1068	29.0	59.2	24.2	16.3	0.3	35.2	22.3
South Africa (9)	2019	2986	16.2	75.2	14.6	9.3	1.0	18.7	13.3
	2023	2986	16.6	76.9	15.3	7.1	0.7	19.1	14.4
International Avg. (3)	2019	4485	24.6	62.0	21.2	16.1	0.7	26.1	22.6
	2023	5598	20.4	63.1	16.4	19.9	0.6	23.4	17.3

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

Science: Chemistry / Reasoning

SP11_07 SP62067: Rate of sugar dissolving - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	31.0	61.9	27.8	9.3	1.1	29.5	32.4
	2023	1544	32.2	57.8	27.4	14.0	0.8	30.4	34.0
Kuwait	2019	648	28.3	68.0	26.9	4.5	0.6	24.4	32.8
	2023	1068	27.6	65.7	25.0	8.8	0.4	25.8	29.6
South Africa (9)	2019	2986	14.5	78.2	13.3	7.3	1.3	12.6	16.8
	2023	2988	14.5	79.5	13.5	5.8	1.2	14.2	14.7
International Avg. (3)	2019	4485	24.6	69.3	22.6	7.0	1.0	22.2	27.3
	2023	5600	24.8	67.6	22.0	9.6	0.8	23.5	26.1

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

Science: Chemistry / Knowing
SP11_08 SP62247: Properties of baking soda - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	40.2	15.4	37.4	17.6	22.7	5.7	1.3	35.5	44.4
	2023	1544	45.1	13.5	42.3	15.5	22.6	5.2	0.9	43.8	46.3
Kuwait	2019	647	35.7	32.0	34.1	17.1	12.5	3.6	0.6	32.5	39.1
	2023	1068	28.6	33.7	27.2	21.6	12.6	4.4	0.5	24.9	32.4
South Africa (9)	2019	2986	37.3	17.3	35.6	11.1	31.2	3.1	1.7	37.4	37.2
	2023	2981	38.6	14.6	37.1	13.0	31.5	2.2	1.5	41.2	36.0
International Avg. (3)	2019	4484	37.7	21.6	35.7	15.3	22.1	4.1	1.2	35.1	40.3
	2023	5593	37.4	20.6	35.6	16.7	22.2	3.9	1.0	36.6	38.2

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

Science: Earth Science / Knowing
SP11_09 SP62177: Formation of oil - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	64.1	16.6	10.2	7.4	61.0	3.3	1.5	66.4	62.0
	2023	1544	53.2	21.7	9.5	13.3	50.6	4.0	1.0	48.7	57.5
Kuwait	2019	646	64.1	13.3	11.2	10.5	62.6	1.7	0.6	66.3	61.7
	2023	1068	61.8	14.6	10.5	12.2	60.3	1.8	0.7	62.0	61.6
South Africa (9)	2019	2986	26.6	38.3	18.0	13.6	25.4	2.6	2.0	24.6	29.0
	2023	2983	27.2	35.7	19.0	15.3	26.1	2.2	1.7	26.2	28.2
International Avg. (3)	2019	4483	51.6	22.8	13.1	10.5	49.7	2.6	1.4	52.4	50.9
	2023	5595	47.4	24.0	13.0	13.6	45.7	2.6	1.1	45.7	49.1

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

Science: Earth Science / Knowing

SP11_10 SP62186: Greenhouse on Mars - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	41.2	17.7	38.3	20.1	16.8	5.6	1.5	39.3	43.0
	2023	1544	38.7	19.5	36.1	21.5	16.1	5.6	1.2	35.6	41.6
Kuwait	2019	646	34.3	26.2	33.1	14.4	22.9	2.7	0.6	29.0	40.0
	2023	1068	32.6	22.8	31.5	11.8	30.6	2.6	0.7	27.9	37.2
South Africa (9)	2019	2986	24.4	18.1	22.9	19.2	33.6	4.3	2.0	23.9	25.0
	2023	2984	22.0	21.2	21.0	18.3	34.9	2.7	2.0	19.7	23.8
International Avg. (3)	2019	4483	33.3	20.6	31.4	17.9	24.4	4.2	1.4	30.8	36.0
	2023	5596	31.1	21.2	29.5	17.2	27.2	3.6	1.3	27.7	34.2

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

Science: Earth Science / Applying

SP11_11A SP62211A: Warmest and driest time of year - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	32.0	53.1	24.9	20.4	1.5	31.0	32.9
	2023	1544	27.9	52.7	20.4	25.7	1.3	27.7	28.2
Kuwait	2019	648	18.4	62.6	14.2	22.6	0.6	20.5	15.8
	2023	1068	25.5	50.8	17.3	31.0	0.9	24.7	26.4
South Africa (9)	2019	2986	22.4	69.1	19.9	8.3	2.6	22.8	21.9
	2023	2988	20.5	75.3	19.4	3.1	2.2	21.0	20.2

International Avg. (3)	2019	4485	24.3	61.6	19.7	17.1	1.6	24.7	23.5
	2023	5600	24.6	59.6	19.1	19.9	1.5	24.5	24.9

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

Science: Earth Science / Reasoning

SP11_11B SP62211B: Climate data are wrong - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	3.1	89.3	2.9	6.0	1.9	3.2	3.1
	2023	1544	2.3	89.7	2.1	6.6	1.6	2.0	2.5
Kuwait	2019	648	5.4	88.9	5.1	5.3	0.8	7.8	2.8
	2023	1068	5.3	89.4	5.0	4.6	1.1	6.3	4.3
South Africa (9)	2019	2986	3.9	89.4	3.6	3.8	3.2	4.5	3.2
	2023	2988	2.9	91.2	2.7	3.6	2.5	3.5	2.3

International Avg. (3)	2019	4485	4.1	89.2	3.9	5.0	1.9	5.2	3.0
	2023	5600	3.5	90.1	3.3	4.9	1.7	3.9	3.0

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

Science: Physics / Reasoning

SP11_13 SP62033: Pressure applied to pistons - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	17.9	77.3	16.8	3.8	2.1	22.1	14.1
	2023	1544	15.5	79.9	14.6	3.8	1.6	14.6	16.2
Kuwait	2019	647	19.8	78.5	19.4	1.2	0.9	21.2	18.3
	2023	1067	15.1	83.2	14.8	0.9	1.1	16.5	13.6
South Africa (9)	2019	2986	9.3	84.0	8.6	3.6	3.8	9.4	9.1
	2023	2987	8.5	85.1	7.9	3.9	3.1	8.9	8.1
International Avg. (3)	2019	4484	15.6	79.9	14.9	2.9	2.3	17.6	13.8
	2023	5598	13.0	82.8	12.4	2.9	2.0	13.3	12.6

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

Science: Physics / Applying
SP11_14 SP62037: Toy car powered by battery - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	65.2	62.5	5.7	5.0	22.7	1.5	2.7	67.7	63.0
	2023	1544	56.2	54.1	7.8	5.9	28.5	1.8	1.8	54.9	57.4
Kuwait	2019	648	48.2	47.0	5.6	5.2	39.7	1.2	1.2	47.8	48.6
	2023	1067	48.3	47.2	6.4	3.6	40.4	1.1	1.3	44.0	52.7
South Africa (9)	2019	2986	35.4	32.7	17.0	24.2	18.5	2.8	4.8	33.8	37.3
	2023	2983	37.5	35.1	16.8	20.8	21.0	2.7	3.6	38.3	37.0
International Avg. (3)	2019	4485	49.6	47.4	9.4	11.5	27.0	1.8	2.9	49.8	49.6
	2023	5594	47.3	45.5	10.3	10.1	30.0	1.9	2.2	45.8	49.0

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

Science: Physics / Applying
SP11_15 SP62242: Waste removed by electromagnet (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	79.9	18.6	73.8	4.7	3.0	82.2	77.7
	2023	1544	76.8	20.8	69.0	7.9	2.2	78.6	75.1
Kuwait	2019	645	77.1	21.1	71.0	6.5	1.4	78.5	75.4
	2023	1066	73.6	23.4	65.1	9.8	1.8	76.5	70.3
South Africa (9)	2019	2986	64.3	30.1	54.0	10.0	5.9	63.5	65.3
	2023	2989	62.4	33.1	55.0	7.9	4.0	64.0	61.5
International Avg. (3)	2019	4482	73.7	23.3	66.3	7.1	3.4	74.8	72.8
	2023	5599	70.9	25.8	63.0	8.5	2.7	73.0	69.0

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

Science: Physics / Applying

SP11_15A SP62242A: Waste removed by electromagnet: cans - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	89.5	80.6	9.5	7.0	3.0	89.5	89.4
	2023	1544	88.5	77.3	10.1	10.4	2.2	87.6	89.4
Kuwait	2019	645	88.9	80.5	10.1	8.0	1.4	88.4	89.4
	2023	1067	89.9	77.8	8.7	11.7	1.8	88.3	91.7
South Africa (9)	2019	2986	85.7	66.4	11.0	16.7	5.9	84.8	87.0
	2023	2989	84.3	67.8	12.6	15.6	4.0	84.2	85.1
International Avg. (3)	2019	4482	88.0	75.8	10.2	10.6	3.4	87.6	88.6
	2023	5600	87.6	74.3	10.5	12.6	2.7	86.7	88.7

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

Science: Physics / Applying

SP11_15B SP62242B: Waste removed by electromagnet: cups - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	94.1	5.3	84.3	7.4	3.0	95.0	93.3
	2023	1544	93.9	5.3	81.0	11.5	2.2	94.5	93.3
Kuwait	2019	646	89.2	9.7	80.1	8.8	1.4	89.5	88.7
	2023	1067	90.6	8.0	77.6	12.7	1.8	91.8	89.3
South Africa (9)	2019	2986	85.6	10.7	63.7	19.7	5.9	85.1	86.3
	2023	2989	84.4	12.2	66.3	17.5	4.0	85.7	84.0
International Avg. (3)	2019	4483	89.6	8.6	76.0	12.0	3.4	89.9	89.4
	2023	5600	89.6	8.5	74.9	13.9	2.7	90.7	88.9

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

Science: Physics / Applying

SP11_15D SP62242D: Waste removed by electromagnet: paper - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	94.8	4.6	85.3	7.0	3.0	94.9	94.8
	2023	1544	93.1	5.9	79.8	12.0	2.2	93.9	92.3
Kuwait	2019	646	92.0	7.1	82.5	9.0	1.4	93.1	90.7
	2023	1066	88.2	10.0	74.6	13.6	1.8	91.2	84.8
South Africa (9)	2019	2986	87.7	9.1	65.2	19.8	5.9	85.6	90.4
	2023	2989	86.4	10.5	66.8	18.7	4.0	87.6	85.6
International Avg. (3)	2019	4483	91.5	7.0	77.7	11.9	3.4	91.2	92.0
	2023	5599	89.2	8.8	73.8	14.8	2.7	90.9	87.6

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

Science: Physics / Applying

SP11_15E SP62242E: Waste removed by electromagnet: nails - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	851	95.2	86.2	4.4	6.5	3.0	96.1	94.3
	2023	1544	94.0	81.9	5.2	10.7	2.2	94.3	93.7
Kuwait	2019	646	93.1	83.9	6.2	8.5	1.4	92.7	93.6
	2023	1067	90.8	77.1	7.8	13.3	1.8	93.1	88.2
South Africa (9)	2019	2986	87.0	65.7	9.8	18.6	5.9	85.3	89.0
	2023	2989	85.5	67.1	11.4	17.5	4.0	85.6	85.9
International Avg. (3)	2019	4483	91.8	78.6	6.8	11.2	3.4	91.4	92.3
	2023	5600	90.1	75.3	8.1	13.9	2.7	91.0	89.3

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

Science: Biology / Knowing

SP12_01 SP72078: Plant part that releases water - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	31.1	52.5	23.7	23.4	0.5	33.6	28.9
	2023	1541	26.9	45.5	16.7	37.4	0.4	27.7	26.1
Kuwait	2019	662	30.0	56.8	24.3	18.6	0.3	27.7	32.9
	2023	1080	30.1	50.9	21.9	26.8	0.4	30.4	29.7
South Africa (9)	2019	2989	12.5	75.9	10.8	13.1	0.1	12.7	12.3
	2023	2988	13.6	74.5	11.7	13.7	0.1	14.3	12.7
International Avg. (3)	2019	4505	24.5	61.7	19.6	18.3	0.3	24.7	24.7
	2023	5609	23.5	57.0	16.8	26.0	0.3	24.1	22.9

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

Science: Biology / Applying

SP12_02 SP72460: Human activity that can cause algal blooms - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	45.5	43.7	11.6	7.6	33.1	3.6	0.5	44.7	46.2
	2023	1541	46.6	43.8	11.1	8.9	30.2	5.6	0.5	45.2	48.0
Kuwait	2019	661	43.4	42.3	11.4	7.6	36.1	2.3	0.3	44.7	42.0
	2023	1081	38.7	37.4	11.6	6.0	41.8	2.9	0.4	38.9	38.4
South Africa (9)	2019	2989	25.8	25.2	23.3	7.8	41.3	2.0	0.4	25.0	26.7
	2023	2985	27.9	27.4	23.8	8.1	38.8	1.7	0.1	28.8	27.5
International Avg. (3)	2019	4504	38.3	37.1	15.4	7.7	36.8	2.6	0.4	38.1	38.3
	2023	5607	37.7	36.2	15.5	7.7	36.9	3.4	0.3	37.7	38.0

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

Science: Biology / Applying
SP12_03 SP72000: Characteristics of organisms - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	24.8	61.4	23.0	12.6	2.5	0.5	29.8	20.3
	2023	1541	22.4	63.8	19.4	11.5	4.8	0.5	25.2	19.6
Kuwait	2019	664	28.3	57.6	19.8	16.8	5.5	0.3	28.3	28.4
	2023	1080	22.0	64.6	13.9	13.3	7.9	0.4	21.5	22.6
South Africa (9)	2019	2989	15.1	74.5	9.8	9.2	6.1	0.4	15.1	15.1
	2023	2984	13.8	76.2	9.4	8.3	5.9	0.2	14.1	13.8
International Avg. (3)	2019	4507	22.7	64.5	17.5	12.9	4.7	0.4	24.4	21.2
	2023	5605	19.4	68.2	14.2	11.0	6.2	0.3	20.2	18.7

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

Science: Biology / Reasoning

SP12_05 SP72901: Snakes sharing physical and behavioral traits - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	41.3	17.8	39.8	17.7	20.9	3.1	0.7	43.6	39.3
	2023	1541	42.3	18.5	39.2	15.4	19.6	6.6	0.8	41.0	43.5
Kuwait	2019	661	36.3	25.9	34.9	21.3	14.1	3.6	0.3	35.5	37.2
	2023	1081	35.9	24.8	34.7	19.7	17.3	3.1	0.5	35.4	36.5
South Africa (9)	2019	2989	43.8	22.2	42.8	22.4	10.4	1.4	0.8	45.0	42.4
	2023	2983	43.7	22.2	42.9	23.5	9.6	1.5	0.2	47.3	40.2
International Avg. (3)	2019	4504	40.5	22.0	39.2	20.5	15.1	2.7	0.6	41.4	39.6
	2023	5605	40.7	21.8	38.9	19.5	15.5	3.7	0.5	41.2	40.1

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

Science: Biology / Applying
SP12_06 SP72038: What makes fermentation unique - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	52.5	50.0	13.7	18.6	12.9	4.1	0.7	59.5	46.2
	2023	1541	51.5	47.6	15.7	17.8	11.4	6.6	0.8	55.9	47.3
Kuwait	2019	662	53.6	52.1	11.0	20.3	13.8	2.5	0.3	61.0	45.4
	2023	1081	51.4	50.0	12.6	17.4	17.3	2.2	0.5	52.1	50.7
South Africa (9)	2019	2989	38.7	37.6	20.5	23.3	15.8	1.8	0.9	37.1	40.5
	2023	2984	43.5	43.0	19.5	20.9	15.3	0.9	0.3	45.4	42.5
International Avg. (3)	2019	4505	48.3	46.6	15.1	20.7	14.2	2.8	0.6	52.5	44.0
	2023	5606	48.8	46.9	16.0	18.7	14.7	3.2	0.6	51.1	46.8

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

Science: Chemistry / Knowing
SP12_07 SP72120: Identify a chemical property - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	43.8	6.0	42.9	37.6	11.4	1.5	0.7	44.8	42.9
	2023	1541	47.0	5.6	45.2	34.5	10.9	2.8	1.0	49.3	44.8
Kuwait	2019	662	61.5	5.2	59.8	18.6	13.6	2.1	0.6	63.5	59.1
	2023	1081	66.0	6.4	64.0	17.1	9.4	2.4	0.6	70.0	61.8
South Africa (9)	2019	2989	27.3	14.4	26.2	29.9	25.8	2.5	1.1	27.0	27.5
	2023	2986	26.2	13.0	25.6	33.5	25.5	2.0	0.4	26.5	26.1
International Avg. (3)	2019	4505	44.2	8.5	43.0	28.7	16.9	2.1	0.8	45.1	43.2
	2023	5608	46.4	8.3	45.0	28.4	15.3	2.4	0.7	48.6	44.2

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

Science: Chemistry / Reasoning

SP12_08 SP72143: Equipment Tom should use - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	40.6	56.8	38.7	3.8	0.7	43.9	37.4
	2023	1541	43.5	51.6	39.8	7.6	1.0	45.3	41.8
Kuwait	2019	664	42.4	54.2	39.8	5.5	0.6	44.4	39.9
	2023	1081	30.9	63.0	28.1	8.2	0.6	32.6	28.9
South Africa (9)	2019	2989	15.3	81.4	14.7	2.7	1.2	14.7	15.9
	2023	2986	12.6	84.5	12.2	2.9	0.4	11.9	13.7

International Avg. (3)	2019	4507	32.7	64.1	31.1	4.0	0.8	34.3	31.1
	2023	5608	29.0	66.4	26.7	6.2	0.7	29.9	28.1

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

Science: Chemistry / Applying
SP12_09 SP72523: Higher sugar concentration in tea - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	35.0	45.0	37.3	15.6	1.5	0.7	40.2	30.3
	2023	1541	25.7	51.4	40.1	4.7	2.5	1.3	29.0	22.5
Kuwait	2019	663	32.9	49.9	32.0	16.3	1.0	0.8	39.2	25.8
	2023	1080	34.8	50.8	25.6	21.2	1.6	0.8	40.6	28.8
South Africa (9)	2019	2986	20.2	63.0	27.8	5.5	2.2	1.5	20.5	19.8
	2023	2986	23.3	63.9	21.4	11.9	2.3	0.6	24.5	21.8
International Avg. (3)	2019	4503	29.3	52.6	32.3	12.5	1.6	1.0	33.3	25.3
	2023	5607	27.9	55.4	29.0	12.6	2.1	0.9	31.4	24.4

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

Science: Chemistry / Knowing
SP12_10 SP72168: Formation of iron sulfide - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	50.8	16.3	13.0	17.2	48.2	4.5	0.7	53.5	48.5
	2023	1541	47.8	17.5	13.6	17.3	44.2	6.2	1.4	52.2	43.5
Kuwait	2019	663	41.5	36.3	10.6	10.4	40.7	1.3	0.8	41.6	41.5
	2023	1081	39.4	35.9	11.0	11.1	37.8	3.3	0.8	39.1	39.8
South Africa (9)	2019	2986	27.9	35.6	14.8	18.9	26.8	1.8	2.0	28.9	26.8
	2023	2982	26.3	35.8	13.9	22.4	25.8	1.3	0.8	26.3	26.9
International Avg. (3)	2019	4503	40.1	29.4	12.8	15.5	38.6	2.5	1.2	41.3	38.9
	2023	5604	37.9	29.7	12.8	16.9	35.9	3.6	1.0	39.2	36.7

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

Science: Physics / Knowing

SP12_11 SP72205: Water molecules in a melting ice cube - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	40.0	29.8	20.3	39.1	8.6	1.5	0.7	42.2	38.0
	2023	1541	37.4	28.5	21.3	35.1	9.1	4.0	2.0	38.9	35.9
Kuwait	2019	664	37.7	28.6	21.5	36.7	10.5	1.8	0.9	37.3	38.2
	2023	1081	32.9	30.0	22.3	31.5	12.0	3.3	0.9	31.4	34.4
South Africa (9)	2019	2986	29.0	29.4	23.5	27.6	14.7	2.3	2.6	30.6	27.1
	2023	2983	27.8	28.4	27.6	27.0	14.3	1.7	0.9	25.4	30.1
International Avg. (3)	2019	4504	35.6	29.3	21.7	34.5	11.2	1.8	1.4	36.7	34.4
	2023	5605	32.7	29.0	23.7	31.2	11.8	3.0	1.3	31.9	33.5

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

Science: Physics / Applying
SP12_12 SP72293: Why Ben slides faster when the water is on - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	9.0	84.5	8.3	6.4	0.7	4.3	13.3
	2023	1541	8.5	79.5	7.4	11.2	2.0	5.6	11.2
Kuwait	2019	664	29.2	63.8	26.3	9.0	0.9	24.4	35.0
	2023	1080	39.1	50.9	32.6	15.6	0.9	35.8	43.0
South Africa (9)	2019	2986	3.7	89.8	3.5	3.9	2.8	2.6	5.0
	2023	2985	6.0	90.0	5.8	3.2	1.1	5.2	6.8

International Avg. (3)	2019	4504	14.0	79.4	12.7	6.4	1.5	10.5	17.8
	2023	5606	17.9	73.5	15.3	10.0	1.3	15.5	20.4

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

Science: Physics / Reasoning

SP12_13A SP72280A: Movement of motorbike in chronophotograph A - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	11.7	85.8	11.4	1.9	1.0	13.3	10.3
	2023	1541	8.1	87.7	7.7	2.1	2.4	7.0	9.1
Kuwait	2019	664	14.5	84.0	14.3	0.6	1.1	15.5	13.5
	2023	1081	16.2	81.4	15.8	1.9	0.9	16.5	15.9
South Africa (9)	2019	2986	5.7	89.6	5.5	1.8	3.1	5.3	6.3
	2023	2984	7.4	89.2	7.1	2.3	1.4	6.8	8.2

International Avg. (3)	2019	4504	10.7	86.5	10.4	1.5	1.7	11.4	10.0
	2023	5606	10.6	86.1	10.2	2.1	1.6	10.1	11.1

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

Science: Physics / Reasoning

SP12_13B SP72280B: Movement of motorbike in chronophotograph B - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	61.1	20.8	59.2	10.1	6.8	1.3	1.8	61.0	61.2
	2023	1541	61.3	19.1	58.2	10.7	6.9	2.0	3.0	63.9	58.8
Kuwait	2019	664	61.8	25.3	60.3	6.0	5.9	1.1	1.4	62.2	61.5
	2023	1081	63.4	21.3	61.7	8.4	5.8	1.5	1.2	61.7	65.1
South Africa (9)	2019	2986	51.6	24.5	48.6	13.4	7.7	2.1	3.7	51.1	52.2
	2023	2985	51.9	27.0	50.4	13.1	6.7	1.0	1.9	53.2	50.6
International Avg. (3)	2019	4504	58.2	23.5	56.0	9.9	6.8	1.5	2.3	58.1	58.3
	2023	5607	58.9	22.5	56.7	10.7	6.5	1.5	2.0	59.6	58.2

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

Science: Earth Science / Applying
SP12_14 SP72370: What makes Saturn visible - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	46.3	12.2	23.3	44.6	16.2	1.7	2.0	43.9	48.4
	2023	1541	48.3	11.6	24.9	45.4	12.1	2.6	3.4	47.5	49.0
Kuwait	2019	663	47.3	16.7	18.3	45.7	16.0	1.8	1.5	46.0	48.7
	2023	1081	41.4	19.6	23.5	39.8	13.5	2.2	1.4	39.3	43.4
South Africa (9)	2019	2986	37.1	16.9	25.3	34.5	16.3	1.8	5.1	37.7	36.5
	2023	2982	37.4	18.1	23.5	36.2	19.1	1.0	2.2	37.5	37.3
International Avg. (3)	2019	4503	43.6	15.3	22.3	41.6	16.2	1.8	2.9	42.5	44.5
	2023	5604	42.4	16.4	23.9	40.5	14.9	1.9	2.3	41.4	43.3

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

Science: Biology / Applying

SP13_01A SP62091A: Producers in food web - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	73.6	4.7	72.6	8.4	13.0	1.4	0.0	74.1	73.2
	2023	1555	69.6	6.3	67.2	7.7	15.3	3.0	0.4	66.4	72.6
Kuwait	2019	658	75.7	4.6	74.5	7.2	12.1	1.2	0.4	76.2	75.2
	2023	1086	76.5	4.3	75.1	6.9	12.0	1.7	0.1	76.3	76.6
South Africa (9)	2019	2977	60.4	8.4	59.5	7.1	23.6	1.0	0.4	55.9	65.4
	2023	3002	60.6	8.0	59.9	8.2	22.8	1.0	0.2	60.6	60.4
International Avg. (3)	2019	4492	69.9	5.9	68.9	7.5	16.2	1.2	0.3	68.7	71.3
	2023	5643	68.9	6.2	67.4	7.6	16.7	1.9	0.2	67.8	69.9

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

Science: Biology / Applying
SP13_01B SP62091B: Eat only plants in food web - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	70.7	12.1	15.5	70.1	1.4	0.9	0.0	70.7	70.7
	2023	1555	67.7	11.4	18.1	66.1	1.9	2.0	0.4	66.4	69.0
Kuwait	2019	658	63.8	11.3	20.7	63.0	3.8	0.8	0.4	69.0	58.1
	2023	1086	62.8	12.0	20.1	61.7	4.5	1.5	0.2	61.8	63.8
South Africa (9)	2019	2977	69.0	16.9	8.6	68.0	5.1	1.0	0.4	69.7	68.3
	2023	3001	66.7	17.5	10.6	66.3	5.0	0.3	0.3	66.8	66.7
International Avg. (3)	2019	4492	67.9	13.4	14.9	67.1	3.4	0.9	0.3	69.8	65.7
	2023	5642	65.7	13.6	16.3	64.7	3.8	1.3	0.3	65.0	66.5

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

Science: Biology / Applying

SP13_02 SP62100: Cell structure of fossils - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	22.5	73.0	21.2	5.7	0.1	24.5	20.9
	2023	1555	12.3	81.9	11.5	6.1	0.5	13.7	11.0
Kuwait	2019	658	39.7	58.4	38.5	2.7	0.4	48.5	29.9
	2023	1086	31.4	66.0	30.3	3.4	0.4	36.5	26.4
South Africa (9)	2019	2977	39.8	57.5	38.1	3.7	0.7	43.1	36.1
	2023	3001	36.7	60.7	35.1	3.9	0.3	41.3	31.7

International Avg. (3)	2019	4492	34.0	63.0	32.6	4.0	0.4	38.7	28.9
	2023	5642	26.8	69.5	25.6	4.5	0.4	30.5	23.0

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

Science: Biology / Reasoning

SP13_03 SP62097: Kate's heart and breathing rates - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	37.2	33.5	22.3	26.3	7.8	10.0	0.1	36.3	38.0
	2023	1555	36.8	32.0	23.2	24.7	7.2	12.2	0.8	34.2	39.3
Kuwait	2019	658	39.3	37.4	24.7	27.1	5.9	4.5	0.4	37.8	40.9
	2023	1085	40.5	38.4	23.7	26.7	6.1	4.8	0.4	40.7	40.3
South Africa (9)	2019	2977	29.1	27.4	18.1	40.3	8.2	5.2	0.9	29.0	29.3
	2023	2995	29.6	28.2	19.6	38.8	8.8	4.1	0.5	30.8	28.8
International Avg. (3)	2019	4492	35.2	32.7	21.7	31.2	7.3	6.6	0.5	34.4	36.1
	2023	5635	35.6	32.9	22.2	30.0	7.3	7.0	0.5	35.2	36.1

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

Science: Biology / Knowing

SP13_04 SP62101: Stomach tissue and function - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	36.3	43.1	32.4	17.6	6.6	0.3	35.2	37.3
	2023	1555	32.6	45.4	29.8	14.3	9.3	1.2	33.5	31.8
Kuwait	2019	658	34.6	46.8	28.9	17.9	5.4	1.0	37.6	31.0
	2023	1086	31.9	46.3	32.0	13.2	8.1	0.5	33.9	29.8
South Africa (9)	2019	2977	21.9	58.2	26.6	6.7	7.3	1.2	21.7	22.1
	2023	3001	21.8	58.1	24.1	7.6	9.0	1.2	23.3	20.3
International Avg. (3)	2019	4492	30.9	49.4	29.3	14.1	6.4	0.8	31.5	30.2
	2023	5642	28.8	49.9	28.6	11.7	8.8	1.0	30.2	27.3

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

Science: Physics / Applying
SP13_06 SP62128: Densities of three liquids - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	45.1	47.7	39.2	11.5	1.5	46.2	44.2
	2023	1555	40.0	48.2	32.2	17.7	1.8	36.3	43.9
Kuwait	2019	658	41.6	54.4	38.7	5.4	1.4	40.6	42.7
	2023	1086	42.8	52.1	39.0	8.3	0.6	40.1	45.7
South Africa (9)	2019	2977	17.8	77.3	16.7	3.8	2.1	17.1	18.6
	2023	2999	19.3	75.5	18.0	4.0	2.5	17.5	21.2

International Avg. (3)	2019	4492	34.8	59.8	31.6	6.9	1.7	34.7	35.1
	2023	5640	34.0	58.6	29.7	10.0	1.6	31.3	36.9

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

Science: Physics / Knowing

SP13_07 SP62047: Absorbed or reflected light (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	30.7	63.4	28.1	6.4	2.1	33.4	28.4
	2023	1555	31.5	61.1	28.1	8.8	1.9	28.8	34.1
Kuwait	2019	655	36.7	59.9	34.8	3.9	1.5	35.3	38.3
	2023	1079	35.1	59.9	32.4	6.8	0.8	36.4	33.7
South Africa (9)	2019	2977	26.6	67.9	24.6	4.6	2.8	26.1	27.3
	2023	3003	26.8	67.8	24.8	4.4	3.0	26.9	27.0
International Avg. (3)	2019	4489	31.3	63.7	29.2	5.0	2.1	31.6	31.4
	2023	5637	31.1	62.9	28.4	6.7	1.9	30.7	31.6

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

Science: Physics / Knowing

SP13_07A SP62047A: Absorbed or reflected light: green - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	54.8	45.8	37.9	14.1	2.1	55.9	53.7
	2023	1555	58.4	48.0	34.2	15.9	1.9	54.5	62.4
Kuwait	2019	655	57.6	52.5	38.7	7.3	1.5	57.1	58.2
	2023	1080	59.4	52.9	36.2	10.1	0.8	58.1	60.7
South Africa (9)	2019	2977	55.0	45.4	37.1	14.6	2.8	55.0	55.0
	2023	3003	56.4	47.0	36.4	13.7	3.0	55.8	57.0
International Avg. (3)	2019	4489	55.8	47.9	37.9	12.0	2.1	56.0	55.7
	2023	5638	58.1	49.3	35.6	13.2	1.9	56.1	60.0

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

Science: Physics / Knowing

SP13_07B SP62047B: Absorbed or reflected light: red - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	45.0	49.0	40.1	8.8	2.1	48.4	42.1
	2023	1555	47.4	45.7	41.3	11.1	1.9	43.4	51.3
Kuwait	2019	657	53.0	44.3	49.8	4.5	1.5	53.0	52.9
	2023	1083	54.8	41.2	50.0	7.9	0.8	54.4	55.2
South Africa (9)	2019	2977	53.4	40.8	46.7	9.6	2.8	53.4	53.4
	2023	3003	54.3	40.3	47.9	8.8	3.0	54.9	53.9
International Avg. (3)	2019	4491	50.4	44.7	45.5	7.6	2.1	51.6	49.4
	2023	5641	52.2	42.4	46.4	9.3	1.9	50.9	53.5

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

Science: Physics / Knowing

SP13_07C SP62047C: Absorbed or reflected light: blue - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	54.2	45.2	38.2	14.5	2.1	54.3	54.1
	2023	1555	53.5	44.1	38.3	15.7	1.9	51.1	55.8
Kuwait	2019	655	60.7	55.4	35.8	7.3	1.5	60.0	61.4
	2023	1081	57.3	50.6	37.8	10.7	0.8	56.7	57.9
South Africa (9)	2019	2977	56.7	46.7	35.7	14.7	2.8	54.9	58.8
	2023	3003	56.9	48.1	36.5	12.5	3.0	56.3	58.0
International Avg. (3)	2019	4489	57.2	49.1	36.6	12.2	2.1	56.4	58.1
	2023	5639	55.9	47.6	37.5	13.0	1.9	54.7	57.2

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

Science: Physics / Applying

SP13_08 SP62042: Parts of Incandescent light bulb - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Kuwait	2019	658	39.2	53.7	34.6	9.9	1.9	38.5	39.9
	2023	1085	33.6	54.9	27.8	16.4	0.9	31.4	36.2
South Africa (9)	2019	2977	24.9	58.1	19.2	18.9	3.7	21.0	29.7
	2023	2999	21.3	60.7	16.4	18.9	3.9	20.0	22.8
International Avg. (2)	2019	3635	32.0	55.9	26.9	14.4	2.8	29.8	34.8
	2023	4084	27.4	57.8	22.1	17.7	2.4	25.7	29.5

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

Science: Chemistry / Applying
SP13_09 SP62250: Paint prevents rust - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	43.3	39.6	30.2	27.5	2.7	45.6	41.3
	2023	1555	54.2	28.0	33.0	36.5	2.5	56.7	52.0
Kuwait	2019	658	32.8	52.3	25.5	20.3	1.9	35.9	28.9
	2023	1084	28.1	48.0	18.8	32.1	1.1	30.3	25.7
South Africa (9)	2019	2977	24.8	63.5	20.9	11.3	4.3	23.1	26.7
	2023	2997	25.3	63.3	21.5	10.8	4.4	27.0	23.5
International Avg. (3)	2019	4492	33.6	51.8	25.5	19.7	3.0	34.9	32.3
	2023	5636	35.9	46.4	24.4	26.5	2.6	38.0	33.7

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

Science: Chemistry / Knowing

SP13_10 SP62246: True of all neutral atoms - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	49.7	24.1	10.8	46.4	12.1	3.9	2.7	53.5	46.2
	2023	1555	50.4	23.9	11.8	46.6	10.2	4.7	2.8	55.2	45.8
Kuwait	2019	657	40.0	33.9	16.7	38.0	6.3	3.1	2.0	41.0	38.9
	2023	1085	35.9	36.0	15.8	34.4	9.7	2.8	1.3	36.6	35.2
South Africa (9)	2019	2977	35.3	24.4	21.5	32.0	12.6	4.7	4.8	37.6	32.7
	2023	2981	33.0	27.5	22.7	30.3	11.4	3.6	4.5	34.6	31.3
International Avg. (3)	2019	4491	41.7	27.5	16.3	38.8	10.3	3.9	3.2	44.0	39.3
	2023	5621	39.8	29.1	16.8	37.1	10.4	3.7	2.9	42.1	37.4

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

Science: Chemistry / Reasoning

SP13_11 SP62056: Mary has a light stick - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	21.3	71.4	19.3	6.1	3.2	25.5	17.6
	2023	1555	8.7	82.9	7.9	6.1	3.0	8.2	9.2
Kuwait	2019	658	27.8	68.4	26.4	3.2	2.0	31.7	23.5
	2023	1086	21.9	74.2	20.8	3.6	1.4	26.6	17.1
South Africa (9)	2019	2977	14.4	77.8	13.0	3.6	5.6	13.5	15.3
	2023	2998	13.3	78.0	12.0	4.7	5.3	12.7	14.0

International Avg. (3)	2019	4492	21.2	72.5	19.6	4.3	3.6	23.6	18.8
	2023	5639	14.6	78.4	13.6	4.8	3.2	15.8	13.4

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

Science: Earth Science / Knowing

SP13_12 SP62235: Negative effects of fertilizer - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	39.9	37.3	14.2	17.9	24.0	3.3	3.4	42.1	38.0
	2023	1555	41.5	38.3	13.4	21.8	18.8	4.3	3.4	42.5	40.6
Kuwait	2019	658	35.5	33.9	15.9	26.5	19.2	2.1	2.5	37.2	33.7
	2023	1085	37.4	35.7	15.8	26.4	17.6	2.7	1.8	40.0	34.8
South Africa (9)	2019	2977	26.4	23.9	14.0	29.3	23.3	3.2	6.3	25.3	27.7
	2023	2989	24.9	22.5	14.9	29.2	24.0	3.1	6.3	23.2	26.4
International Avg. (3)	2019	4492	33.9	31.7	14.7	24.6	22.1	2.9	4.1	34.9	33.1
	2023	5629	34.6	32.2	14.7	25.8	20.1	3.3	3.8	35.2	33.9

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

Science: Earth Science / Applying
SP13_13 SP62180: Melting permafrost - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	24.4	21.6	15.7	22.2	28.9	8.1	3.5	22.7	25.9
	2023	1555	26.1	23.3	18.7	21.2	25.8	7.3	3.6	22.4	29.8
Kuwait	2019	658	44.3	42.0	17.4	15.6	19.9	2.4	2.6	48.4	39.6
	2023	1085	45.6	43.5	15.7	13.0	23.2	2.7	1.8	47.5	43.7
South Africa (9)	2019	2977	32.2	28.7	28.2	13.6	18.4	3.8	7.3	33.9	30.3
	2023	2988	31.8	28.5	27.8	14.5	18.9	3.4	7.0	32.6	30.6
International Avg. (3)	2019	4492	33.6	30.8	20.5	17.1	22.4	4.8	4.5	35.0	31.9
	2023	5628	34.5	31.8	20.8	16.2	22.6	4.5	4.1	34.2	34.7

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

Science: Earth Science / Knowing

SP13_14 SP62022: Fresh water or salt water (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	31.3	65.0	29.7	1.5	3.9	27.7	34.6
	2023	1555	27.5	68.3	26.0	1.9	3.8	21.9	32.9
Kuwait	2019	657	28.4	68.4	27.2	1.7	2.7	25.5	31.7
	2023	1084	26.6	69.1	25.1	3.9	2.0	22.2	31.2
South Africa (9)	2019	2977	27.5	65.3	24.7	1.9	8.0	25.9	29.2
	2023	3003	25.9	66.8	23.3	2.4	7.5	24.1	28.4

International Avg. (3)	2019	4491	29.1	66.3	27.2	1.7	4.8	26.4	31.8
	2023	5642	26.7	68.1	24.8	2.7	4.4	22.7	30.9

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

Science: Earth Science / Knowing

SP13_14A SP62022A: Fresh water or salt water: snow cap - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	85.6	77.4	13.1	5.7	3.9	82.2	88.5
	2023	1555	81.9	74.0	16.4	5.9	3.8	78.5	85.2
Kuwait	2019	657	70.2	65.4	27.7	4.2	2.7	69.2	71.4
	2023	1085	68.2	62.6	29.1	6.3	2.0	66.4	70.2
South Africa (9)	2019	2977	67.9	57.2	27.1	7.7	8.0	68.0	67.7
	2023	3003	68.0	57.7	27.1	7.7	7.5	65.8	70.5
International Avg. (3)	2019	4491	74.5	66.7	22.6	5.9	4.8	73.1	75.9
	2023	5643	72.7	64.8	24.2	6.6	4.4	70.3	75.3

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

Science: Earth Science / Knowing

SP13_14B SP62022B: Fresh water or salt water: cloud - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	72.9	65.7	24.4	6.1	3.9	70.4	75.2
	2023	1555	68.2	60.4	28.1	7.7	3.8	63.4	73.0
Kuwait	2019	657	64.1	58.9	33.0	5.5	2.7	60.2	68.4
	2023	1084	69.0	63.1	28.3	6.7	2.0	66.6	71.6
South Africa (9)	2019	2977	74.8	63.5	21.4	7.1	8.0	76.2	73.2
	2023	3003	73.6	62.0	22.2	8.2	7.5	73.7	73.8
International Avg. (3)	2019	4491	70.6	62.7	26.3	6.2	4.8	68.9	72.3
	2023	5642	70.3	61.8	26.2	7.5	4.4	67.9	72.8

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

Science: Earth Science / Knowing

SP13_14C SP62022C: Fresh water or salt water: river - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	63.8	57.4	32.5	6.3	3.9	62.9	64.7
	2023	1555	65.0	58.2	31.4	6.7	3.8	64.0	66.0
Kuwait	2019	658	80.7	75.3	18.0	4.1	2.6	80.1	81.5
	2023	1085	75.2	69.3	22.8	5.9	2.0	72.0	78.5
South Africa (9)	2019	2977	71.9	61.1	23.9	7.0	8.0	69.7	74.4
	2023	3003	70.4	60.6	25.5	6.4	7.5	70.5	70.7
International Avg. (3)	2019	4492	72.1	64.6	24.8	5.8	4.8	70.9	73.5
	2023	5643	70.2	62.7	26.6	6.3	4.4	68.8	71.8

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

Science: Earth Science / Knowing

SP13_14D SP62022D: Fresh water or salt water: ocean - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	89.8	9.2	81.4	5.5	3.9	88.3	91.2
	2023	1555	89.3	9.6	80.7	5.9	3.8	86.6	92.0
Kuwait	2019	657	80.7	18.1	75.3	4.0	2.7	79.0	82.5
	2023	1084	80.2	18.2	74.0	5.8	2.0	80.0	80.5
South Africa (9)	2019	2977	87.1	11.1	74.4	6.5	8.0	87.1	87.1
	2023	3003	85.8	12.2	73.8	6.5	7.5	86.0	85.9
International Avg. (3)	2019	4491	85.9	12.8	77.0	5.3	4.8	84.8	86.9
	2023	5642	85.1	13.4	76.1	6.1	4.4	84.2	86.2

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

Science: Earth Science / Reasoning
SP13_15 SP62243: Animals and habitat - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	36.3	43.2	21.3	20.1	10.1	5.3	35.3	37.3
	2023	1555	32.4	46.0	14.3	18.4	15.7	5.6	33.3	31.6
Kuwait	2019	658	37.0	44.2	18.4	22.2	11.4	3.7	40.6	32.6
	2023	1086	35.1	42.9	20.9	18.4	14.1	3.6	34.2	36.2
South Africa (9)	2019	2977	37.6	37.9	23.8	18.1	10.4	9.7	38.8	36.1
	2023	2998	33.4	41.2	21.3	15.4	12.6	9.5	32.9	33.8
International Avg. (3)	2019	4492	37.0	41.8	21.2	20.2	10.6	6.2	38.2	35.4
	2023	5639	33.7	43.4	18.8	17.4	14.1	6.3	33.5	33.9

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

Science: Biology / Reasoning

SP14_01 SP72011: Compare fish and human fields of vision - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	57.7	56.5	4.0	6.0	31.4	2.0	0.1	60.1	55.5
	2023	1560	51.2	49.4	6.3	4.9	36.0	3.1	0.3	50.9	51.4
Kuwait	2019	656	45.2	43.8	5.3	11.3	36.5	2.5	0.7	42.6	48.2
	2023	1085	45.6	43.8	6.4	8.7	37.1	3.8	0.3	44.8	46.4
South Africa (9)	2019	2960	27.4	26.9	7.3	10.6	53.5	1.4	0.4	23.6	31.5
	2023	3009	29.8	29.3	8.5	12.8	47.9	1.3	0.3	24.6	35.2
International Avg. (3)	2019	4481	43.4	42.4	5.5	9.3	40.4	2.0	0.4	42.1	45.1
	2023	5654	42.2	40.8	7.1	8.8	40.3	2.7	0.3	40.1	44.4

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

Science: Biology / Knowing

SP14_02 SP72905: Risk factors for disease - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	59.6	39.4	58.1	2.4	0.1	68.5	51.7
	2023	1560	57.1	40.9	54.4	4.3	0.4	64.2	50.1
Kuwait	2019	656	65.4	32.1	60.5	6.7	0.7	69.5	60.4
	2023	1086	63.5	33.2	57.9	8.5	0.5	67.7	59.2
South Africa (9)	2019	2960	42.1	53.9	39.2	6.4	0.5	47.0	36.4
	2023	3016	37.5	57.6	34.5	7.6	0.3	40.8	33.7

International Avg. (3)	2019	4481	55.7	41.8	52.6	5.2	0.4	61.6	49.5
	2023	5662	52.7	43.9	48.9	6.8	0.4	57.6	47.7

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

Science: Biology / Applying

SP14_03 SP72049: Source of DNA making flowers pink - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	53.3	12.1	51.7	13.2	19.8	2.8	0.3	58.0	49.4
	2023	1564	49.4	12.5	46.9	13.2	22.4	4.6	0.5	50.9	47.9
Kuwait	2019	656	47.2	16.5	46.4	13.8	21.4	1.1	0.7	48.8	45.4
	2023	1085	42.3	18.5	40.7	14.8	22.1	3.5	0.4	43.7	41.0
South Africa (9)	2019	2960	37.1	13.0	36.4	20.9	27.7	1.4	0.6	36.0	38.3
	2023	3017	37.5	13.6	36.8	22.1	25.5	1.6	0.4	37.5	37.8
International Avg. (3)	2019	4481	45.9	13.9	44.8	16.0	23.0	1.8	0.5	47.6	44.4
	2023	5666	43.1	14.8	41.4	16.7	23.3	3.2	0.4	44.0	42.2

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

Science: Biology / Applying

SP14_04 SP72016: Gases in inhaled and exhaled air (DERIVED) - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	31.9	43.0	13.9	16.5	26.1	0.5	30.0	33.6
	2023	1564	29.3	37.1	14.1	11.3	36.8	0.8	24.4	33.9
Kuwait	2019	656	29.5	48.8	27.8	12.4	10.4	0.7	30.6	28.3
	2023	1086	17.6	61.3	14.7	7.3	16.0	0.6	17.2	18.0
South Africa (9)	2019	2960	12.9	74.8	11.3	6.3	6.9	0.7	12.9	13.0
	2023	3017	13.1	74.9	14.4	5.2	5.0	0.5	12.5	14.0

International Avg. (3)	2019	4481	24.8	55.5	17.6	11.7	14.5	0.6	24.5	25.0
	2023	5667	20.0	57.8	14.4	7.9	19.3	0.6	18.1	22.0

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

Science: Biology / Applying
SP14_04A SP72016A: Gases in inhaled and exhaled air - oxygen - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	35.3	46.4	25.3	27.8	0.5	32.4	37.8
	2023	1564	35.5	39.4	21.7	38.2	0.8	32.7	38.1
Kuwait	2019	656	23.4	67.8	20.7	10.8	0.7	23.5	23.3
	2023	1086	15.0	69.7	12.3	17.4	0.6	15.0	15.0
South Africa (9)	2019	2960	15.3	77.8	14.1	7.5	0.7	15.9	14.6
	2023	3018	16.8	78.1	15.8	5.6	0.5	16.5	17.3

International Avg. (3)	2019	4481	24.7	64.0	20.0	15.4	0.6	24.0	25.3
	2023	5668	22.4	62.4	16.6	20.4	0.6	21.4	23.5

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

Science: Biology / Applying
SP14_04B SP72016B: Gases in inhaled and exhaled air - nitrogen - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	34.5	40.9	21.6	37.1	0.5	35.1	34.0
	2023	1564	30.5	33.9	14.9	50.4	0.8	22.7	37.1
Kuwait	2019	656	37.6	52.7	31.8	14.8	0.7	38.7	36.2
	2023	1086	24.1	53.7	17.1	28.6	0.6	22.7	25.9
South Africa (9)	2019	2960	11.2	77.5	9.8	12.1	0.7	10.3	12.3
	2023	3017	9.8	82.1	9.0	8.4	0.5	8.8	11.2

International Avg. (3)	2019	4481	27.8	57.0	21.0	21.3	0.6	28.1	27.5
	2023	5667	21.5	56.6	13.7	29.1	0.6	18.1	24.7

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

Science: Biology / Reasoning
SP14_05 SP72451: Oldest fossils - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	46.1	53.1	45.4	1.1	0.5	48.3	44.1
	2023	1560	36.8	62.3	36.2	0.7	0.9	39.7	33.9
Kuwait	2019	654	39.5	59.0	38.5	1.7	0.8	44.3	33.9
	2023	1082	18.0	78.6	17.3	3.4	0.7	19.9	16.1
South Africa (9)	2019	2960	27.0	70.9	26.3	1.7	1.1	24.3	30.1
	2023	3018	27.9	69.8	27.0	2.5	0.7	25.6	30.2

International Avg. (3)	2019	4479	37.5	61.0	36.7	1.5	0.8	39.0	36.1
	2023	5660	27.6	70.2	26.8	2.2	0.8	28.4	26.8

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

Science: Biology / Knowing

SP14_06 SP72074: How planting trees benefits environment - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	19.1	76.9	18.2	4.2	0.7	19.5	18.9
	2023	1560	21.3	70.2	19.0	9.8	0.9	20.9	21.7
Kuwait	2019	656	33.3	62.3	31.1	5.8	0.8	33.0	33.7
	2023	1085	20.2	71.0	18.0	10.3	0.7	20.8	19.5
South Africa (9)	2019	2960	18.0	74.5	16.3	8.0	1.1	18.8	17.2
	2023	3017	21.3	72.5	19.6	7.0	0.9	21.6	20.6

International Avg. (3)	2019	4480	23.5	71.2	21.9	6.0	0.9	23.7	23.2
	2023	5662	20.9	71.2	18.9	9.0	0.9	21.1	20.6

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

Science: Biology / Knowing

SP14_07 SP72091: Function of white blood cells - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	39.4	32.5	11.2	37.9	14.6	3.0	0.7	34.5	43.7
	2023	1560	37.1	28.0	14.9	35.1	16.6	4.5	1.0	33.5	40.6
Kuwait	2019	655	33.2	39.0	14.2	32.0	11.1	2.8	0.9	29.6	37.4
	2023	1085	34.2	41.0	13.9	32.9	8.4	3.1	0.8	30.0	38.4
South Africa (9)	2019	2960	28.7	22.0	25.3	27.1	19.8	4.2	1.6	27.6	30.1
	2023	3012	26.8	22.7	25.8	25.5	21.2	3.5	1.2	26.5	27.1
International Avg. (3)	2019	4479	33.8	31.2	16.9	32.3	15.2	3.3	1.1	30.6	37.1
	2023	5657	32.7	30.6	18.2	31.2	15.4	3.7	1.0	30.0	35.3

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

Science: Chemistry / Applying

SP14_08 SP72109: Place elements in periodic table - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	29.9	60.4	25.8	12.9	0.9	34.4	26.0
	2023	1564	25.0	62.1	20.8	16.0	1.1	29.0	21.1
Kuwait	2019	656	36.9	58.3	34.1	6.7	0.9	40.1	33.1
	2023	1084	27.5	66.6	25.3	7.3	0.8	27.4	27.7
South Africa (9)	2019	2960	36.6	59.5	34.4	4.1	2.0	40.2	32.5
	2023	3016	37.1	60.0	35.4	3.2	1.4	40.5	33.3

International Avg. (3)	2019	4480	34.5	59.4	31.4	7.9	1.2	38.2	30.5
	2023	5664	29.9	62.9	27.1	8.8	1.1	32.3	27.4

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

Science: Chemistry / Reasoning

SP14_09 SP72140: How substances are grouped - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	42.9	14.0	21.7	40.5	18.3	3.8	1.8	44.5	41.4
	2023	1565	40.9	15.4	23.9	37.8	15.3	6.3	1.3	41.3	40.5
Kuwait	2019	656	47.9	15.6	17.3	45.9	17.2	3.0	1.1	51.5	43.7
	2023	1084	42.5	13.1	21.1	40.4	20.6	4.1	0.8	39.9	45.0
South Africa (9)	2019	2960	34.9	19.7	15.7	33.1	26.4	2.7	2.4	36.0	33.7
	2023	3010	39.1	21.2	15.9	37.7	21.6	1.9	1.7	41.4	36.9
International Avg. (3)	2019	4480	41.9	16.4	18.2	39.8	20.6	3.2	1.7	44.0	39.6
	2023	5659	40.8	16.6	20.3	38.6	19.2	4.1	1.2	40.9	40.8

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

Science: Chemistry / Reasoning

SP14_10 SP72132: Hydrangea colors in acidic soil - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	7.0	88.5	6.7	2.7	2.1	7.0	7.1
	2023	1565	7.2	89.3	7.0	2.4	1.4	8.4	6.1
Kuwait	2019	656	10.0	87.7	9.7	1.5	1.1	12.2	7.5
	2023	1084	5.7	90.6	5.4	3.0	0.9	5.8	5.5
South Africa (9)	2019	2960	5.4	89.9	5.1	2.3	2.7	5.8	4.9
	2023	3017	5.4	90.4	5.2	2.5	2.0	5.1	5.9

International Avg. (3)	2019	4480	7.5	88.7	7.2	2.1	2.0	8.3	6.5
	2023	5666	6.1	90.1	5.9	2.6	1.4	6.4	5.8

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

Science: Physics / Applying
SP14_11 SP72209: Process in section 2 of graph - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	35.6	33.6	20.8	27.0	13.0	3.2	2.5	34.6	36.5
	2023	1565	35.8	34.0	17.5	30.9	12.6	3.3	1.5	37.7	33.9
Kuwait	2019	655	36.1	35.2	17.7	34.7	9.8	1.5	1.1	36.3	35.9
	2023	1083	36.9	35.4	17.5	34.6	8.5	2.8	1.1	33.2	40.5
South Africa (9)	2019	2960	27.7	26.2	17.0	34.5	16.9	2.0	3.4	27.7	27.7
	2023	3015	29.0	27.8	18.6	33.2	16.4	1.7	2.3	28.4	29.8
International Avg. (3)	2019	4479	33.1	31.6	18.5	32.1	13.2	2.2	2.3	32.9	33.3
	2023	5663	33.9	32.4	17.9	32.9	12.5	2.6	1.7	33.1	34.7

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

Science: Physics / Applying

SP14_12 SP72210: Ice cubes that will melt faster - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	27.1	48.0	44.4	3.9	0.8	2.9	29.6	24.8
	2023	1565	19.9	59.8	35.4	1.5	1.5	1.7	23.8	16.2
Kuwait	2019	656	19.8	64.0	29.0	4.9	1.0	1.1	22.9	16.4
	2023	1082	14.6	70.2	25.1	1.6	1.4	1.7	18.9	10.4
South Africa (9)	2019	2960	24.2	50.1	42.4	1.6	2.0	3.9	25.9	22.3
	2023	3016	27.1	45.6	46.3	2.5	2.8	2.8	28.6	25.8

International Avg. (3)	2019	4480	23.7	54.1	38.6	3.5	1.3	2.6	26.1	21.2
	2023	5663	20.6	58.5	35.6	1.9	1.9	2.1	23.8	17.4

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

Science: Physics / Knowing

SP14_13 SP72249: Sounds made by shortest and longest bars of a xylophone - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	16.0	18.3	34.0	26.2	14.9	3.8	2.9	13.1	18.6
	2023	1565	14.7	20.6	32.2	27.0	13.8	4.2	2.2	15.2	14.3
Kuwait	2019	655	16.9	21.4	30.6	28.7	16.5	1.8	1.1	17.0	16.9
	2023	1083	23.3	17.0	30.9	26.0	22.4	1.9	1.8	22.1	24.4
South Africa (9)	2019	2960	22.7	21.1	27.2	23.2	21.0	2.9	4.6	23.4	22.0
	2023	3015	22.8	22.6	28.8	21.5	21.5	2.2	3.5	25.3	19.7
International Avg. (3)	2019	4479	18.6	20.2	30.6	26.0	17.5	2.8	2.8	17.8	19.2
	2023	5663	20.3	20.1	30.6	24.8	19.2	2.8	2.5	20.9	19.5

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

Science: Earth Science / Knowing

SP14_14 SP72323: Conditions where rock will weather the fastest - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	62.2	17.5	58.8	7.9	10.3	2.5	3.0	62.5	62.0
	2023	1565	55.9	19.8	52.4	9.7	11.9	3.4	2.8	56.7	55.0
Kuwait	2019	656	56.1	16.3	53.7	9.9	15.9	2.8	1.5	58.6	53.2
	2023	1082	45.8	23.9	43.1	11.3	15.8	4.1	1.8	45.8	45.9
South Africa (9)	2019	2960	46.2	17.5	41.3	17.0	13.5	4.4	6.2	50.4	41.4
	2023	3010	46.3	17.4	42.4	16.6	15.2	4.0	4.4	47.2	44.9
International Avg. (3)	2019	4480	54.8	17.1	51.3	11.6	13.2	3.3	3.5	57.2	52.2
	2023	5657	49.3	20.4	46.0	12.5	14.3	3.8	3.0	49.9	48.6

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

Science: Earth Science / Reasoning

SP14_15 SP72368: Position of Moon when Jill took her photo - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	49.0	28.0	12.2	46.5	8.2	1.9	3.2	46.3	51.5
	2023	1565	46.8	28.5	14.5	44.8	7.9	1.4	2.8	41.6	51.7
Kuwait	2019	656	44.6	29.4	13.9	43.4	10.7	1.0	1.6	41.9	47.7
	2023	1081	50.3	23.9	11.7	48.3	12.1	2.2	1.9	45.5	55.2
South Africa (9)	2019	2960	36.3	32.7	13.9	33.5	12.1	1.1	6.6	33.5	39.7
	2023	3010	35.8	33.7	14.3	33.7	12.4	1.3	4.6	32.7	38.3
International Avg. (3)	2019	4480	43.3	30.0	13.3	41.2	10.3	1.3	3.8	40.6	46.3
	2023	5656	44.3	28.7	13.5	42.3	10.8	1.6	3.1	40.0	48.4

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

Science: Earth Science / Applying

SP14_16 SP72303: Diagram best representing Earth - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	37.8	25.9	21.0	10.5	34.9	3.4	4.3	37.2	38.3
	2023	1565	33.8	26.9	20.5	13.5	31.0	5.0	3.1	34.5	33.1
Kuwait	2019	655	24.2	31.9	26.8	14.3	23.3	1.7	2.0	18.6	30.6
	2023	1081	27.1	30.3	26.1	12.5	25.6	2.8	2.8	26.3	27.8
South Africa (9)	2019	2960	24.4	30.1	26.1	12.4	22.1	2.1	7.1	25.1	23.6
	2023	3008	25.3	28.4	29.0	12.1	23.5	2.0	5.0	25.4	25.0

International Avg. (3)	2019	4480	28.8	29.3	24.6	12.4	26.8	2.4	4.5	27.0	30.8
	2023	5654	28.7	28.5	25.2	12.7	26.7	3.3	3.6	28.7	28.6

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