

COUNTRY ID=Australia SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	75	1.0	80	1.2	70	1.3
A10	No	The fossils of dinosaurs can be found where?	90	0.5	91	0.6	90	0.8
B02	No	Shown diagram, where is the saltiest water found?	75	1.2	77	1.3	73	1.7
C09	No	Where are large amounts of metals like iron and aluminum found?	51	1.8	57	2.6	44	2.1
D04	No	Shown diagram of Earth, which layer is the hottest?	75	1.2	79	1.5	71	2.0
E06	No	Which of the following is hottest? (astronomical bodies)	97	0.4	96	0.7	98	0.6
E09	No	Given several recent floods, when will it flood next?	43	1.3	43	2.0	43	1.7
F02	No	Each year the Earth moves once around which of the following?	69	1.6	70	2.1	68	2.2
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	68	1.5	70	1.9	66	2.0
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	81	1.5	86	1.4	77	2.2
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	29	1.6	31	1.9	26	2.0
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	49	1.8	53	2.3	45	2.4
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	46	2.3	47	3.3	45	3.1
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	70	2.1	75	2.9	65	2.7
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	37	1.8	39	3.1	36	2.8
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	44	1.7	49	2.7	39	2.0
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	76	1.5	76	1.9	77	2.2
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	23	1.5	25	2.1	22	1.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Australia SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	89	0.8	88	1.1	90	0.8
C07	No	Which of the following is an example of the use of a renewable source?	52	1.2	55	1.8	49	2.0
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	86	1.1	84	1.5	88	1.3
O06	Yes	Write down one example of how computers help people do their work.	78	2.0	71	3.3	84	2.5
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	49	3.1	53	3.6	45	3.5
Q07	Yes	Which of the following statements is not an observation?	57	2.3	56	3.5	58	3.1
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	52	2.3	54	3.5	50	3.2
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	68	1.8	71	2.4	64	2.2
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	52	1.6	53	2.5	51	2.3
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	37	2.4	34	2.8	40	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Australia SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	75	1.0	74	1.0	76	1.3
B03	No	If you throw each one of these things away, which will decay fastest?	80	1.2	79	1.3	82	1.6
B04	No	Where do humans interpret senses?	72	1.0	73	1.3	71	1.7
C06	No	Which animal eats only plants?	93	0.7	95	0.8	92	1.2
C08	No	What gas in the air do we need in order to live?	88	1.0	88	1.3	88	1.4
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	72	1.3	70	1.9	74	1.7
D03	No	Which of the following animals does not lay eggs?	96	0.5	97	0.7	96	0.8
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	64	1.4	66	2.1	63	2.3
F01	No	Which of the following plants is grown for food?	85	1.1	86	1.4	84	1.8
G05	No	Where does air go when a person breathes in?	91	0.9	88	1.4	93	0.9
G06	No	Shown diagram of plant, which part takes in the most water?	89	0.8	89	1.1	90	1.2
H02	No	How can washing your hands help keep you from getting sick?	94	0.6	93	0.9	95	0.8
H04	No	Which of the following will most likely affect your adult height?	48	1.5	46	2.3	49	1.8
N02	Yes	Which of the following refers only to living things?	76	1.9	75	2.3	76	2.6
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	43	2.6	41	3.4	44	3.8
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	76	1.9	77	2.3	74	2.9
N06	Yes	Where does a baby chick get its food while inside an egg?	44	2.0	47	3.3	41	3.1
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	45	2.5	43	3.8	47	2.9
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	78	2.0	78	2.5	78	2.8
O07	Yes	Which of the following animal produces milk for its young?	76	1.4	77	3.0	75	2.3
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	96	0.7	95	1.2	98	0.6
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	92	1.6	92	2.8	93	1.6
P08	Yes	Birds are different from insects in that birds have...	76	2.1	77	3.0	75	2.7
P09	Yes	Seeds develop from which part of a plant?	38	2.5	39	3.8	36	3.6
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	81	1.9	82	2.2	80	3.2
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	57	2.7	57	3.4	58	3.7
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	78	2.3	79	2.7	77	3.2
Q06	Yes	Which of the following pictures does not show an insect?	63	2.4	67	2.9	59	3.2
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	62	2.6	64	3.8	60	3.1
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	93	1.1	92	1.6	95	1.6
R06	Yes	Which of the following groups contains only animals with a backbone?	53	2.6	54	3.9	52	3.2
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	68	2.2	66	3.1	71	3.1
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	69	2.2	71	3.1	67	2.1
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	28	1.8	31	2.7	25	2.1
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	66	1.4	67	2.2	65	2.1
X02	Yes	Write down one reason why animals could not live in a world without plants.	87	1.0	85	1.5	89	1.5
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	94	0.9	93	1.2	94	1.5
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	69	1.6	69	2.1	69	2.2
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	75	1.6	73	2.4	78	2.1
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	50	1.6	48	2.3	53	2.3
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	75	1.6	72	2.3	78	2.1
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	63	1.7	62	2.5	63	2.2
Z02	Yes	Identify skin and skeletal features of various animals	79	1.8	78	2.6	79	1.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Australia SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	89	0.7	89	0.9	88	0.9
B01	No	A strong magnet will separate which of the following mixtures?	75	1.1	78	1.4	73	1.7
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	76	1.3	75	1.9	76	1.9
D01	No	Why are kettles and kitchen pans often made of copper?	75	1.7	74	2.1	76	1.8
E05	No	When you make soap bubbles, what is inside the bubbles?	71	1.2	73	1.8	69	1.8
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	82	1.0	82	1.3	83	1.4
G09	No	Which of the following pairs could together cause a rainbow?	91	0.8	90	1.2	92	1.0
H01	No	What happens to water when it boils?	73	1.2	73	2.0	72	1.9
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	32	2.0	36	3.5	28	2.7
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	59	2.2	63	3.2	56	3.3
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	75	1.8	77	2.9	72	3.0
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	65	2.5	64	3.3	65	3.1
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	53	2.5	55	3.7	52	3.1
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	56	2.2	58	2.9	55	3.5
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	54	2.3	55	3.2	53	3.1
P03	Yes	Which of the following is not used as an energy source?	33	2.4	40	3.4	26	2.4
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	38	2.5	40	3.1	36	3.7
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	56	2.5	61	3.7	51	3.2
P07	Yes	Which of the following travels fastest? (light)	59	2.0	69	2.9	48	2.7
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	63	2.8	62	3.2	64	3.6
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	69	2.5	73	3.2	65	3.5
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	56	2.3	59	3.5	53	3.7
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	72	2.0	72	3.1	73	2.6
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	20	1.6	28	2.6	12	1.7
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	60	2.6	63	3.6	58	3.0
R08	Yes	Which of the following makes its own light?	52	2.5	55	3.4	49	3.0
R09	Yes	Which of the following is an advantage of solar energy?	57	2.3	61	3.3	54	3.3
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	42	1.7	40	2.2	45	2.2
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	67	1.5	62	1.8	71	2.4
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	47	1.7	48	2.3	46	2.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Austria SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	70	1.4	76	1.5	63	2.2
A10	No	The fossils of dinosaurs can be found where?	81	0.9	82	1.3	81	1.3
B02	No	Shown diagram, where is the saltiest water found?	88	1.2	87	1.6	88	1.6
C09	No	Where are large amounts of metals like iron and aluminum found?	62	2.3	66	2.9	59	3.3
D04	No	Shown diagram of Earth, which layer is the hottest?	76	1.6	79	1.9	72	2.9
E06	No	Which of the following is hottest? (astronomical bodies)	96	0.7	96	0.9	96	1.1
E09	No	Given several recent floods, when will it flood next?	49	1.9	44	2.8	55	2.7
F02	No	Each year the Earth moves once around which of the following?	76	2.1	77	2.6	74	2.8
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	80	1.5	81	2.0	80	2.4
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	83	1.4	87	1.9	80	2.1
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	31	2.3	31	2.9	31	3.1
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	49	1.9	54	2.4	44	2.5
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	52	3.6	53	4.4	51	5.4
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	79	2.5	77	3.5	82	3.3
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	30	3.1	34	4.2	27	4.2
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	40	2.3	51	3.8	29	2.7
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	51	2.6	53	3.4	48	3.5
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	20	2.1	21	2.9	17	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Austria SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	94	0.5	93	0.8	95	0.7
C07	No	Which of the following is an example of the use of a renewable source?	54	2.2	56	3.2	51	3.2
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	74	1.6	77	2.4	71	2.2
O06	Yes	Write down one example of how computers help people do their work.	60	2.9	65	4.1	54	4.2
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	35	2.9	34	4.2	37	4.5
Q07	Yes	Which of the following statements is not an observation?	42	3.6	43	5.5	40	4.5
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	27	3.0	26	4.0	26	3.8
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	62	3.0	67	3.2	57	3.9
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	46	2.8	54	3.1	39	3.7
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	29	2.7	28	3.0	30	4.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Austria SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	83	0.8	82	1.2	84	1.1
B03	No	If you throw each one of these things away, which will decay fastest?	90	0.8	90	1.2	91	1.3
B04	No	Where do humans interpret senses?	68	1.7	67	2.3	69	2.2
C06	No	Which animal eats only plants?	96	0.8	97	0.9	95	1.3
C08	No	What gas in the air do we need in order to live?	92	1.2	92	1.7	92	1.5
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	79	1.4	80	1.9	79	1.8
D03	No	Which of the following animals does not lay eggs?	95	0.8	95	1.1	96	1.0
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	81	1.6	82	2.1	79	2.3
F01	No	Which of the following plants is grown for food?	90	1.1	92	1.6	88	1.8
G05	No	Where does air go when a person breathes in?	85	1.3	84	2.5	86	1.8
G06	No	Shown diagram of plant, which part takes in the most water?	89	1.3	91	1.9	88	2.0
H02	No	How can washing your hands help keep you from getting sick?	72	1.7	70	2.3	75	2.5
H04	No	Which of the following will most likely affect your adult height?	53	2.1	54	2.6	52	2.4
N02	Yes	Which of the following refers only to living things?	86	2.0	84	2.7	88	3.0
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	58	3.3	56	4.2	60	5.3
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	80	2.3	83	2.7	76	4.4
N06	Yes	Where does a baby chick get its food while inside an egg?	62	3.0	63	4.0	60	5.2
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	40	3.1	37	4.9	44	3.7
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	69	2.9	64	4.2	74	3.7
O07	Yes	Which of the following animal produces milk for its young?	60	3.6	56	5.6	65	4.4
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	94	1.6	94	2.0	93	2.1
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	95	1.6	94	3.1	95	1.6
P08	Yes	Birds are different from insects in that birds have...	71	3.4	73	3.9	68	4.2
P09	Yes	Seeds develop from which part of a plant?	71	2.6	74	3.7	68	4.5
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	70	3.3	65	4.7	75	4.0
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	92	1.3	89	2.0	96	1.6
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	77	2.8	75	4.2	79	3.8
Q06	Yes	Which of the following pictures does not show an insect?	43	3.8	45	5.6	41	5.0
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	72	2.9	72	3.9	72	4.9
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	83	2.9	83	3.1	83	4.7
R06	Yes	Which of the following groups contains only animals with a backbone?	31	3.5	31	5.3	30	4.5
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	73	2.9	76	3.9	70	4.7
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	57	2.8	57	3.4	56	4.1
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	35	3.0	41	3.5	28	3.9
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	65	2.6	70	3.3	58	3.6
X02	Yes	Write down one reason why animals could not live in a world without plants.	83	1.5	82	2.4	84	2.3
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	95	1.1	95	1.2	96	1.4
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	44	2.4	43	3.5	43	3.1
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	79	2.1	79	2.8	79	2.9
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	59	2.4	54	3.8	64	3.1
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	61	2.4	64	3.0	59	3.4
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	41	2.4	42	3.2	41	3.0
Z02	Yes	Identify skin and skeletal features of various animals	71	2.3	70	3.3	71	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Austria SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	90	0.9	91	1.1	89	1.2
B01	No	A strong magnet will separate which of the following mixtures?	85	1.0	85	1.4	84	1.6
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	82	1.7	80	2.2	83	2.1
D01	No	Why are kettles and kitchen pans often made of copper?	68	1.7	68	2.8	68	2.1
E05	No	When you make soap bubbles, what is inside the bubbles?	66	1.7	70	2.3	61	2.5
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	83	1.4	83	1.7	82	2.0
G09	No	Which of the following pairs could together cause a rainbow?	92	1.2	91	1.7	93	1.6
H01	No	What happens to water when it boils?	94	1.0	95	1.3	93	1.4
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	43	3.2	45	3.9	39	5.3
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	66	3.1	67	4.0	65	5.0
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	77	2.7	78	3.7	77	4.2
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	49	3.6	56	4.3	41	6.1
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	56	3.5	60	4.8	53	4.4
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	53	3.7	57	4.3	47	4.8
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	56	3.2	66	4.2	44	4.6
P03	Yes	Which of the following is not used as an energy source?	47	3.2	54	4.5	40	4.2
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	40	3.0	46	4.2	34	4.5
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	51	2.8	57	4.6	46	4.3
P07	Yes	Which of the following travels fastest? (light)	43	2.9	55	4.2	31	4.0
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	66	3.3	66	5.3	66	4.4
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	83	2.9	85	3.2	79	4.8
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	53	3.2	55	4.5	48	4.6
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	65	3.4	67	3.9	64	4.8
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	25	3.5	35	4.9	11	2.7
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	62	3.0	65	4.0	58	4.8
R08	Yes	Which of the following makes its own light?	83	2.7	84	3.0	81	4.9
R09	Yes	Which of the following is an advantage of solar energy?	62	4.1	66	5.7	58	5.3
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	47	2.3	49	3.7	46	3.7
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	44	2.7	43	3.4	45	3.9
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	32	2.2	37	2.8	27	3.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Canada SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	76	1.1	79	1.4	74	1.3
A10	No	The fossils of dinosaurs can be found where?	88	0.7	87	1.1	88	0.9
B02	No	Shown diagram, where is the saltiest water found?	79	1.7	79	1.6	80	2.1
C09	No	Where are large amounts of metals like iron and aluminum found?	52	1.8	55	2.9	49	2.4
D04	No	Shown diagram of Earth, which layer is the hottest?	84	1.1	87	1.3	80	1.5
E06	No	Which of the following is hottest? (astronomical bodies)	97	0.4	97	0.6	98	0.4
E09	No	Given several recent floods, when will it flood next?	43	2.3	42	2.1	42	2.8
F02	No	Each year the Earth moves once around which of the following?	75	1.4	76	1.7	74	1.6
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	75	1.5	76	2.0	73	2.4
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	73	1.4	76	1.8	70	1.9
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	29	1.8	30	2.0	27	1.6
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	40	1.7	43	2.3	36	1.6
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	47	2.7	47	4.1	47	4.5
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	68	2.9	69	3.3	67	4.1
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	54	3.3	57	4.0	51	3.4
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	36	1.7	40	2.6	31	2.3
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	68	3.2	66	4.3	71	2.3
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	25	1.7	26	2.9	25	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Canada SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	86	0.9	84	1.3	88	0.9
C07	No	Which of the following is an example of the use of a renewable source?	54	1.5	56	2.3	52	1.9
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	80	1.1	77	1.7	84	1.9
O06	Yes	Write down one example of how computers help people do their work.	71	2.4	67	3.7	76	3.4
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	43	3.1	37	3.2	52	3.9
Q07	Yes	Which of the following statements is not an observation?	54	3.5	56	4.3	52	4.2
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	45	2.1	48	2.7	41	3.1
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	46	2.2	50	3.1	42	2.2
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	33	2.0	33	2.1	33	2.7
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	30	2.2	28	2.9	32	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Canada SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	70	0.9	72	1.3	68	1.5
B03	No	If you throw each one of these things away, which will decay fastest?	79	1.3	77	2.0	81	1.7
B04	No	Where do humans interpret senses?	72	1.4	74	1.7	70	1.6
C06	No	Which animal eats only plants?	86	1.0	88	1.9	84	1.8
C08	No	What gas in the air do we need in order to live?	87	1.0	83	1.6	90	1.1
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	76	1.2	75	2.0	77	1.6
D03	No	Which of the following animals does not lay eggs?	97	0.5	97	0.6	96	0.9
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	66	1.6	63	2.3	68	2.2
F01	No	Which of the following plants is grown for food?	85	1.2	84	1.7	86	1.4
G05	No	Where does air go when a person breathes in?	89	1.3	89	1.8	89	2.1
G06	No	Shown diagram of plant, which part takes in the most water?	88	1.0	87	1.2	90	1.3
H02	No	How can washing your hands help keep you from getting sick?	92	1.0	91	1.0	93	1.7
H04	No	Which of the following will most likely affect your adult height?	45	1.6	42	1.8	46	1.8
N02	Yes	Which of the following refers only to living things?	73	2.8	69	3.9	78	3.2
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	37	2.6	34	3.6	42	4.5
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	75	2.8	78	4.0	72	3.8
N06	Yes	Where does a baby chick get its food while inside an egg?	41	2.5	39	4.0	43	4.3
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	45	3.9	44	4.9	47	4.1
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	72	2.6	66	5.0	79	3.1
O07	Yes	Which of the following animal produces milk for its young?	70	2.3	70	3.3	70	3.1
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	98	0.5	96	1.0	99	0.4
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	96	0.7	96	1.0	96	0.9
P08	Yes	Birds are different from insects in that birds have...	73	2.1	70	3.2	74	3.8
P09	Yes	Seeds develop from which part of a plant?	33	2.7	25	3.3	39	3.6
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	79	2.0	78	3.0	79	2.7
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	58	3.4	63	4.5	54	3.8
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	75	2.5	75	3.7	76	3.6
Q06	Yes	Which of the following pictures does not show an insect?	59	3.7	66	4.1	53	4.9
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	59	2.4	58	3.5	61	3.5
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	85	2.2	85	3.0	87	2.6
R06	Yes	Which of the following groups contains only animals with a backbone?	50	3.6	49	4.8	51	3.5
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	62	2.7	64	2.8	60	4.5
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	49	1.8	53	2.4	43	2.3
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	33	1.7	37	2.5	29	2.2
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	48	1.7	53	2.2	43	2.3
X02	Yes	Write down one reason why animals could not live in a world without plants.	78	1.5	75	2.1	80	2.2
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	92	0.9	94	1.0	91	1.4
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	57	1.4	61	3.0	52	2.9
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	70	1.4	71	2.1	70	2.2
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	48	1.5	49	2.1	49	2.6
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	72	2.1	69	3.0	74	2.3
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	56	1.7	54	3.0	59	2.7
Z02	Yes	Identify skin and skeletal features of various animals	69	1.9	69	1.8	71	2.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Canada SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	91	0.6	91	0.9	90	0.7
B01	No	A strong magnet will separate which of the following mixtures?	68	1.5	70	1.8	64	2.2
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	71	1.3	71	2.6	71	2.1
D01	No	Why are kettles and kitchen pans often made of copper?	70	1.8	73	1.8	66	2.5
E05	No	When you make soap bubbles, what is inside the bubbles?	76	1.3	77	1.7	74	1.6
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	78	1.3	78	2.4	78	2.1
G09	No	Which of the following pairs could together cause a rainbow?	92	0.8	91	1.0	93	1.4
H01	No	What happens to water when it boils?	72	1.5	72	2.5	70	1.7
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	36	2.6	43	3.5	27	2.9
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	63	2.5	64	3.2	62	3.3
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	73	2.1	70	3.4	75	3.0
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	70	2.5	73	3.8	68	3.6
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	52	3.3	55	3.9	50	3.6
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	63	3.0	63	3.9	63	3.2
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	43	2.2	44	3.1	44	4.1
P03	Yes	Which of the following is not used as an energy source?	39	3.5	46	4.4	34	3.3
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	28	2.5	34	4.3	24	3.7
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	51	2.5	52	4.2	49	4.3
P07	Yes	Which of the following travels fastest? (light)	44	2.8	52	4.4	34	3.9
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	60	3.0	59	3.5	60	5.0
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	61	4.3	69	5.3	53	4.8
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	53	2.5	57	3.2	47	3.4
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	66	3.0	67	3.8	66	3.1
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	22	1.8	28	3.0	15	2.3
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	70	2.5	67	3.4	73	3.0
R08	Yes	Which of the following makes its own light?	56	2.6	57	3.3	55	3.5
R09	Yes	Which of the following is an advantage of solar energy?	53	3.4	63	3.6	43	4.2
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	46	2.1	45	3.1	46	2.4
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	60	2.5	56	3.7	65	2.0
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	37	2.8	39	3.3	35	3.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Cyprus SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	48	1.7	51	2.1	45	1.9
A10	No	The fossils of dinosaurs can be found where?	67	1.3	72	1.6	62	1.6
B02	No	Shown diagram, where is the saltiest water found?	88	1.2	89	1.2	87	1.7
C09	No	Where are large amounts of metals like iron and aluminum found?	56	1.6	61	2.0	51	2.4
D04	No	Shown diagram of Earth, which layer is the hottest?	66	1.6	67	2.3	65	2.3
E06	No	Which of the following is hottest? (astronomical bodies)	77	1.4	78	1.8	75	2.2
E09	No	Given several recent floods, when will it flood next?	42	2.2	41	2.7	44	2.5
F02	No	Each year the Earth moves once around which of the following?	48	1.9	53	2.6	44	2.2
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	52	1.5	52	2.5	51	2.0
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	59	2.0	61	2.6	56	2.4
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	25	1.8	22	2.3	28	2.2
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	40	2.0	36	2.8	43	2.6
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	32	2.7	34	4.1	29	3.8
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	54	2.4	58	3.4	50	3.8
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	29	2.1	35	3.8	24	3.1
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	9	1.4	11	1.6	8	1.9
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	56	2.0	57	2.8	55	2.7
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	9	1.1	10	1.8	7	1.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Cyprus SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	84	0.9	81	1.3	87	1.1
C07	No	Which of the following is an example of the use of a renewable source?	47	1.9	46	2.7	47	2.2
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	72	1.3	71	2.0	73	2.0
O06	Yes	Write down one example of how computers help people do their work.	32	2.6	32	3.8	32	3.0
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	27	2.5	26	3.5	28	3.6
Q07	Yes	Which of the following statements is not an observation?	29	2.3	30	3.1	27	3.8
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	40	2.5	41	3.8	39	3.5
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	36	2.0	37	2.7	34	2.8
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	25	2.1	28	2.9	22	2.8
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	18	1.6	16	1.8	20	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Cyprus SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	48	1.4	48	1.9	48	1.6
B03	No	If you throw each one of these things away, which will decay fastest?	42	1.9	43	2.7	42	2.1
C06	No	Which animal eats only plants?	96	0.7	96	0.8	95	0.9
C08	No	What gas in the air do we need in order to live?	85	1.3	86	1.7	83	1.7
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	68	1.6	66	2.1	71	2.1
D03	No	Which of the following animals does not lay eggs?	84	1.3	85	1.8	84	1.7
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	55	1.9	58	2.6	52	2.8
F01	No	Which of the following plants is grown for food?	86	1.1	85	1.6	86	1.6
G05	No	Where does air go when a person breathes in?	84	1.2	83	1.8	86	1.4
G06	No	Shown diagram of plant, which part takes in the most water?	89	1.0	88	1.4	91	1.3
H02	No	How can washing your hands help keep you from getting sick?	83	1.1	81	1.9	86	1.5
H04	No	Which of the following will most likely affect your adult height?	31	1.6	31	1.8	31	2.4
N02	Yes	Which of the following refers only to living things?	60	2.8	60	3.9	59	4.0
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	33	2.9	34	3.7	33	4.5
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	69	2.8	70	4.4	68	3.8
N06	Yes	Where does a baby chick get its food while inside an egg?	27	2.2	28	3.7	27	3.3
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	31	2.4	29	3.7	32	3.4
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	60	2.5	57	3.3	63	4.0
O07	Yes	Which of the following animal produces milk for its young?	68	2.5	71	3.3	66	3.6
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	64	2.9	61	4.0	67	3.2
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	84	2.2	88	2.5	79	3.5
P08	Yes	Birds are different from insects in that birds have...	28	2.5	28	3.5	28	3.2
P09	Yes	Seeds develop from which part of a plant?	44	2.5	47	3.7	41	3.8
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	53	2.7	55	3.7	50	4.2
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	44	2.6	44	3.9	44	3.6
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	79	1.9	79	3.0	78	2.7
Q06	Yes	Which of the following pictures does not show an insect?	37	3.0	35	4.1	40	4.8
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	40	2.3	38	2.8	42	3.7
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	76	2.2	75	3.2	76	3.3
R06	Yes	Which of the following groups contains only animals with a backbone?	50	2.8	53	3.9	47	3.7
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	35	2.7	34	4.0	35	4.2
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	18	1.7	20	2.2	15	2.2
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	19	1.6	20	2.1	17	2.2
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	38	2.0	42	2.9	34	2.6
X02	Yes	Write down one reason why animals could not live in a world without plants.	70	1.7	65	2.5	74	2.4
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	71	1.9	70	2.8	71	2.5
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	57	2.2	57	2.9	58	3.0
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	52	2.2	51	2.5	52	3.0
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	28	2.0	29	2.7	28	2.5
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	38	2.4	43	3.3	33	2.7
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	23	1.9	28	2.9	18	2.4
Z02	Yes	Identify skin and skeletal features of various animals	62	2.5	63	3.0	61	3.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Cyprus SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	84	0.9	86	1.0	82	1.1
B01	No	A strong magnet will separate which of the following mixtures?	76	1.2	79	1.6	73	1.9
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	68	1.9	68	2.4	67	2.6
D01	No	Why are kettles and kitchen pans often made of copper?	49	2.0	49	2.6	50	2.8
E05	No	When you make soap bubbles, what is inside the bubbles?	61	2.0	63	2.3	60	2.6
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	59	1.8	63	2.1	56	2.3
G09	No	Which of the following pairs could together cause a rainbow?	76	1.4	76	1.9	76	2.3
H01	No	What happens to water when it boils?	85	1.1	83	1.7	86	1.2
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	37	2.6	42	3.6	30	4.1
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	29	2.6	30	3.3	29	3.8
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	53	3.2	50	3.8	57	4.1
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	54	3.0	54	4.5	54	4.3
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	32	2.4	38	3.8	26	3.1
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	59	2.4	61	3.8	57	3.9
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	43	3.0	49	3.9	38	4.2
P03	Yes	Which of the following is not used as an energy source?	32	2.7	28	3.7	36	3.6
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	28	3.3	30	4.3	26	3.7
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	42	2.8	43	3.7	41	4.2
P07	Yes	Which of the following travels fastest? (light)	23	2.1	30	2.9	16	2.6
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	48	2.5	50	3.4	45	4.0
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	56	3.3	61	3.7	51	4.5
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	24	2.6	23	2.9	26	4.3
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	48	2.7	48	3.8	48	3.5
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	13	2.0	10	2.2	17	3.4
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	67	2.5	64	3.8	69	3.3
R08	Yes	Which of the following makes its own light?	57	2.6	60	3.7	53	3.8
R09	Yes	Which of the following is an advantage of solar energy?	27	2.3	27	3.2	27	3.5
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	27	1.7	24	2.5	30	2.5
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	39	1.8	40	2.7	39	2.5
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	26	1.7	30	2.7	22	2.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Czech Republic SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	59	1.8	64	1.9	54	2.2
A10	No	The fossils of dinosaurs can be found where?	84	1.0	88	1.2	81	1.2
B02	No	Shown diagram, where is the saltiest water found?	87	0.9	88	1.3	86	1.2
C09	No	Where are large amounts of metals like iron and aluminum found?	62	1.5	73	2.0	52	2.0
D04	No	Shown diagram of Earth, which layer is the hottest?	76	1.5	78	2.0	74	2.1
E06	No	Which of the following is hottest? (astronomical bodies)	95	0.6	94	0.9	95	0.9
E09	No	Given several recent floods, when will it flood next?	49	1.5	49	2.1	48	2.4
F02	No	Each year the Earth moves once around which of the following?	83	1.1	84	1.5	83	1.7
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	75	1.4	77	1.9	74	1.9
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	86	1.1	88	1.3	84	1.7
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	31	1.5	33	2.5	29	2.0
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	55	1.8	61	2.3	48	2.5
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	60	2.8	60	3.9	60	3.5
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	76	2.1	82	2.9	69	2.8
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	60	2.5	61	3.5	59	3.2
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	38	2.1	45	3.0	32	2.6
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	54	2.3	54	2.8	54	2.9
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	22	1.5	23	2.3	20	2.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Czech Republic SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	93	0.4	93	0.7	94	0.5
C07	No	Which of the following is an example of the use of a renewable source?	54	1.7	54	2.1	54	2.2
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	79	1.5	78	2.0	80	1.6
O06	Yes	Write down one example of how computers help people do their work.	67	2.6	66	3.8	68	3.3
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	40	2.9	37	3.7	43	3.8
Q07	Yes	Which of the following statements is not an observation?	47	2.8	49	4.2	44	3.6
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	51	2.6	54	3.9	48	3.6
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	55	1.9	56	3.1	55	2.4
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	38	2.0	40	2.7	36	2.5
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	22	2.0	21	2.3	23	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Czech Republic SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	80	0.9	80	1.0	80	1.3
B03	No	If you throw each one of these things away, which will decay fastest?	84	1.2	86	1.5	83	1.5
B04	No	Where do humans interpret senses?	55	1.7	60	1.9	52	2.2
C06	No	Which animal eats only plants?	99	0.3	100	0.3	99	0.5
C08	No	What gas in the air do we need in order to live?	85	1.0	87	1.5	82	1.5
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	77	1.6	75	2.2	78	1.8
D03	No	Which of the following animals does not lay eggs?	86	1.1	88	1.4	85	1.4
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	68	1.4	70	1.8	67	2.0
F01	No	Which of the following plants is grown for food?	97	0.5	96	0.9	98	0.6
G05	No	Where does air go when a person breathes in?	96	0.6	96	0.9	96	1.0
G06	No	Shown diagram of plant, which part takes in the most water?	95	0.7	94	1.1	95	1.0
H02	No	How can washing your hands help keep you from getting sick?	84	1.1	85	1.6	84	1.6
H04	No	Which of the following will most likely affect your adult height?	48	1.8	47	2.4	49	2.2
N02	Yes	Which of the following refers only to living things?	84	2.0	82	3.4	86	2.5
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	60	2.3	60	3.1	59	3.6
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	83	2.1	85	2.8	80	2.8
N06	Yes	Where does a baby chick get its food while inside an egg?	34	2.5	34	3.5	33	3.5
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	50	3.1	51	4.2	49	3.7
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	76	2.4	73	3.2	79	3.0
O07	Yes	Which of the following animal produces milk for its young?	92	1.5	92	2.2	91	2.1
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	96	1.0	97	1.4	95	1.5
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	91	1.7	94	1.8	89	2.4
P08	Yes	Birds are different from insects in that birds have...	77	2.2	78	2.9	75	2.7
P09	Yes	Seeds develop from which part of a plant?	79	2.0	84	2.5	74	3.2
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	79	2.4	81	2.7	77	3.0
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	83	2.1	80	3.1	85	2.6
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	75	2.4	76	3.3	75	3.3
Q06	Yes	Which of the following pictures does not show an insect?	32	2.3	38	3.3	27	3.2
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	79	2.4	79	3.2	79	3.1
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	89	1.6	88	2.2	90	2.2
R06	Yes	Which of the following groups contains only animals with a backbone?	63	2.4	62	3.6	64	3.3
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	66	2.7	66	3.7	65	3.3
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	35	2.2	34	2.9	35	2.5
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	33	1.8	34	2.4	32	2.3
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	52	2.1	51	3.2	52	2.4
X02	Yes	Write down one reason why animals could not live in a world without plants.	79	1.8	78	2.3	80	2.4
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	90	1.2	89	1.9	91	1.3
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	71	1.6	72	2.5	71	2.3
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	53	2.2	54	3.1	53	2.8
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	32	2.0	31	2.8	33	3.0
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	62	2.2	63	3.0	62	2.6
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	44	2.0	48	3.2	41	2.7
Z02	Yes	Identify skin and skeletal features of various animals	71	1.7	69	2.8	73	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Czech Republic SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	89	0.7	91	1.0	88	0.9
B01	No	A strong magnet will separate which of the following mixtures?	76	1.4	80	1.4	73	2.1
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	84	1.3	86	1.7	83	1.9
D01	No	Why are kettles and kitchen pans often made of copper?	64	1.7	65	2.3	63	2.2
E05	No	When you make soap bubbles, what is inside the bubbles?	72	1.5	75	2.1	70	2.0
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	90	0.9	90	1.5	91	1.3
G09	No	Which of the following pairs could together cause a rainbow?	95	0.6	96	0.8	94	1.0
H01	No	What happens to water when it boils?	78	1.4	81	1.8	75	1.8
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	35	2.3	39	3.5	31	2.9
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	54	2.7	57	3.9	51	3.7
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	54	2.1	50	3.3	58	3.5
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	70	2.4	72	3.3	69	3.2
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	59	2.4	62	3.2	56	3.5
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	62	3.1	62	3.8	62	3.9
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	59	3.0	70	3.6	49	4.0
P03	Yes	Which of the following is not used as an energy source?	31	2.5	41	3.9	22	2.8
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	43	2.8	49	3.6	38	4.1
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	66	2.8	77	3.1	55	3.9
P07	Yes	Which of the following travels fastest? (light)	53	2.4	66	3.2	42	3.5
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	60	2.7	60	3.7	60	3.7
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	85	1.9	87	2.6	82	2.9
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	56	2.9	62	4.2	51	3.7
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	58	3.3	63	4.2	53	4.3
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	28	2.6	35	3.7	21	3.3
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	51	2.7	50	3.7	51	3.9
R08	Yes	Which of the following makes its own light?	69	2.3	68	3.4	71	3.4
R09	Yes	Which of the following is an advantage of solar energy?	52	2.8	53	3.6	51	3.3
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	44	1.9	41	2.8	47	2.6
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	39	2.0	40	2.8	39	2.5
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	34	1.8	35	2.5	33	2.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Greece SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	61	1.8	68	2.1	55	2.0
A10	No	The fossils of dinosaurs can be found where?	70	1.4	73	1.8	67	1.7
B02	No	Shown diagram, where is the saltiest water found?	64	1.9	67	2.4	61	2.4
C09	No	Where are large amounts of metals like iron and aluminum found?	41	2.1	40	2.5	42	2.7
D04	No	Shown diagram of Earth, which layer is the hottest?	74	2.5	72	3.8	76	2.8
E06	No	Which of the following is hottest? (astronomical bodies)	97	0.7	96	1.1	97	0.9
E09	No	Given several recent floods, when will it flood next?	43	2.5	42	5.0	44	2.5
F02	No	Each year the Earth moves once around which of the following?	79	1.6	81	2.1	78	2.3
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	61	2.4	59	3.8	62	2.6
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	62	2.2	66	3.5	59	2.5
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	21	1.5	16	1.9	26	2.2
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	47	2.1	47	3.3	47	2.3
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	30	2.8	27	3.5	32	4.4
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	67	3.4	69	6.0	65	4.0
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	28	3.1	24	4.8	31	4.1
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	12	1.5	14	2.0	11	2.4
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	62	2.4	61	3.1	62	2.9
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	13	1.6	14	2.1	12	1.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Greece SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	85	1.1	84	1.2	86	1.4
C07	No	Which of the following is an example of the use of a renewable source?	48	1.8	48	2.7	48	2.4
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	65	3.2	62	5.5	68	3.1
O06	Yes	Write down one example of how computers help people do their work.	38	4.3	45	7.5	32	4.4
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	30	2.8	28	3.4	32	4.3
Q07	Yes	Which of the following statements is not an observation?	28	2.5	25	3.9	31	3.8
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	41	3.0	41	3.9	41	4.7
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	33	2.0	35	3.1	32	2.8
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	24	1.6	23	2.3	25	2.3
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	25	2.6	25	4.8	24	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Greece SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	67	1.5	67	2.0	67	1.7
B03	No	If you throw each one of these things away, which will decay fastest?	76	1.5	78	1.9	74	1.9
B04	No	Where do humans interpret senses?	37	2.0	37	2.5	37	2.2
C06	No	Which animal eats only plants?	95	1.1	97	0.9	94	1.7
C08	No	What gas in the air do we need in order to live?	89	1.2	90	1.5	89	1.9
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	64	2.2	61	3.4	67	2.3
D03	No	Which of the following animals does not lay eggs?	92	0.9	92	1.2	92	1.4
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	55	1.9	55	2.8	56	2.3
F01	No	Which of the following plants is grown for food?	93	0.9	94	1.1	91	1.4
G05	No	Where does air go when a person breathes in?	84	2.0	83	3.4	84	1.9
G06	No	Shown diagram of plant, which part takes in the most water?	87	2.0	86	3.3	88	1.7
H02	No	How can washing your hands help keep you from getting sick?	90	1.2	89	1.8	92	1.4
H04	No	Which of the following will most likely affect your adult height?	50	2.0	48	3.0	52	2.5
N02	Yes	Which of the following refers only to living things?	65	2.8	69	3.8	61	4.4
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	42	3.0	42	4.1	43	4.2
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	82	2.8	81	3.1	83	3.3
N06	Yes	Where does a baby chick get its food while inside an egg?	47	2.7	47	4.0	46	3.8
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	22	2.9	22	4.5	22	3.6
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	55	3.9	54	6.7	56	4.8
O07	Yes	Which of the following animal produces milk for its young?	73	2.9	74	4.8	72	3.8
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	67	2.9	73	4.0	61	4.2
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	86	2.0	88	2.5	83	3.4
P08	Yes	Birds are different from insects in that birds have...	59	2.8	57	3.3	60	4.7
P09	Yes	Seeds develop from which part of a plant?	37	3.1	35	3.8	39	4.1
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	57	3.0	63	3.7	50	4.5
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	46	3.0	46	4.0	47	4.4
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	75	2.5	75	3.7	76	3.5
Q06	Yes	Which of the following pictures does not show an insect?	39	3.3	37	3.9	41	4.8
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	55	3.1	53	3.8	56	4.3
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	68	2.9	70	3.6	65	4.5
R06	Yes	Which of the following groups contains only animals with a backbone?	61	2.9	65	3.7	56	4.0
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	30	3.2	33	4.0	27	4.2
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	34	2.4	33	3.5	35	2.9
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	25	1.7	24	2.3	26	2.4
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	52	2.4	55	3.2	50	3.1
X02	Yes	Write down one reason why animals could not live in a world without plants.	70	2.0	67	3.3	72	2.8
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	79	2.1	78	2.8	79	2.6
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	61	2.6	57	4.5	65	2.9
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	65	2.2	63	3.6	67	2.7
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	33	2.1	32	3.0	33	2.9
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	61	2.4	62	3.7	60	3.2
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	35	2.8	37	4.2	33	3.6
Z02	Yes	Identify skin and skeletal features of various animals	63	2.3	64	2.7	61	2.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Greece SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	86	0.9	87	1.4	85	1.2
B01	No	A strong magnet will separate which of the following mixtures?	70	2.0	77	2.6	64	2.3
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	68	1.9	68	2.4	68	2.9
D01	No	Why are kettles and kitchen pans often made of copper?	66	2.2	63	3.4	69	2.4
E05	No	When you make soap bubbles, what is inside the bubbles?	40	2.5	42	4.1	39	2.7
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	69	2.0	70	2.5	69	2.6
G09	No	Which of the following pairs could together cause a rainbow?	81	1.7	82	2.2	80	2.1
H01	No	What happens to water when it boils?	89	1.1	91	1.4	88	1.7
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	32	2.6	38	4.0	27	3.9
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	31	2.8	30	4.5	32	3.8
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	42	2.8	40	3.7	44	4.1
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	52	3.3	58	4.5	47	4.4
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	32	4.7	35	8.4	29	4.1
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	52	4.1	46	7.3	57	4.1
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	50	4.2	58	6.7	42	4.2
P03	Yes	Which of the following is not used as an energy source?	34	2.7	33	4.2	35	3.9
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	32	2.6	37	3.8	27	3.4
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	25	2.9	28	4.2	21	3.7
P07	Yes	Which of the following travels fastest? (light)	29	2.8	39	3.9	21	3.6
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	50	2.8	46	3.9	54	3.7
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	50	3.1	51	3.9	48	4.0
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	29	2.7	29	3.7	28	3.9
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	56	3.1	64	3.8	47	4.4
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	17	2.1	19	3.0	15	2.6
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	55	3.2	59	4.1	51	3.4
R08	Yes	Which of the following makes its own light?	54	2.6	56	3.6	53	4.1
R09	Yes	Which of the following is an advantage of solar energy?	33	2.7	38	3.7	26	4.0
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	20	1.7	21	2.3	19	2.2
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	36	2.4	35	3.3	37	3.5
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	28	2.0	27	2.9	28	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hong Kong SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	62	1.4	70	1.3	52	1.9
A10	No	The fossils of dinosaurs can be found where?	86	0.8	87	1.0	83	1.1
B02	No	Shown diagram, where is the saltiest water found?	72	1.2	76	1.6	68	1.7
C09	No	Where are large amounts of metals like iron and aluminum found?	69	1.5	69	2.4	68	1.6
D04	No	Shown diagram of Earth, which layer is the hottest?	82	1.3	83	1.3	80	2.3
E06	No	Which of the following is hottest? (astronomical bodies)	81	1.1	83	1.3	78	1.7
E09	No	Given several recent floods, when will it flood next?	35	1.5	33	1.7	38	2.1
F02	No	Each year the Earth moves once around which of the following?	90	0.8	91	1.0	88	1.4
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	71	1.5	72	2.0	70	2.6
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	88	1.0	90	1.3	87	1.3
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	13	0.8	12	1.2	14	1.3
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	48	1.3	53	2.1	41	2.0
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	63	2.6	58	3.2	67	4.3
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	87	1.8	92	1.9	81	3.2
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	46	2.7	53	3.6	38	3.3
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	30	2.0	33	2.6	26	2.6
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	65	2.3	62	3.0	68	2.9
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	9	0.9	10	1.1	9	1.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hong Kong SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	81	0.8	79	1.2	83	1.1
C07	No	Which of the following is an example of the use of a renewable source?	55	2.1	60	2.6	49	2.4
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	77	1.6	77	1.9	77	2.0
O06	Yes	Write down one example of how computers help people do their work.	65	2.2	65	3.2	65	2.8
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	36	2.5	35	3.0	37	3.4
Q07	Yes	Which of the following statements is not an observation?	47	2.7	45	3.2	49	3.7
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	60	2.7	62	3.4	58	4.0
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	39	1.8	43	2.9	36	2.1
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	35	2.3	36	3.0	33	2.4
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	9	1.5	8	1.6	9	2.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hong Kong SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	61	1.2	59	1.8	63	1.1
B03	No	If you throw each one of these things away, which will decay fastest?	61	1.2	61	1.5	61	2.1
B04	No	Where do humans interpret senses?	80	1.1	84	1.3	74	1.5
C06	No	Which animal eats only plants?	93	1.0	94	1.0	92	1.5
C08	No	What gas in the air do we need in order to live?	74	1.3	77	1.7	72	1.9
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	86	1.1	85	1.6	87	1.3
D03	No	Which of the following animals does not lay eggs?	87	1.1	87	1.7	88	1.6
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	69	1.7	70	2.6	67	2.5
F01	No	Which of the following plants is grown for food?	95	0.7	93	0.9	96	0.9
G05	No	Where does air go when a person breathes in?	80	1.5	81	2.1	78	2.1
G06	No	Shown diagram of plant, which part takes in the most water?	81	1.3	81	1.9	81	1.8
H02	No	How can washing your hands help keep you from getting sick?	95	0.6	94	0.9	95	0.8
H04	No	Which of the following will most likely affect your adult height?	50	2.0	51	2.2	49	3.1
N02	Yes	Which of the following refers only to living things?	77	2.2	77	3.1	77	2.6
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	58	2.8	58	3.7	59	3.9
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	56	2.3	67	3.5	47	3.2
N06	Yes	Where does a baby chick get its food while inside an egg?	35	1.8	39	3.0	31	3.0
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	36	2.9	38	3.7	34	4.6
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	86	2.0	89	2.2	82	4.1
O07	Yes	Which of the following animal produces milk for its young?	81	1.7	86	2.0	76	3.1
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	97	0.7	97	1.0	97	1.0
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	97	0.6	97	1.0	98	0.9
P08	Yes	Birds are different from insects in that birds have...	41	2.5	42	3.1	40	3.7
P09	Yes	Seeds develop from which part of a plant?	62	2.7	63	3.0	61	4.3
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	82	1.9	84	2.3	80	2.7
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	74	2.6	70	3.1	80	3.4
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	87	1.7	86	2.3	89	2.4
Q06	Yes	Which of the following pictures does not show an insect?	61	3.0	65	3.8	58	4.2
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	35	2.3	34	3.5	37	3.4
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	85	1.8	85	2.8	87	2.8
R06	Yes	Which of the following groups contains only animals with a backbone?	22	2.1	26	3.1	16	2.5
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	56	2.3	56	3.7	56	3.1
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	14	1.4	16	2.0	13	1.6
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	41	2.1	38	2.7	45	2.7
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	70	2.0	71	2.1	69	2.7
X02	Yes	Write down one reason why animals could not live in a world without plants.	71	1.7	70	2.2	73	2.2
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	95	0.9	94	1.5	97	0.7
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	63	1.3	64	2.1	61	3.0
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	67	2.6	67	2.7	68	4.0
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	51	2.1	49	3.1	54	2.4
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	61	2.2	60	2.5	62	3.3
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	47	2.3	47	2.2	48	3.8
Z02	Yes	Identify skin and skeletal features of various animals	94	0.9	94	1.1	94	1.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hong Kong SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	85	0.8	86	0.9	83	1.5
B01	No	A strong magnet will separate which of the following mixtures?	68	1.4	72	2.0	65	2.0
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	75	1.3	71	1.7	78	1.7
D01	No	Why are kettles and kitchen pans often made of copper?	65	1.8	65	2.1	64	2.5
E05	No	When you make soap bubbles, what is inside the bubbles?	69	1.6	71	2.3	68	2.0
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	65	1.5	70	1.9	60	2.2
G09	No	Which of the following pairs could together cause a rainbow?	92	0.9	93	1.1	92	1.2
H01	No	What happens to water when it boils?	80	1.2	79	1.7	82	1.7
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	44	3.1	51	4.2	37	3.8
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	54	2.8	57	3.7	50	3.9
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	48	2.6	47	3.4	49	3.3
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	80	2.4	83	2.4	76	3.5
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	44	2.6	52	4.0	34	2.8
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	62	2.2	62	3.2	62	4.5
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	48	3.4	51	4.1	44	3.7
P03	Yes	Which of the following is not used as an energy source?	34	2.0	34	3.0	33	3.2
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	33	2.7	31	2.7	35	4.1
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	59	1.9	60	2.9	58	3.5
P07	Yes	Which of the following travels fastest? (light)	44	3.1	54	4.0	32	4.0
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	40	2.7	36	3.9	45	3.4
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	68	2.9	71	3.7	65	4.4
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	60	2.7	66	3.4	53	3.3
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	74	2.4	76	3.0	72	3.5
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	28	2.6	36	3.7	20	3.5
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	65	2.8	64	3.5	68	4.4
R08	Yes	Which of the following makes its own light?	45	2.1	53	2.9	35	3.4
R09	Yes	Which of the following is an advantage of solar energy?	52	2.9	59	4.2	44	3.7
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	40	2.2	36	3.3	44	2.8
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	33	2.6	33	2.9	33	3.1
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	61	1.9	61	3.0	62	3.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hungary SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	71	1.7	77	2.0	64	2.0
A10	No	The fossils of dinosaurs can be found where?	65	1.2	69	1.4	62	1.5
B02	No	Shown diagram, where is the saltiest water found?	86	1.2	89	1.5	83	1.7
C09	No	Where are large amounts of metals like iron and aluminum found?	45	1.6	51	2.1	39	2.3
D04	No	Shown diagram of Earth, which layer is the hottest?	78	1.4	79	2.2	77	1.8
E06	No	Which of the following is hottest? (astronomical bodies)	94	0.8	93	1.2	95	0.9
E09	No	Given several recent floods, when will it flood next?	50	1.8	49	2.4	50	2.3
F02	No	Each year the Earth moves once around which of the following?	88	1.2	88	1.4	87	1.8
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	62	1.7	62	2.3	62	2.3
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	84	1.3	86	1.8	81	1.7
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	26	1.4	30	2.1	23	2.2
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	36	2.0	39	2.6	33	2.6
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	49	2.7	47	3.9	50	3.6
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	78	2.3	79	3.2	77	3.6
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	67	2.5	68	3.5	67	3.8
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	33	1.9	40	2.7	26	2.4
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	69	1.9	71	2.9	66	3.0
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	35	2.0	37	3.0	32	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hungary SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	94	0.6	92	0.8	95	0.8
C07	No	Which of the following is an example of the use of a renewable source?	32	1.7	35	2.3	28	2.0
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	80	1.3	78	2.1	83	1.6
O06	Yes	Write down one example of how computers help people do their work.	62	2.9	62	4.0	62	3.9
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	19	2.2	21	3.1	17	3.3
Q07	Yes	Which of the following statements is not an observation?	44	3.1	33	3.7	55	3.9
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	35	2.5	32	3.7	38	3.7
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	52	2.1	56	3.7	49	2.6
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	23	1.6	27	2.6	20	1.9
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	26	1.8	24	2.2	29	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hungary SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	75	1.1	75	1.7	76	1.2
B03	No	If you throw each one of these things away, which will decay fastest?	56	1.5	57	2.1	55	2.3
B04	No	Where do humans interpret senses?	66	1.7	65	2.3	67	1.8
C06	No	Which animal eats only plants?	94	0.7	96	1.0	93	1.4
C08	No	What gas in the air do we need in order to live?	91	1.0	91	1.3	90	1.5
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	73	1.5	74	1.7	73	2.2
D03	No	Which of the following animals does not lay eggs?	78	1.3	78	2.0	79	2.0
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	68	1.6	70	2.3	67	2.1
F01	No	Which of the following plants is grown for food?	92	0.9	90	1.1	93	1.3
G05	No	Where does air go when a person breathes in?	92	0.9	92	1.2	91	1.3
G06	No	Shown diagram of plant, which part takes in the most water?	91	0.9	93	1.3	90	1.5
H02	No	How can washing your hands help keep you from getting sick?	83	1.1	79	1.8	88	1.4
H04	No	Which of the following will most likely affect your adult height?	45	1.6	48	2.4	43	2.0
N02	Yes	Which of the following refers only to living things?	71	2.5	66	4.1	77	2.9
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	42	3.1	45	4.0	40	4.8
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	76	2.6	75	3.7	77	3.7
N06	Yes	Where does a baby chick get its food while inside an egg?	39	3.0	40	4.0	37	3.9
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	48	2.6	46	4.1	51	3.9
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	61	2.8	62	3.7	59	4.1
O07	Yes	Which of the following animal produces milk for its young?	91	1.8	88	3.2	94	1.8
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	85	2.2	87	3.0	84	3.1
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	82	2.2	89	2.4	76	3.5
P08	Yes	Birds are different from insects in that birds have...	95	1.6	95	2.4	96	2.3
P09	Yes	Seeds develop from which part of a plant?	65	2.5	67	4.0	64	4.2
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	67	2.4	68	3.5	67	3.4
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	82	2.3	83	2.8	81	3.9
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	68	2.3	66	3.5	70	3.3
Q06	Yes	Which of the following pictures does not show an insect?	31	3.0	34	4.0	28	4.1
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	76	2.3	75	3.9	76	3.3
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	69	2.8	70	4.0	68	3.6
R06	Yes	Which of the following groups contains only animals with a backbone?	64	2.6	66	3.8	63	3.7
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	55	2.9	57	3.9	52	4.4
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	30	2.0	32	3.1	28	2.3
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	17	1.5	21	2.5	14	2.0
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	48	2.3	52	3.0	43	2.8
X02	Yes	Write down one reason why animals could not live in a world without plants.	74	2.1	72	2.6	76	2.9
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	87	1.3	84	1.9	89	1.8
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	65	2.0	64	2.5	66	3.2
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	58	2.1	60	2.8	57	2.6
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	49	2.1	50	2.6	48	3.2
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	43	1.8	40	2.8	45	2.7
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	37	1.9	37	2.7	38	2.9
Z02	Yes	Identify skin and skeletal features of various animals	74	2.0	77	2.1	72	3.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hungary SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	88	0.8	90	0.9	86	1.1
B01	No	A strong magnet will separate which of the following mixtures?	75	1.2	78	1.7	73	1.6
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	74	1.4	76	2.0	72	1.9
E05	No	When you make soap bubbles, what is inside the bubbles?	77	1.4	79	2.4	76	2.1
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	82	1.4	83	1.5	82	1.8
G09	No	Which of the following pairs could together cause a rainbow?	94	0.8	93	1.3	94	1.1
H01	No	What happens to water when it boils?	85	1.2	88	1.4	83	1.8
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	24	2.4	30	3.3	18	3.1
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	42	2.4	44	4.1	40	3.1
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	77	2.4	79	3.4	76	3.5
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	66	2.6	68	3.8	65	4.1
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	40	2.7	40	3.9	40	3.9
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	60	2.7	60	3.8	61	4.1
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	59	2.8	64	4.1	56	4.2
P03	Yes	Which of the following is not used as an energy source?	38	2.9	41	4.4	36	3.6
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	39	3.0	41	4.3	36	3.7
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	64	3.3	67	4.1	60	4.2
P07	Yes	Which of the following travels fastest? (light)	49	2.6	60	3.9	39	3.5
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	76	2.2	79	3.2	73	3.5
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	77	2.3	82	3.2	72	3.9
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	58	2.9	63	4.1	54	4.0
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	49	2.8	52	3.8	47	4.5
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	26	2.7	35	3.8	18	3.0
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	29	2.7	27	3.8	31	3.6
R08	Yes	Which of the following makes its own light?	72	2.5	74	3.5	70	3.1
R09	Yes	Which of the following is an advantage of solar energy?	43	2.8	49	4.3	37	3.6
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	29	1.9	29	2.4	29	2.6
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	39	2.0	42	2.6	36	2.6
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	31	2.3	33	3.0	28	3.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iceland SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	66	1.6	69	2.2	63	1.9
A10	No	The fossils of dinosaurs can be found where?	77	1.2	83	1.4	71	1.7
B02	No	Shown diagram, where is the saltiest water found?	82	1.2	86	1.6	78	2.2
C09	No	Where are large amounts of metals like iron and aluminum found?	46	1.8	47	2.6	44	2.7
D04	No	Shown diagram of Earth, which layer is the hottest?	76	1.5	80	1.7	72	2.6
E06	No	Which of the following is hottest? (astronomical bodies)	95	1.0	96	1.3	95	1.2
E09	No	Given several recent floods, when will it flood next?	42	1.9	41	2.9	43	3.0
F02	No	Each year the Earth moves once around which of the following?	71	2.3	72	2.9	69	3.2
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	58	2.5	60	3.1	56	3.1
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	64	2.4	68	3.0	60	2.6
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	18	1.6	17	2.0	20	2.3
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	54	2.2	53	2.9	55	3.2
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	36	3.7	44	5.4	28	4.3
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	64	2.8	69	5.6	60	4.2
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	50	3.6	51	5.7	50	5.5
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	38	2.4	43	4.4	32	3.1
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	38	2.5	38	3.8	38	3.1
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	12	1.7	14	3.0	11	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iceland SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	86	1.1	87	1.3	84	1.5
C07	No	Which of the following is an example of the use of a renewable source?	39	2.2	41	3.4	38	3.2
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	69	2.1	69	3.2	68	2.5
O06	Yes	Write down one example of how computers help people do their work.	61	3.7	60	7.2	61	4.9
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	40	3.9	41	6.6	39	3.9
Q07	Yes	Which of the following statements is not an observation?	27	4.2	30	5.5	24	5.0
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	48	4.0	52	5.9	44	5.1
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	50	2.7	52	3.8	48	4.4
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	32	2.7	34	3.7	30	3.7
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	20	2.2	19	3.3	21	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iceland SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	65	1.5	66	1.8	64	1.9
B04	No	Where do humans interpret senses?	61	1.7	65	2.3	57	2.4
C06	No	Which animal eats only plants?	88	1.6	89	1.7	88	2.3
C08	No	What gas in the air do we need in order to live?	89	1.4	88	1.9	89	1.7
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	70	1.9	73	2.6	68	2.4
D03	No	Which of the following animals does not lay eggs?	91	1.2	93	1.2	89	1.8
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	65	2.0	67	3.0	63	2.7
F01	No	Which of the following plants is grown for food?	80	1.8	79	2.5	80	3.0
G05	No	Where does air go when a person breathes in?	86	1.5	86	2.4	86	2.0
G06	No	Shown diagram of plant, which part takes in the most water?	85	1.6	84	2.7	86	2.5
H02	No	How can washing your hands help keep you from getting sick?	83	1.7	85	2.3	81	2.3
H04	No	Which of the following will most likely affect your adult height?	45	2.2	44	3.2	46	3.4
N02	Yes	Which of the following refers only to living things?	68	4.0	70	5.1	67	6.1
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	57	3.0	64	4.9	51	4.9
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	81	2.5	77	4.0	85	3.3
N06	Yes	Where does a baby chick get its food while inside an egg?	48	4.0	51	5.6	44	5.8
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	43	3.8	37	5.7	47	4.5
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	60	3.3	56	4.6	62	4.6
O07	Yes	Which of the following animal produces milk for its young?	56	2.9	52	4.4	59	3.5
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	71	3.1	70	3.7	72	4.6
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	89	2.3	87	3.5	91	3.0
P08	Yes	Birds are different from insects in that birds have...	55	4.3	47	5.6	62	4.5
P09	Yes	Seeds develop from which part of a plant?	29	3.9	27	4.4	32	6.4
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	49	3.2	56	4.7	42	4.9
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	65	3.5	62	4.2	69	4.7
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	71	2.9	68	3.7	74	4.5
Q06	Yes	Which of the following pictures does not show an insect?	20	2.9	20	4.0	20	3.6
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	54	3.9	51	5.0	59	5.2
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	74	2.6	74	4.6	73	4.1
R06	Yes	Which of the following groups contains only animals with a backbone?	40	3.3	36	5.2	44	4.7
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	53	3.7	60	5.0	45	5.3
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	33	2.8	38	3.3	28	4.3
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	13	1.7	14	2.5	11	2.2
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	38	2.2	41	2.9	35	3.3
X02	Yes	Write down one reason why animals could not live in a world without plants.	70	2.1	62	3.8	78	3.0
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	71	2.7	70	3.5	72	3.1
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	53	2.7	56	3.3	50	3.9
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	64	3.1	65	4.1	63	3.9
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	38	2.6	40	3.1	37	3.4
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	48	2.7	46	4.0	50	3.7
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	36	2.6	38	3.7	34	3.0
Z02	Yes	Identify skin and skeletal features of various animals	40	2.6	43	4.0	36	4.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iceland SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	82	1.0	81	1.4	83	1.4
B01	No	A strong magnet will separate which of the following mixtures?	73	1.6	79	2.5	68	1.8
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	65	2.2	64	3.1	66	3.0
D01	No	Why are kettles and kitchen pans often made of copper?	72	1.8	70	2.6	74	2.6
E05	No	When you make soap bubbles, what is inside the bubbles?	59	2.5	58	4.0	59	2.9
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	60	2.1	60	2.8	60	2.6
G09	No	Which of the following pairs could together cause a rainbow?	86	1.5	86	2.3	86	2.0
H01	No	What happens to water when it boils?	76	1.9	84	2.1	70	2.8
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	29	3.2	39	4.6	20	4.2
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	70	2.6	67	4.4	72	4.2
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	35	3.1	33	3.2	37	5.6
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	70	3.7	75	4.9	64	4.5
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	45	4.3	50	5.6	40	5.5
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	51	3.7	46	4.9	54	5.0
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	41	3.9	38	5.2	43	5.3
P03	Yes	Which of the following is not used as an energy source?	37	3.6	39	5.8	34	4.2
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	36	3.1	38	5.1	33	4.2
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	33	3.4	33	4.9	33	4.5
P07	Yes	Which of the following travels fastest? (light)	37	3.8	57	5.0	17	3.6
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	39	3.5	38	3.7	40	5.3
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	62	3.8	60	5.3	64	4.4
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	50	4.0	51	5.3	49	4.6
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	48	3.4	56	5.2	38	4.2
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	17	2.2	23	3.4	11	3.1
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	44	3.6	51	5.5	35	5.0
R08	Yes	Which of the following makes its own light?	56	3.9	62	5.4	49	4.6
R09	Yes	Which of the following is an advantage of solar energy?	51	3.5	52	4.4	49	6.2
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	8	1.4	5	1.4	10	2.1
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	22	2.6	22	3.5	23	3.7
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	37	2.6	39	3.1	35	3.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iran, Islamic Rep. SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	33	1.7	39	2.7	27	2.3
A10	No	The fossils of dinosaurs can be found where?	34	1.6	38	2.0	31	2.3
B02	No	Shown diagram, where is the saltiest water found?	36	1.6	40	2.5	33	2.0
C09	No	Where are large amounts of metals like iron and aluminum found?	44	2.3	48	2.8	40	3.4
D04	No	Shown diagram of Earth, which layer is the hottest?	55	1.8	56	2.7	53	2.6
E06	No	Which of the following is hottest? (astronomical bodies)	75	1.6	74	2.1	76	2.2
E09	No	Given several recent floods, when will it flood next?	15	1.4	14	1.7	16	1.9
F02	No	Each year the Earth moves once around which of the following?	64	1.7	69	2.4	59	2.1
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	35	1.6	34	2.2	36	2.5
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	53	2.0	60	2.6	44	2.4
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	27	1.3	23	1.6	32	2.0
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	13	1.4	14	2.3	12	1.4
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	31	2.6	32	2.8	29	4.5
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	56	2.8	60	4.2	52	3.8
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	42	3.1	46	4.6	39	3.9
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	12	1.5	16	2.1	8	1.7
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	40	2.1	39	3.4	42	2.2
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	10	1.5	10	2.1	9	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iran, Islamic Rep. SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	79	1.2	77	1.7	81	1.4
C07	No	Which of the following is an example of the use of a renewable source?	24	1.4	26	1.8	23	2.2
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	34	1.9	33	2.5	35	2.9
O06	Yes	Write down one example of how computers help people do their work.	27	2.8	25	3.4	30	4.1
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	14	2.1	12	2.4	17	3.8
Q07	Yes	Which of the following statements is not an observation?	21	2.3	22	3.7	21	2.8
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	24	2.3	23	2.7	26	3.9
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	18	1.6	19	2.1	16	2.5
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	8	1.2	8	1.5	7	2.0
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	7	1.0	6	1.4	8	1.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iran, Islamic Rep. SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	55	1.4	56	2.3	54	1.8
B03	No	If you throw each one of these things away, which will decay fastest?	55	1.4	54	2.1	57	2.2
B04	No	Where do humans interpret senses?	39	1.8	44	2.1	34	2.3
C06	No	Which animal eats only plants?	87	1.1	88	1.6	86	1.7
C08	No	What gas in the air do we need in order to live?	68	2.0	69	2.7	68	2.6
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	67	1.6	65	2.6	69	2.3
D03	No	Which of the following animals does not lay eggs?	77	1.5	76	2.1	78	1.9
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	47	2.0	48	3.2	47	2.5
F01	No	Which of the following plants is grown for food?	87	1.4	86	2.0	89	1.6
G05	No	Where does air go when a person breathes in?	66	1.7	66	2.5	67	2.5
G06	No	Shown diagram of plant, which part takes in the most water?	79	1.3	77	1.8	80	1.9
H02	No	How can washing your hands help keep you from getting sick?	73	1.9	71	2.8	76	2.8
H04	No	Which of the following will most likely affect your adult height?	36	2.0	39	2.4	32	2.9
N02	Yes	Which of the following refers only to living things?	47	3.0	46	3.9	49	4.1
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	17	2.8	19	4.0	15	3.6
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	57	3.0	66	4.5	46	4.3
N06	Yes	Where does a baby chick get its food while inside an egg?	33	3.0	36	4.3	31	3.8
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	23	2.1	21	3.1	24	2.7
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	33	3.1	37	4.7	30	3.7
O07	Yes	Which of the following animal produces milk for its young?	83	2.4	86	3.3	80	3.1
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	69	2.7	69	4.3	69	3.5
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	56	2.8	55	4.1	56	4.1
P08	Yes	Birds are different from insects in that birds have...	29	2.7	29	3.5	29	3.7
P09	Yes	Seeds develop from which part of a plant?	23	2.7	23	4.0	23	3.5
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	19	2.5	26	3.8	12	2.3
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	39	2.4	41	3.8	37	3.2
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	71	2.8	66	3.8	76	3.6
Q06	Yes	Which of the following pictures does not show an insect?	22	2.3	20	3.0	24	3.5
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	48	2.6	43	3.5	53	4.3
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	28	2.4	30	2.8	26	4.0
R06	Yes	Which of the following groups contains only animals with a backbone?	31	2.5	31	3.7	32	3.6
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	28	2.5	29	3.8	27	3.4
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	23	2.0	23	2.2	23	3.3
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	15	1.9	15	2.7	14	2.9
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	33	2.8	34	4.0	31	4.1
X02	Yes	Write down one reason why animals could not live in a world without plants.	60	2.0	59	3.1	61	2.7
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	16	1.5	16	1.8	17	2.5
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	36	2.0	35	2.8	37	2.9
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	17	1.8	16	2.4	18	2.6
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	10	1.3	10	1.7	11	2.0
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	35	2.3	36	3.5	35	2.5
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	25	2.2	24	2.9	25	3.2
Z02	Yes	Identify skin and skeletal features of various animals	27	1.8	30	2.4	25	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iran, Islamic Rep. SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	76	1.1	76	1.4	76	1.4
B01	No	A strong magnet will separate which of the following mixtures?	74	1.5	76	2.2	72	1.9
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	47	2.2	44	3.2	51	3.0
D01	No	Why are kettles and kitchen pans often made of copper?	51	2.0	46	3.1	56	2.7
E05	No	When you make soap bubbles, what is inside the bubbles?	50	2.2	47	3.6	53	3.0
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	43	2.1	43	3.0	42	2.6
G09	No	Which of the following pairs could together cause a rainbow?	64	2.1	63	3.2	66	2.8
H01	No	What happens to water when it boils?	81	1.6	82	2.5	80	1.8
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	20	2.6	21	3.4	19	3.9
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	47	3.0	53	4.5	40	4.8
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	36	2.6	37	4.1	33	3.4
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	42	3.2	50	4.3	34	4.3
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	22	2.8	25	3.4	20	4.1
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	44	2.9	37	3.2	50	4.5
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	73	2.6	71	4.0	75	3.4
P03	Yes	Which of the following is not used as an energy source?	32	2.8	35	3.8	30	4.1
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	27	2.8	30	4.5	24	3.5
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	32	3.3	37	4.6	28	4.5
P07	Yes	Which of the following travels fastest? (light)	34	2.9	41	3.9	25	3.6
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	37	2.5	42	3.6	32	3.7
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	33	3.3	39	4.5	27	5.0
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	17	2.7	17	4.1	17	3.5
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	34	3.1	39	3.9	29	4.2
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	10	1.6	10	2.3	9	2.1
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	25	2.6	25	3.4	24	3.9
R08	Yes	Which of the following makes its own light?	39	3.2	41	4.2	36	4.2
R09	Yes	Which of the following is an advantage of solar energy?	31	2.7	28	3.7	34	3.9
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	5	0.9	5	1.5	4	1.1
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	25	2.0	27	3.2	22	1.9
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	4	1.0	5	1.7	4	0.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Ireland SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	77	1.2	79	1.4	76	1.8
A10	No	The fossils of dinosaurs can be found where?	81	1.1	82	1.3	80	1.6
B02	No	Shown diagram, where is the saltiest water found?	73	1.6	74	2.0	72	2.2
C09	No	Where are large amounts of metals like iron and aluminum found?	50	2.0	55	2.8	45	2.7
D04	No	Shown diagram of Earth, which layer is the hottest?	79	1.1	81	1.5	78	1.8
E06	No	Which of the following is hottest? (astronomical bodies)	96	0.7	96	0.9	96	1.1
E09	No	Given several recent floods, when will it flood next?	42	1.7	36	2.2	49	2.3
F02	No	Each year the Earth moves once around which of the following?	63	1.9	66	2.3	61	2.9
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	72	1.4	74	2.0	70	2.1
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	75	1.6	80	1.7	71	2.5
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	47	2.3	49	2.5	44	3.6
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	43	1.7	46	2.4	40	2.4
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	38	2.5	43	4.1	34	3.1
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	69	2.3	72	3.3	66	3.8
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	41	2.4	44	3.3	37	3.5
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	33	1.9	38	2.6	28	2.9
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	70	2.1	70	3.0	70	2.6
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	36	2.1	32	3.1	39	2.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Ireland SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	89	0.7	88	0.9	91	0.8
C07	No	Which of the following is an example of the use of a renewable source?	53	2.0	55	2.7	51	3.0
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	85	1.1	82	1.6	87	1.5
O06	Yes	Write down one example of how computers help people do their work.	77	2.5	77	3.1	76	3.6
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	29	2.4	29	3.9	29	3.3
Q07	Yes	Which of the following statements is not an observation?	51	2.8	48	4.1	53	4.1
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	45	2.3	44	3.1	46	3.2
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	46	2.0	53	3.1	40	2.7
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	33	1.8	31	2.4	35	2.7
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	30	1.8	30	2.7	30	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Ireland SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	78	0.9	77	1.3	79	1.3
B03	No	If you throw each one of these things away, which will decay fastest?	67	1.8	66	2.2	68	2.4
B04	No	Where do humans interpret senses?	65	1.5	66	2.0	63	2.1
C06	No	Which animal eats only plants?	92	0.9	93	1.3	91	1.1
C08	No	What gas in the air do we need in order to live?	84	1.3	85	1.9	83	1.6
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	65	1.7	60	2.5	70	2.2
D03	No	Which of the following animals does not lay eggs?	97	0.6	96	1.0	97	0.7
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	56	1.9	55	2.2	57	3.1
F01	No	Which of the following plants is grown for food?	91	1.3	90	1.5	92	1.7
G05	No	Where does air go when a person breathes in?	88	1.2	89	1.6	87	1.4
G06	No	Shown diagram of plant, which part takes in the most water?	88	1.0	89	1.3	88	1.4
H02	No	How can washing your hands help keep you from getting sick?	92	0.9	90	1.4	93	1.1
H04	No	Which of the following will most likely affect your adult height?	35	1.8	34	2.0	37	2.7
N02	Yes	Which of the following refers only to living things?	85	1.7	85	2.3	86	2.7
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	27	2.2	29	3.6	25	2.9
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	76	2.6	73	3.9	79	3.6
N06	Yes	Where does a baby chick get its food while inside an egg?	37	2.8	35	3.5	39	4.2
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	43	3.0	45	3.5	42	4.8
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	64	2.4	60	3.5	69	3.7
O07	Yes	Which of the following animal produces milk for its young?	69	2.8	72	3.6	66	3.7
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	94	1.3	92	2.1	96	1.5
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	89	2.0	90	2.5	87	2.7
P08	Yes	Birds are different from insects in that birds have...	63	2.7	58	3.9	68	3.5
P09	Yes	Seeds develop from which part of a plant?	22	2.2	26	3.2	18	3.2
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	65	2.5	67	3.8	63	3.2
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	62	2.5	56	3.6	67	3.5
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	72	2.8	73	3.5	72	3.7
Q06	Yes	Which of the following pictures does not show an insect?	40	2.8	45	4.0	36	3.9
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	72	2.6	68	4.3	76	3.3
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	90	1.7	85	2.7	94	1.8
R06	Yes	Which of the following groups contains only animals with a backbone?	47	3.1	52	4.0	43	4.2
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	54	2.9	54	4.5	54	3.5
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	49	2.2	48	2.9	50	3.4
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	22	1.8	25	2.5	20	2.4
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	49	2.4	54	3.2	45	3.5
X02	Yes	Write down one reason why animals could not live in a world without plants.	80	1.5	76	2.2	84	1.8
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	89	1.2	86	1.8	92	1.4
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	61	2.0	61	3.0	61	2.4
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	73	2.0	72	2.4	74	2.6
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	46	2.4	45	2.7	46	3.5
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	67	1.7	66	2.3	67	2.8
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	53	2.0	52	2.4	55	3.3
Z02	Yes	Identify skin and skeletal features of various animals	60	2.2	60	3.1	60	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Ireland SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	86	0.8	88	1.0	85	1.0
B01	No	A strong magnet will separate which of the following mixtures?	78	1.3	80	1.8	75	1.9
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	75	1.5	70	2.1	79	2.2
D01	No	Why are kettles and kitchen pans often made of copper?	62	1.6	59	2.4	65	2.0
E05	No	When you make soap bubbles, what is inside the bubbles?	70	1.6	72	2.4	68	2.2
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	77	1.5	76	2.2	78	1.8
G09	No	Which of the following pairs could together cause a rainbow?	95	0.8	93	1.3	97	0.9
H01	No	What happens to water when it boils?	70	1.9	72	2.4	68	2.4
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	34	3.2	39	4.0	30	4.3
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	52	2.7	51	3.5	53	3.7
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	78	2.4	75	3.6	81	2.9
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	61	2.5	67	4.3	55	3.6
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	39	2.6	44	3.4	33	3.9
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	55	3.0	54	4.0	55	4.7
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	42	3.4	41	4.1	43	5.0
P03	Yes	Which of the following is not used as an energy source?	40	2.5	41	3.7	38	3.7
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	30	2.5	29	3.7	32	3.2
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	50	3.1	58	3.6	42	4.3
P07	Yes	Which of the following travels fastest? (light)	39	2.7	48	3.9	30	4.3
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	41	2.9	40	4.2	42	4.1
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	62	3.1	65	4.4	59	4.3
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	38	2.7	39	4.1	37	3.8
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	59	2.6	58	3.2	59	3.7
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	19	2.3	26	3.8	14	2.8
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	66	2.4	65	3.5	67	3.7
R08	Yes	Which of the following makes its own light?	47	2.7	48	4.2	45	3.6
R09	Yes	Which of the following is an advantage of solar energy?	47	2.6	45	3.8	48	3.4
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	43	2.1	40	2.4	47	3.2
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	57	2.4	56	2.9	59	3.5
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	39	2.0	48	2.7	31	3.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Israel SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	62	1.7	66	2.5	59	2.0
A10	No	The fossils of dinosaurs can be found where?	67	1.5	70	1.9	65	1.9
B02	No	Shown diagram, where is the saltiest water found?	59	2.0	63	2.7	55	2.7
C09	No	Where are large amounts of metals like iron and aluminum found?	50	2.1	55	2.5	45	3.2
D04	No	Shown diagram of Earth, which layer is the hottest?	65	1.7	64	2.8	66	2.5
E06	No	Which of the following is hottest? (astronomical bodies)	93	1.0	93	1.4	93	1.1
E09	No	Given several recent floods, when will it flood next?	44	1.8	45	2.5	43	2.4
F02	No	Each year the Earth moves once around which of the following?	62	2.2	63	2.8	61	2.8
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	56	1.9	53	2.6	59	2.7
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	56	1.8	58	2.7	57	2.8
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	16	1.4	14	1.8	17	2.2
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	41	2.1	44	3.1	41	2.5
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	44	2.8	48	4.2	40	4.0
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	52	3.0	56	4.8	51	3.7
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	46	3.7	43	5.1	50	5.4
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	25	2.2	31	3.1	22	2.4
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	59	2.6	59	3.5	61	3.5
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	26	2.1	26	2.7	25	3.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Israel SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	82	1.1	81	1.5	84	1.4
C07	No	Which of the following is an example of the use of a renewable source?	45	1.8	50	2.7	43	2.4
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	76	1.7	73	2.9	80	2.0
O06	Yes	Write down one example of how computers help people do their work.	72	2.8	70	4.9	80	3.0
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	26	2.4	29	3.1	23	4.0
Q07	Yes	Which of the following statements is not an observation?	40	3.6	41	4.3	41	5.5
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	59	3.2	58	4.6	62	4.0
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	38	3.0	44	3.7	33	3.8
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	28	2.3	31	3.5	25	3.0
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	36	2.3	36	3.4	38	3.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Israel SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	77	1.2	75	1.8	79	1.5
B03	No	If you throw each one of these things away, which will decay fastest?	72	2.0	72	2.4	74	2.5
B04	No	Where do humans interpret senses?	38	1.7	40	2.1	38	2.5
C06	No	Which animal eats only plants?	92	0.9	92	1.2	93	1.2
C08	No	What gas in the air do we need in order to live?	75	1.6	77	2.2	76	2.2
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	72	1.8	71	1.9	74	2.4
D03	No	Which of the following animals does not lay eggs?	80	1.5	82	2.1	78	2.1
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	64	2.2	66	3.1	63	2.5
F01	No	Which of the following plants is grown for food?	87	1.4	84	2.1	89	1.7
G05	No	Where does air go when a person breathes in?	82	1.4	82	1.8	83	2.0
G06	No	Shown diagram of plant, which part takes in the most water?	88	1.5	89	1.7	88	1.9
H02	No	How can washing your hands help keep you from getting sick?	86	1.4	85	1.9	88	1.9
H04	No	Which of the following will most likely affect your adult height?	40	1.9	40	2.6	40	2.4
N02	Yes	Which of the following refers only to living things?	78	2.6	77	3.7	80	3.6
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	44	3.6	42	4.4	45	5.1
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	73	3.4	72	5.0	75	4.4
N06	Yes	Where does a baby chick get its food while inside an egg?	29	3.1	33	4.3	26	4.3
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	53	2.9	48	3.9	54	4.4
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	64	3.1	64	4.4	63	4.7
O07	Yes	Which of the following animal produces milk for its young?	63	2.6	64	4.4	63	3.4
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	81	2.6	80	4.0	83	3.6
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	80	2.0	81	3.4	79	3.5
P08	Yes	Birds are different from insects in that birds have...	41	2.8	46	3.9	36	4.4
P09	Yes	Seeds develop from which part of a plant?	45	3.6	44	4.8	46	4.8
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	51	3.3	51	5.0	49	4.8
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	72	3.5	71	4.2	72	5.5
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	69	2.8	67	4.0	71	4.3
Q06	Yes	Which of the following pictures does not show an insect?	21	3.2	24	4.6	18	3.9
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	57	3.0	57	3.7	57	5.5
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	83	2.6	79	3.5	87	3.0
R06	Yes	Which of the following groups contains only animals with a backbone?	19	2.5	24	4.1	16	3.5
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	60	3.8	62	5.4	54	4.7
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	37	2.6	40	3.9	34	3.1
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	36	2.1	39	3.5	34	3.0
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	52	2.8	52	4.2	55	3.1
X02	Yes	Write down one reason why animals could not live in a world without plants.	84	1.6	85	1.9	87	2.0
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	79	2.0	81	2.8	78	3.1
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	43	2.4	42	3.2	44	3.6
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	66	2.8	68	3.5	68	3.8
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	42	2.3	44	4.1	42	2.8
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	66	2.7	69	3.1	67	3.1
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	52	3.0	56	4.1	52	4.0
Z02	Yes	Identify skin and skeletal features of various animals	45	2.3	50	2.6	38	3.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Israel SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	86	1.0	88	1.2	86	1.3
B01	No	A strong magnet will separate which of the following mixtures?	77	1.6	78	2.2	76	2.3
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	66	2.1	66	2.8	68	2.8
D01	No	Why are kettles and kitchen pans often made of copper?	52	2.1	53	2.8	53	2.3
E05	No	When you make soap bubbles, what is inside the bubbles?	64	2.1	64	2.9	67	2.6
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	82	1.5	82	2.4	84	2.0
G09	No	Which of the following pairs could together cause a rainbow?	86	1.2	85	1.6	89	1.7
H01	No	What happens to water when it boils?	93	1.0	93	1.5	94	1.5
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	38	2.7	41	4.4	32	4.2
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	52	3.7	55	4.8	50	4.7
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	55	2.6	52	3.9	57	5.3
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	49	3.1	46	4.1	52	4.3
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	35	3.0	36	4.1	33	4.5
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	58	2.5	62	3.5	54	4.5
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	64	3.1	68	4.8	64	4.8
P03	Yes	Which of the following is not used as an energy source?	36	2.8	39	3.9	31	3.9
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	31	2.8	34	4.1	29	4.6
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	38	2.9	43	4.6	36	4.1
P07	Yes	Which of the following travels fastest? (light)	43	2.6	58	4.4	28	4.2
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	49	3.3	48	5.0	46	4.0
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	60	3.2	65	4.6	53	5.1
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	37	2.9	34	4.6	41	4.7
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	47	3.9	49	4.0	43	6.3
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	13	2.2	14	3.6	13	3.0
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	64	2.8	61	4.7	65	4.3
R08	Yes	Which of the following makes its own light?	63	3.2	52	4.8	72	4.3
R09	Yes	Which of the following is an advantage of solar energy?	55	3.5	49	4.2	59	5.6
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	32	2.3	30	2.8	35	3.2
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	56	3.1	54	3.8	60	4.1
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	28	2.5	32	3.6	24	3.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Japan SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	64	0.9	69	1.2	58	1.3
A10	No	The fossils of dinosaurs can be found where?	86	0.6	89	0.8	83	1.0
B02	No	Shown diagram, where is the saltiest water found?	93	0.5	93	0.7	93	0.7
C09	No	Where are large amounts of metals like iron and aluminum found?	76	1.1	76	1.6	77	1.7
D04	No	Shown diagram of Earth, which layer is the hottest?	84	0.9	90	1.1	79	1.3
E06	No	Which of the following is hottest? (astronomical bodies)	92	0.6	95	0.7	90	1.1
E09	No	Given several recent floods, when will it flood next?	66	1.4	63	1.8	69	1.7
F02	No	Each year the Earth moves once around which of the following?	63	1.3	68	1.8	57	2.0
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	81	1.2	80	1.4	83	1.5
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	86	1.0	88	1.3	83	1.3
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	24	1.2	27	1.7	22	1.5
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	50	1.5	50	1.8	49	2.0
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	69	2.0	68	3.0	70	3.0
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	58	2.3	62	3.0	55	3.2
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	73	1.9	74	2.8	72	2.9
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	43	1.6	48	2.2	39	2.2
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	75	1.5	73	2.2	76	1.8
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	12	1.1	12	1.6	12	1.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Japan SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	84	0.6	82	0.7	86	0.9
C07	No	Which of the following is an example of the use of a renewable source?	68	1.4	68	1.7	68	1.8
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	86	1.0	87	1.2	86	1.3
O06	Yes	Write down one example of how computers help people do their work.	48	2.1	48	3.1	48	3.0
Q07	Yes	Which of the following statements is not an observation?	56	2.2	52	2.8	60	3.6
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	59	1.8	58	2.6	60	2.6
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	57	1.7	61	2.0	52	2.2
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	44	1.6	46	2.4	42	2.0
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	53	1.7	50	2.3	56	2.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Japan SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	78	0.8	78	1.0	79	1.0
B03	No	If you throw each one of these things away, which will decay fastest?	95	0.5	95	0.7	94	0.7
B04	No	Where do humans interpret senses?	44	1.2	45	1.5	43	1.6
C06	No	Which animal eats only plants?	85	1.1	87	1.3	83	1.5
C08	No	What gas in the air do we need in order to live?	75	1.2	75	1.7	75	1.5
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	92	0.8	91	1.2	93	0.9
D03	No	Which of the following animals does not lay eggs?	95	0.5	94	0.8	95	0.6
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	93	0.8	91	1.2	94	1.0
F01	No	Which of the following plants is grown for food?	85	0.9	84	1.4	87	1.2
G05	No	Where does air go when a person breathes in?	61	1.4	66	1.8	56	1.9
G06	No	Shown diagram of plant, which part takes in the most water?	90	0.8	90	1.1	90	1.1
H02	No	How can washing your hands help keep you from getting sick?	98	0.3	98	0.5	99	0.4
H04	No	Which of the following will most likely affect your adult height?	28	1.2	29	1.6	27	1.6
N02	Yes	Which of the following refers only to living things?	94	0.9	93	1.5	95	1.5
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	74	2.0	76	2.7	72	3.2
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	71	2.2	74	2.8	69	3.1
N06	Yes	Where does a baby chick get its food while inside an egg?	67	1.9	62	2.6	72	2.5
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	37	2.0	34	2.6	41	3.4
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	92	1.2	88	2.1	97	1.1
O07	Yes	Which of the following animal produces milk for its young?	94	1.1	92	1.8	96	1.1
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	95	0.9	96	1.0	94	1.4
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	94	1.0	97	1.0	92	1.7
P08	Yes	Birds are different from insects in that birds have...	77	1.9	77	2.7	78	2.9
P09	Yes	Seeds develop from which part of a plant?	68	2.1	67	2.8	70	3.0
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	92	1.1	93	1.5	92	1.5
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	64	1.7	65	2.5	63	3.0
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	73	2.2	68	2.8	78	2.8
Q06	Yes	Which of the following pictures does not show an insect?	77	1.9	79	2.4	76	3.0
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	22	1.9	22	2.8	21	2.6
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	61	2.3	59	2.9	63	3.4
R06	Yes	Which of the following groups contains only animals with a backbone?	47	1.9	51	3.0	43	2.9
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	79	2.1	79	2.7	80	2.4
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	39	1.8	45	2.4	33	2.2
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	37	1.5	39	2.4	35	2.2
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	71	1.4	74	1.8	69	2.0
X02	Yes	Write down one reason why animals could not live in a world without plants.	91	0.9	92	1.3	91	1.2
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	97	0.5	96	0.8	97	0.7
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	88	1.1	87	1.5	89	1.4
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	90	1.1	90	1.3	90	1.4
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	22	1.3	24	1.9	20	1.6
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	92	1.0	92	1.3	92	1.3
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	31	1.4	35	1.8	26	2.1
Z02	Yes	Identify skin and skeletal features of various animals	83	1.1	84	1.7	81	1.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Japan SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	96	0.3	96	0.5	95	0.5
B01	No	A strong magnet will separate which of the following mixtures?	84	1.0	85	1.2	84	1.2
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	76	1.3	73	1.5	79	1.8
D01	No	Why are kettles and kitchen pans often made of copper?	82	1.0	83	1.3	82	1.3
E05	No	When you make soap bubbles, what is inside the bubbles?	83	1.0	84	1.2	82	1.3
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	73	1.3	77	1.7	68	1.7
G09	No	Which of the following pairs could together cause a rainbow?	88	0.8	88	1.1	89	1.1
H01	No	What happens to water when it boils?	94	0.7	95	0.9	94	0.9
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	37	2.0	40	3.1	33	3.2
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	63	2.4	64	3.0	62	3.4
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	42	1.9	40	3.0	44	2.7
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	87	1.6	84	2.4	89	2.0
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	63	2.0	59	3.1	67	2.8
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	59	2.1	59	2.8	58	3.4
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	89	1.2	87	1.9	92	1.6
P03	Yes	Which of the following is not used as an energy source?	46	2.5	51	3.1	41	3.4
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	58	2.4	58	3.2	59	3.3
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	83	1.6	82	2.3	83	2.0
P07	Yes	Which of the following travels fastest? (light)	58	2.4	72	3.1	45	3.0
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	76	1.9	76	2.2	75	2.8
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	48	2.4	54	3.2	41	3.7
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	62	2.2	63	3.0	61	2.9
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	60	2.2	62	2.7	58	3.2
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	27	2.1	36	3.1	19	2.5
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	86	1.4	85	2.1	86	2.1
R08	Yes	Which of the following makes its own light?	31	2.2	40	3.4	22	2.7
R09	Yes	Which of the following is an advantage of solar energy?	80	1.7	76	2.3	84	2.1
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	72	1.4	69	2.2	75	2.0
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	55	1.7	53	2.2	57	2.0
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	70	1.6	72	2.0	67	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Korea SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	77	0.9	82	1.0	72	1.4
A10	No	The fossils of dinosaurs can be found where?	93	0.5	94	0.6	93	0.7
B02	No	Shown diagram, where is the saltiest water found?	93	0.8	94	1.0	91	1.2
C09	No	Where are large amounts of metals like iron and aluminum found?	88	1.0	87	1.3	89	1.5
D04	No	Shown diagram of Earth, which layer is the hottest?	84	1.3	86	1.7	81	1.8
E06	No	Which of the following is hottest? (astronomical bodies)	96	0.6	98	0.6	94	1.0
E09	No	Given several recent floods, when will it flood next?	61	1.5	59	1.9	63	2.1
F02	No	Each year the Earth moves once around which of the following?	69	1.4	72	2.0	65	1.9
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	82	1.2	83	1.5	81	1.9
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	82	1.2	85	1.6	80	1.7
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	26	1.6	29	2.2	22	2.0
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	66	1.7	71	2.3	61	2.2
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	56	2.3	63	3.6	49	3.6
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	76	2.3	76	2.9	76	3.3
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	70	2.6	70	3.3	70	3.8
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	46	2.0	52	2.6	39	2.8
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	91	0.9	91	1.4	91	1.7
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	32	2.3	30	3.1	34	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Korea SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	95	0.5	95	0.6	95	0.6
C07	No	Which of the following is an example of the use of a renewable source?	51	1.6	55	2.2	47	2.5
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	86	1.3	85	1.6	86	1.6
O06	Yes	Write down one example of how computers help people do their work.	79	2.2	75	3.3	82	2.8
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	66	2.7	64	4.0	68	3.9
Q07	Yes	Which of the following statements is not an observation?	59	3.0	53	3.9	65	3.7
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	61	2.9	55	4.3	66	3.5
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	67	2.2	72	2.9	62	2.7
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	49	2.2	50	2.5	48	3.2
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	64	2.3	62	2.8	66	3.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Korea SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	70	1.1	68	1.4	73	1.4
B03	No	If you throw each one of these things away, which will decay fastest?	93	0.7	92	1.0	94	0.9
B04	No	Where do humans interpret senses?	40	1.3	44	2.1	35	1.7
C06	No	Which animal eats only plants?	98	0.4	99	0.4	98	0.6
C08	No	What gas in the air do we need in order to live?	82	1.1	85	1.5	80	1.6
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	88	1.1	85	1.5	90	1.4
D03	No	Which of the following animals does not lay eggs?	95	0.7	96	0.8	94	1.1
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	82	1.0	82	1.6	81	1.5
F01	No	Which of the following plants is grown for food?	94	0.8	94	1.1	94	1.1
G05	No	Where does air go when a person breathes in?	63	1.3	65	2.0	61	2.2
G06	No	Shown diagram of plant, which part takes in the most water?	92	0.8	95	1.1	90	1.3
H02	No	How can washing your hands help keep you from getting sick?	98	0.4	98	0.6	98	0.6
H04	No	Which of the following will most likely affect your adult height?	14	1.0	17	1.7	12	1.3
N02	Yes	Which of the following refers only to living things?	91	1.5	91	2.2	92	2.0
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	58	3.0	63	3.7	53	4.8
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	88	1.7	92	2.3	84	2.7
N06	Yes	Where does a baby chick get its food while inside an egg?	72	2.3	73	3.2	71	3.6
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	61	2.4	61	3.4	61	3.9
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	97	0.9	97	1.4	98	0.9
O07	Yes	Which of the following animal produces milk for its young?	96	1.1	95	1.6	97	1.3
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	90	1.8	91	2.4	89	2.3
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	96	1.1	97	1.3	95	1.7
P08	Yes	Birds are different from insects in that birds have...	65	2.4	67	3.5	63	3.6
P09	Yes	Seeds develop from which part of a plant?	55	2.7	57	3.5	53	3.8
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	85	1.8	84	3.0	87	2.5
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	79	2.1	75	3.1	81	3.0
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	73	2.4	70	4.0	75	3.4
Q06	Yes	Which of the following pictures does not show an insect?	81	2.3	84	3.0	79	3.0
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	36	2.4	37	3.3	34	3.4
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	83	1.8	78	3.5	88	2.4
R06	Yes	Which of the following groups contains only animals with a backbone?	51	2.7	54	4.0	49	3.9
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	92	1.6	88	2.8	96	1.7
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	34	2.1	42	2.7	27	2.8
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	43	1.9	47	2.9	38	2.9
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	80	1.8	85	1.8	74	2.8
X02	Yes	Write down one reason why animals could not live in a world without plants.	88	1.3	87	1.8	89	1.5
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	94	1.0	94	1.2	94	1.4
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	82	1.6	80	2.2	84	2.2
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	91	1.0	90	1.6	92	1.4
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	60	2.6	59	3.2	61	3.0
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	80	1.7	81	2.2	79	2.5
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	49	2.3	51	3.2	47	3.1
Z02	Yes	Identify skin and skeletal features of various animals	85	1.3	86	2.2	84	1.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Korea SCALE=Physical Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	95	0.5	95	0.6	94	0.6
B01	No	A strong magnet will separate which of the following mixtures?	90	0.8	89	1.3	91	1.0
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	75	1.5	75	1.8	74	2.0
D01	No	Why are kettles and kitchen pans often made of copper?	89	1.0	88	1.5	90	1.4
E05	No	When you make soap bubbles, what is inside the bubbles?	82	1.4	80	1.6	83	1.9
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	84	1.2	86	1.3	83	1.7
G09	No	Which of the following pairs could together cause a rainbow?	92	0.8	92	1.0	91	1.3
H01	No	What happens to water when it boils?	83	1.0	88	1.3	79	1.7
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	54	2.6	56	3.5	50	3.8
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	65	2.3	74	3.3	55	3.2
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	83	2.2	85	2.6	80	3.1
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	81	2.2	84	2.6	77	3.0
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	84	1.8	89	2.4	78	3.1
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	90	1.8	90	2.3	90	2.5
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	96	1.0	94	1.8	99	0.9
P03	Yes	Which of the following is not used as an energy source?	31	2.8	33	3.7	30	3.4
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	48	2.8	46	4.3	49	3.6
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	84	2.2	83	3.3	85	2.6
P07	Yes	Which of the following travels fastest? (light)	64	3.0	72	3.7	56	4.3
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	74	2.4	72	3.6	76	3.2
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	74	2.5	75	3.4	72	3.2
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	59	3.0	59	4.2	58	3.3
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	54	2.7	52	4.1	56	3.4
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	26	2.7	32	3.7	20	3.5
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	82	2.2	84	2.8	81	2.9
R09	Yes	Which of the following is an advantage of solar energy?	48	2.4	50	4.0	47	3.6
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	75	2.1	75	2.6	75	2.9
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	80	1.9	80	2.3	80	2.2
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	74	1.8	73	2.5	74	2.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Kuwait SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	41	1.2	.	.	.	.
A10	No	The fossils of dinosaurs can be found where?	45	1.1	.	.	.	.
B02	No	Shown diagram, where is the saltiest water found?	59	1.2	.	.	.	.
C09	No	Where are large amounts of metals like iron and aluminum found?	34	1.7	.	.	.	.
D04	No	Shown diagram of Earth, which layer is the hottest?	56	1.3	.	.	.	.
E06	No	Which of the following is hottest? (astronomical bodies)	86	1.6	.	.	.	.
E09	No	Given several recent floods, when will it flood next?	28	1.2	.	.	.	.
F02	No	Each year the Earth moves once around which of the following?	48	1.3	.	.	.	.
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	35	1.4	.	.	.	.
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	44	1.2	.	.	.	.
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	15	1.1	.	.	.	.
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	14	1.2	.	.	.	.
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	27	1.9	.	.	.	.
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	58	2.9	.	.	.	.
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	22	1.8	.	.	.	.
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	16	1.4	.	.	.	.
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	23	1.4	.	.	.	.
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	7	0.8	.	.	.	.

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Kuwait SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	64	1.3	.	.	.	.
C07	No	Which of the following is an example of the use of a renewable source?	21	1.2	.	.	.	.
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	33	1.6	.	.	.	.
O06	Yes	Write down one example of how computers help people do their work.	27	2.5	.	.	.	.
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	25	1.5	.	.	.	.
Q07	Yes	Which of the following statements is not an observation?	18	1.8	.	.	.	.
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	32	2.2	.	.	.	.
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	18	1.3	.	.	.	.
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	11	1.1	.	.	.	.
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	11	1.0	.	.	.	.

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Kuwait SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade		
			Overall	Boys	Girls
			% (se)	% (se)	% (se)
A09	No	What happens if the body takes in more food than it uses?	43	1.0	. . . .
B03	No	If you throw each one of these things away, which will decay fastest?	29	1.4	. . . .
B04	No	Where do humans interpret senses?	40	1.1	. . . .
C06	No	Which animal eats only plants?	82	1.0	. . . .
C08	No	What gas in the air do we need in order to live?	64	1.4	. . . .
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	63	1.2	. . . .
D03	No	Which of the following animals does not lay eggs?	80	1.2	. . . .
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	45	1.3	. . . .
F01	No	Which of the following plants is grown for food?	65	1.4	. . . .
G05	No	Where does air go when a person breathes in?	71	1.7	. . . .
G06	No	Shown diagram of plant, which part takes in the most water?	67	1.6	. . . .
H02	No	How can washing your hands help keep you from getting sick?	51	1.5	. . . .
H04	No	Which of the following will most likely affect your adult height?	15	0.9	. . . .
N02	Yes	Which of the following refers only to living things?	60	2.4	. . . .
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	57	1.9	. . . .
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	63	2.3	. . . .
N06	Yes	Where does a baby chick get its food while inside an egg?	34	2.6	. . . .
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	22	2.0	. . . .
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	47	2.6	. . . .
O07	Yes	Which of the following animal produces milk for its young?	58	2.1	. . . .
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	45	2.5	. . . .
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	76	2.1	. . . .
P08	Yes	Birds are different from insects in that birds have...	58	2.6	. . . .
P09	Yes	Seeds develop from which part of a plant?	22	1.8	. . . .
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	31	2.7	. . . .
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	45	1.9	. . . .
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	52	2.3	. . . .
Q06	Yes	Which of the following pictures does not show an insect?	38	2.3	. . . .
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	34	1.8	. . . .
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	53	2.6	. . . .
R06	Yes	Which of the following groups contains only animals with a backbone?	54	1.8	. . . .
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	26	2.1	. . . .
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	12	1.1	. . . .
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	12	1.3	. . . .
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	13	0.9	. . . .
X02	Yes	Write down one reason why animals could not live in a world without plants.	44	2.1	. . . .
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	64	1.6	. . . .
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	47	2.5	. . . .
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	37	1.9	. . . .
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	21	1.5	. . . .
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	28	1.7	. . . .
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	15	1.2	. . . .
Z02	Yes	Identify skin and skeletal features of various animals	38	1.6	. . . .

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Kuwait SCALE=Physical Science

ITEM	REL	LABEL	Fourth Grade					
			Overall	Boys	Girls			
			% (se)	% (se)	% (se)			
A06	No	Shown three objects floating in water, which weighs the most?	57	1.0	.	.	.	.
B01	No	A strong magnet will separate which of the following mixtures?	60	1.3	.	.	.	.
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	47	1.3	.	.	.	.
D01	No	Why are kettles and kitchen pans often made of copper?	62	1.1	.	.	.	.
E05	No	When you make soap bubbles, what is inside the bubbles?	64	1.6	.	.	.	.
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	54	1.7	.	.	.	.
G09	No	Which of the following pairs could together cause a rainbow?	57	1.4	.	.	.	.
H01	No	What happens to water when it boils?	78	1.5	.	.	.	.
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	33	2.2	.	.	.	.
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	32	2.3	.	.	.	.
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	47	2.2	.	.	.	.
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	38	2.5	.	.	.	.
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	18	1.8	.	.	.	.
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	42	2.7	.	.	.	.
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	35	1.7	.	.	.	.
P03	Yes	Which of the following is not used as an energy source?	27	2.5	.	.	.	.
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	10	1.6	.	.	.	.
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	25	2.0	.	.	.	.
P07	Yes	Which of the following travels fastest? (light)	16	1.6	.	.	.	.
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	29	2.2	.	.	.	.
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	39	2.4	.	.	.	.
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	20	1.9	.	.	.	.
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	49	2.3	.	.	.	.
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	8	1.0	.	.	.	.
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	32	2.3	.	.	.	.
R08	Yes	Which of the following makes its own light?	37	2.4	.	.	.	.
R09	Yes	Which of the following is an advantage of solar energy?	14	1.7	.	.	.	.
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	16	1.1	.	.	.	.
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	16	1.7	.	.	.	.
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	11	1.1	.	.	.	.

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Latvia (LSS) SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	65	1.9	69	2.0	61	2.3
A10	No	The fossils of dinosaurs can be found where?	71	1.6	74	1.8	68	2.0
B02	No	Shown diagram, where is the saltiest water found?	77	1.6	75	2.3	78	2.0
C09	No	Where are large amounts of metals like iron and aluminum found?	43	2.4	44	2.9	41	3.0
D04	No	Shown diagram of Earth, which layer is the hottest?	69	2.1	66	2.9	72	2.3
E06	No	Which of the following is hottest? (astronomical bodies)	93	1.0	92	1.4	93	1.4
E09	No	Given several recent floods, when will it flood next?	44	2.4	39	2.9	48	3.3
F02	No	Each year the Earth moves once around which of the following?	68	2.3	67	3.1	70	3.0
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	64	1.9	61	2.5	67	2.6
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	73	1.8	74	2.6	72	2.5
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	36	2.5	35	3.1	37	3.0
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	58	2.0	58	2.7	58	2.8
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	48	3.5	51	4.9	44	4.8
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	62	3.5	54	4.5	69	4.5
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	47	3.0	45	4.2	50	3.9
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	30	2.4	30	2.9	31	3.7
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	52	2.3	48	3.1	56	3.4
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	20	2.2	20	3.5	19	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Latvia (LSS) SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	93	0.7	92	1.0	94	0.8
C07	No	Which of the following is an example of the use of a renewable source?	45	2.2	44	2.9	46	3.2
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	80	1.6	75	2.2	86	1.9
O06	Yes	Write down one example of how computers help people do their work.	33	3.4	35	4.5	32	4.2
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	23	3.0	23	3.9	23	3.6
Q07	Yes	Which of the following statements is not an observation?	33	3.2	30	4.5	35	4.0
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	35	3.3	39	5.1	31	4.4
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	54	2.4	51	3.6	57	3.4
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	29	2.3	28	3.4	30	2.7
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	24	2.3	25	2.9	24	2.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Latvia (LSS) SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	67	1.5	64	1.8	70	2.1
B03	No	If you throw each one of these things away, which will decay fastest?	70	1.9	73	2.4	67	2.5
B04	No	Where do humans interpret senses?	55	2.0	57	2.6	52	2.4
C06	No	Which animal eats only plants?	94	1.1	93	1.6	96	1.1
C08	No	What gas in the air do we need in order to live?	79	1.7	79	1.9	79	2.7
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	72	1.7	71	2.4	72	2.4
D03	No	Which of the following animals does not lay eggs?	81	1.6	79	2.5	82	2.4
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	58	2.3	58	2.8	59	3.2
F01	No	Which of the following plants is grown for food?	89	1.2	89	1.6	89	1.5
G05	No	Where does air go when a person breathes in?	82	1.6	84	2.2	80	2.5
G06	No	Shown diagram of plant, which part takes in the most water?	88	1.5	86	2.1	91	1.5
H02	No	How can washing your hands help keep you from getting sick?	82	1.7	76	2.4	88	2.2
H04	No	Which of the following will most likely affect your adult height?	49	2.3	46	2.7	52	3.2
N02	Yes	Which of the following refers only to living things?	65	3.4	64	4.3	66	4.7
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	50	3.0	51	4.1	50	4.9
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	77	2.4	74	3.8	81	3.5
N06	Yes	Where does a baby chick get its food while inside an egg?	41	3.4	39	4.2	44	4.8
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	44	3.7	41	4.5	47	5.3
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	52	3.5	45	4.9	59	5.3
O07	Yes	Which of the following animal produces milk for its young?	74	2.4	70	3.7	77	3.8
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	63	3.3	61	4.9	66	4.7
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	91	2.1	90	3.4	93	2.2
P08	Yes	Birds are different from insects in that birds have...	46	3.4	41	4.3	51	4.8
P09	Yes	Seeds develop from which part of a plant?	66	2.8	63	4.0	70	4.3
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	54	3.3	54	5.7	53	4.4
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	73	3.2	72	4.7	74	4.4
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	77	3.1	76	4.4	79	3.4
Q06	Yes	Which of the following pictures does not show an insect?	19	2.7	22	4.6	17	3.6
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	57	3.6	54	4.4	60	5.2
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	51	3.6	44	5.0	57	4.7
R06	Yes	Which of the following groups contains only animals with a backbone?	30	3.5	28	4.9	31	4.5
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	58	3.1	54	4.9	61	4.6
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	33	2.9	37	3.4	30	3.5
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	21	2.2	22	2.5	19	3.1
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	41	2.7	46	3.3	36	3.8
X02	Yes	Write down one reason why animals could not live in a world without plants.	77	2.0	72	3.0	82	2.7
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	77	2.0	71	2.8	83	2.7
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	56	2.8	53	3.0	59	3.8
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	53	2.0	53	2.6	53	2.9
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	18	1.7	18	2.5	19	2.6
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	60	2.6	60	3.2	61	3.7
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	35	2.5	36	3.0	34	3.4
Z02	Yes	Identify skin and skeletal features of various animals	49	2.4	50	3.4	49	3.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Latvia (LSS) SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	82	0.9	82	1.3	83	1.1
B01	No	A strong magnet will separate which of the following mixtures?	75	1.7	74	1.8	75	2.4
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	83	1.6	82	2.3	85	2.2
D01	No	Why are kettles and kitchen pans often made of copper?	64	1.8	61	2.4	66	2.6
E05	No	When you make soap bubbles, what is inside the bubbles?	64	2.1	68	2.7	60	2.7
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	72	2.1	70	2.6	75	2.4
G09	No	Which of the following pairs could together cause a rainbow?	90	1.2	91	1.5	89	1.7
H01	No	What happens to water when it boils?	79	1.6	81	1.7	76	2.4
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	26	2.9	27	3.7	26	3.9
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	44	3.5	43	4.5	45	5.0
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	61	3.3	57	4.8	66	4.2
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	52	3.5	56	4.6	48	4.7
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	48	3.7	54	5.3	42	5.0
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	44	3.0	43	4.4	45	5.2
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	60	3.5	58	4.7	62	4.5
P03	Yes	Which of the following is not used as an energy source?	27	3.0	23	4.3	32	4.1
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	45	2.9	47	4.2	43	4.0
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	38	3.6	34	4.7	43	5.3
P07	Yes	Which of the following travels fastest? (light)	41	3.2	48	4.8	34	4.3
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	62	3.2	64	4.9	61	5.0
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	62	3.1	67	4.7	58	4.0
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	47	3.2	53	4.8	42	4.4
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	43	3.7	43	4.7	44	5.0
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	30	3.2	38	4.4	23	3.7
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	34	3.1	41	4.8	28	4.2
R08	Yes	Which of the following makes its own light?	53	3.7	56	5.0	50	4.9
R09	Yes	Which of the following is an advantage of solar energy?	36	3.0	33	4.6	38	4.8
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	33	2.4	32	2.9	34	3.7
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	28	2.3	25	2.5	32	3.6
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	25	2.1	25	3.1	26	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Netherlands SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	53	1.5	62	1.6	44	1.9
A10	No	The fossils of dinosaurs can be found where?	80	1.2	81	1.4	79	1.6
B02	No	Shown diagram, where is the saltiest water found?	72	1.7	77	2.0	67	2.7
C09	No	Where are large amounts of metals like iron and aluminum found?	50	1.7	57	2.6	44	2.6
D04	No	Shown diagram of Earth, which layer is the hottest?	82	1.4	87	1.6	78	2.4
E06	No	Which of the following is hottest? (astronomical bodies)	96	0.6	98	0.7	95	1.0
E09	No	Given several recent floods, when will it flood next?	46	2.0	43	3.1	48	3.0
F02	No	Each year the Earth moves once around which of the following?	56	2.1	61	2.7	51	2.8
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	82	1.4	83	2.1	80	1.8
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	72	2.0	78	2.3	65	2.6
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	27	1.8	31	2.8	24	2.1
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	47	2.1	58	2.7	37	2.4
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	60	2.9	60	4.3	61	3.8
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	81	2.2	76	3.3	86	3.1
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	52	3.1	54	5.1	52	3.9
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	38	2.1	44	3.0	33	2.8
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	62	2.1	66	2.6	58	3.2
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	45	2.4	46	3.7	43	3.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Netherlands SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	90	0.8	91	1.0	90	1.3
C07	No	Which of the following is an example of the use of a renewable source?	61	2.2	62	3.0	60	2.9
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	85	1.2	84	1.7	87	1.8
O06	Yes	Write down one example of how computers help people do their work.	71	2.8	70	4.3	73	4.1
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	36	3.2	36	4.5	36	4.4
Q07	Yes	Which of the following statements is not an observation?	53	3.2	45	3.8	59	4.2
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	49	3.2	49	4.4	50	4.1
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	66	2.0	69	2.9	63	3.1
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	56	2.2	61	3.1	52	2.8
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	20	2.0	17	2.7	23	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Netherlands SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	79	1.1	79	1.5	79	1.6
B03	No	If you throw each one of these things away, which will decay fastest?	84	1.8	82	2.2	86	2.0
B04	No	Where do humans interpret senses?	58	1.9	60	2.2	56	2.3
C06	No	Which animal eats only plants?	93	1.0	97	0.9	89	1.7
C08	No	What gas in the air do we need in order to live?	96	0.7	96	1.0	96	0.8
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	84	1.4	83	1.9	86	1.5
D03	No	Which of the following animals does not lay eggs?	93	0.9	94	1.2	93	1.5
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	76	1.6	76	2.2	75	2.2
F01	No	Which of the following plants is grown for food?	80	1.6	81	2.1	79	2.2
G05	No	Where does air go when a person breathes in?	85	1.3	85	1.6	85	1.8
G06	No	Shown diagram of plant, which part takes in the most water?	87	1.3	85	1.9	88	1.4
H02	No	How can washing your hands help keep you from getting sick?	82	1.5	84	1.9	80	2.2
H04	No	Which of the following will most likely affect your adult height?	64	1.9	64	2.6	66	2.4
N02	Yes	Which of the following refers only to living things?	88	1.8	90	2.4	85	3.1
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	70	2.9	73	3.8	66	4.1
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	83	2.5	92	2.6	76	3.4
N06	Yes	Where does a baby chick get its food while inside an egg?	55	3.3	59	4.6	51	4.5
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	58	3.5	56	4.6	61	4.5
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	79	2.7	85	3.7	74	4.2
O07	Yes	Which of the following animal produces milk for its young?	82	2.4	81	3.1	85	2.8
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	97	1.1	97	1.6	96	1.5
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	94	1.6	95	1.9	92	2.2
P08	Yes	Birds are different from insects in that birds have...	57	2.7	59	4.4	56	4.0
P09	Yes	Seeds develop from which part of a plant?	46	3.6	50	4.5	43	5.4
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	86	2.3	90	2.5	83	3.6
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	93	1.7	96	1.0	90	3.1
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	75	3.0	73	3.7	79	4.1
Q06	Yes	Which of the following pictures does not show an insect?	45	3.3	50	4.2	40	5.0
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	57	3.3	61	4.3	54	4.4
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	83	2.6	79	3.9	87	3.0
R06	Yes	Which of the following groups contains only animals with a backbone?	47	2.7	56	3.8	38	4.0
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	73	2.9	75	3.4	69	4.6
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	36	2.1	48	3.5	24	2.5
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	28	2.2	31	2.7	25	2.9
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	60	2.0	69	2.8	51	2.8
X02	Yes	Write down one reason why animals could not live in a world without plants.	88	1.1	89	1.9	88	1.9
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	97	0.7	97	1.1	97	1.2
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	47	2.1	48	3.0	46	3.4
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	86	1.4	87	2.1	86	2.1
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	60	2.2	62	3.1	58	3.3
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	83	1.6	86	2.3	81	2.3
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	61	2.0	64	2.8	60	2.9
Z02	Yes	Identify skin and skeletal features of various animals	57	2.4	59	3.3	54	3.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Netherlands SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	92	0.7	93	0.8	91	1.1
B01	No	A strong magnet will separate which of the following mixtures?	83	1.2	87	1.3	79	1.9
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	76	1.7	80	2.0	72	2.8
D01	No	Why are kettles and kitchen pans often made of copper?	51	2.0	54	2.8	47	2.5
E05	No	When you make soap bubbles, what is inside the bubbles?	79	1.7	79	2.3	79	2.2
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	90	1.1	89	1.5	90	1.5
G09	No	Which of the following pairs could together cause a rainbow?	97	0.6	95	1.0	98	0.7
H01	No	What happens to water when it boils?	85	1.0	87	1.7	83	1.5
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	31	3.0	39	4.7	22	3.7
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	70	3.2	76	4.1	62	4.8
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	85	2.3	83	3.2	87	3.1
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	78	2.3	76	3.4	80	3.3
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	51	3.2	54	4.6	49	4.6
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	51	3.1	53	4.4	49	4.0
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	59	3.3	64	3.8	55	4.1
P03	Yes	Which of the following is not used as an energy source?	38	2.8	41	4.3	35	3.6
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	37	3.0	41	4.6	34	4.0
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	53	3.1	60	4.3	45	3.9
P07	Yes	Which of the following travels fastest? (light)	27	3.2	37	4.5	19	3.7
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	59	3.1	62	4.8	55	4.5
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	74	2.6	84	3.0	64	4.3
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	64	2.7	63	3.8	64	5.1
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	63	3.1	71	4.0	57	4.3
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	28	2.4	37	3.2	17	2.9
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	71	2.9	71	4.1	72	4.3
R08	Yes	Which of the following makes its own light?	67	2.9	72	4.2	61	4.6
R09	Yes	Which of the following is an advantage of solar energy?	38	3.1	44	3.6	33	4.1
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	70	2.2	72	3.0	68	3.0
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	61	2.2	65	3.2	59	3.1
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	47	2.3	53	3.4	41	3.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=New Zealand SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	72	1.2	76	1.6	68	1.8
A10	No	The fossils of dinosaurs can be found where?	83	1.2	84	1.4	82	1.4
B02	No	Shown diagram, where is the saltiest water found?	72	1.6	70	2.4	74	2.1
C09	No	Where are large amounts of metals like iron and aluminum found?	44	1.9	45	2.6	43	2.6
D04	No	Shown diagram of Earth, which layer is the hottest?	80	1.7	83	1.9	77	2.5
E06	No	Which of the following is hottest? (astronomical bodies)	95	0.9	93	1.2	97	1.0
E09	No	Given several recent floods, when will it flood next?	40	1.7	35	2.2	45	2.8
F02	No	Each year the Earth moves once around which of the following?	65	2.2	66	2.6	65	3.1
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	69	1.9	69	2.4	70	2.4
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	75	1.9	77	2.5	74	2.7
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	25	1.6	30	2.4	20	2.0
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	34	2.0	37	2.6	31	2.9
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	39	3.2	41	4.8	38	4.3
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	64	3.1	69	4.8	60	4.3
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	41	3.3	40	4.4	42	4.5
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	34	2.1	36	2.7	31	3.1
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	69	2.6	68	3.5	71	3.2
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	32	2.1	30	3.6	34	3.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=New Zealand SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	83	1.1	80	1.7	87	1.3
C07	No	Which of the following is an example of the use of a renewable source?	41	1.9	44	2.7	37	2.5
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	83	1.4	80	2.4	85	1.6
O06	Yes	Write down one example of how computers help people do their work.	72	3.1	61	4.4	83	3.4
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	39	3.2	32	4.2	46	5.1
Q07	Yes	Which of the following statements is not an observation?	50	3.5	45	5.7	56	4.1
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	46	3.4	45	4.4	47	4.8
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	41	2.2	43	3.6	39	3.1
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	31	2.6	31	3.1	32	3.2
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	38	2.2	34	3.0	41	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=New Zealand SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	69	1.2	70	1.8	68	1.6
B03	No	If you throw each one of these things away, which will decay fastest?	75	1.6	70	2.4	80	1.8
B04	No	Where do humans interpret senses?	69	1.7	64	2.5	73	2.0
C06	No	Which animal eats only plants?	92	1.1	91	1.5	93	1.4
C08	No	What gas in the air do we need in order to live?	82	1.8	82	2.4	83	2.1
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	66	1.7	67	2.1	65	2.3
D03	No	Which of the following animals does not lay eggs?	94	1.1	93	1.6	95	1.0
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	56	2.2	53	3.0	59	2.6
F01	No	Which of the following plants is grown for food?	82	1.5	80	2.2	84	1.9
G05	No	Where does air go when a person breathes in?	88	1.4	88	1.8	87	2.1
G06	No	Shown diagram of plant, which part takes in the most water?	88	1.3	86	1.8	89	1.7
H02	No	How can washing your hands help keep you from getting sick?	92	1.5	90	1.8	93	1.6
H04	No	Which of the following will most likely affect your adult height?	44	2.0	45	3.0	43	2.9
N02	Yes	Which of the following refers only to living things?	66	3.0	67	4.3	65	4.3
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	32	3.2	30	4.5	34	4.3
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	67	3.4	68	5.0	66	4.7
N06	Yes	Where does a baby chick get its food while inside an egg?	50	3.3	48	5.0	51	4.7
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	46	3.3	44	4.1	48	4.6
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	74	3.3	67	4.9	81	3.5
O07	Yes	Which of the following animal produces milk for its young?	73	2.6	68	4.0	78	3.2
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	95	1.8	93	3.1	97	1.6
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	89	2.5	86	3.9	92	2.4
P08	Yes	Birds are different from insects in that birds have...	69	2.6	66	3.9	72	3.8
P09	Yes	Seeds develop from which part of a plant?	33	3.0	39	4.4	28	3.9
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	76	3.1	65	5.2	86	2.8
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	55	3.2	54	5.2	57	4.3
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	74	2.4	68	4.2	79	3.5
Q06	Yes	Which of the following pictures does not show an insect?	53	3.3	57	4.6	49	4.7
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	66	3.0	60	4.4	72	4.1
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	81	2.7	69	4.4	92	2.3
R06	Yes	Which of the following groups contains only animals with a backbone?	50	3.3	51	5.3	50	4.2
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	62	3.1	58	4.7	65	4.3
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	53	3.1	53	3.7	53	3.6
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	21	1.8	23	3.0	20	2.4
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	53	2.5	53	3.7	52	2.9
X02	Yes	Write down one reason why animals could not live in a world without plants.	77	2.2	73	3.4	81	2.4
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	85	1.9	81	2.5	88	2.4
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	61	2.5	57	3.3	64	3.2
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	64	2.5	59	3.3	69	3.6
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	37	2.3	36	3.0	37	2.9
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	64	2.3	59	2.7	68	3.5
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	51	2.5	45	3.4	57	3.5
Z02	Yes	Identify skin and skeletal features of various animals	67	2.4	65	3.5	69	3.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=New Zealand SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	87	1.1	84	1.4	90	1.2
B01	No	A strong magnet will separate which of the following mixtures?	69	1.9	68	2.7	69	2.3
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	70	1.8	69	2.6	71	2.5
D01	No	Why are kettles and kitchen pans often made of copper?	68	2.3	63	3.3	72	2.3
E05	No	When you make soap bubbles, what is inside the bubbles?	68	1.8	71	2.6	66	1.9
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	72	2.0	70	2.9	74	2.3
G09	No	Which of the following pairs could together cause a rainbow?	88	1.5	85	1.9	91	1.6
H01	No	What happens to water when it boils?	64	2.2	66	2.5	61	3.4
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	34	3.4	35	5.2	32	4.2
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	50	3.1	51	5.1	50	4.0
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	67	3.5	66	4.6	68	4.3
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	72	2.9	73	3.8	71	4.1
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	48	3.5	50	5.2	45	4.0
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	57	3.6	58	5.0	57	4.7
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	46	3.3	44	4.4	47	4.3
P03	Yes	Which of the following is not used as an energy source?	32	3.5	41	5.3	22	3.9
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	32	3.3	35	4.0	29	4.9
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	52	3.1	57	4.7	47	4.3
P07	Yes	Which of the following travels fastest? (light)	56	3.4	67	4.2	42	4.9
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	54	3.7	54	5.3	54	4.7
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	66	3.3	68	4.7	65	4.2
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	44	3.3	45	4.7	43	4.6
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	59	3.1	57	4.1	61	4.5
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	17	2.5	16	3.2	18	4.1
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	47	3.3	40	4.5	55	4.3
R08	Yes	Which of the following makes its own light?	48	3.1	48	4.2	49	4.7
R09	Yes	Which of the following is an advantage of solar energy?	44	3.6	40	5.3	48	4.7
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	37	2.5	34	3.5	39	3.3
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	56	2.7	52	3.7	59	3.2
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	35	2.6	36	3.7	34	3.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Norway SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	74	1.0	79	1.4	69	1.3
A10	No	The fossils of dinosaurs can be found where?	54	1.5	57	1.7	51	1.9
B02	No	Shown diagram, where is the saltiest water found?	80	1.4	83	1.9	77	2.1
C09	No	Where are large amounts of metals like iron and aluminum found?	47	1.9	53	3.0	40	2.7
D04	No	Shown diagram of Earth, which layer is the hottest?	83	1.6	85	1.8	80	2.2
E06	No	Which of the following is hottest? (astronomical bodies)	96	0.7	95	1.1	97	1.1
E09	No	Given several recent floods, when will it flood next?	42	1.8	36	2.3	49	2.4
F02	No	Each year the Earth moves once around which of the following?	74	1.8	74	2.4	74	2.3
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	66	1.8	66	2.8	66	2.6
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	75	1.6	78	2.1	71	2.5
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	21	1.7	21	2.2	21	2.6
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	58	1.8	64	2.6	51	2.5
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	44	3.3	43	4.8	44	4.4
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	85	2.6	81	4.1	89	3.1
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	64	3.3	65	5.0	64	4.7
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	43	2.3	48	3.2	35	3.5
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	56	2.5	60	3.1	52	3.9
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	16	1.8	17	2.4	16	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Norway SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	87	1.0	85	1.3	90	1.2
C07	No	Which of the following is an example of the use of a renewable source?	49	1.6	50	2.5	46	2.4
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	75	1.6	71	2.3	79	2.2
O06	Yes	Write down one example of how computers help people do their work.	68	3.2	65	4.2	70	4.1
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	30	2.5	32	4.1	29	4.5
Q07	Yes	Which of the following statements is not an observation?	54	3.0	52	4.8	57	5.1
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	42	3.2	46	4.3	38	4.8
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	50	2.5	57	3.1	42	3.3
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	41	2.3	48	3.1	33	3.4
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	21	1.9	18	2.2	25	2.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Norway SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	75	1.0	73	1.4	78	1.7
B03	No	If you throw each one of these things away, which will decay fastest?	92	1.0	90	1.6	94	1.3
B04	No	Where do humans interpret senses?	78	1.3	79	1.9	77	2.0
C06	No	Which animal eats only plants?	92	0.9	94	1.2	89	1.7
C08	No	What gas in the air do we need in order to live?	86	1.4	89	1.7	82	2.4
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	66	1.5	65	2.6	66	2.5
D03	No	Which of the following animals does not lay eggs?	90	1.2	90	1.6	90	2.0
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	71	1.8	71	2.3	69	2.7
F01	No	Which of the following plants is grown for food?	90	1.0	89	1.5	91	1.6
G05	No	Where does air go when a person breathes in?	86	1.4	87	1.8	85	1.8
G06	No	Shown diagram of plant, which part takes in the most water?	84	1.7	86	1.8	81	2.4
H02	No	How can washing your hands help keep you from getting sick?	79	1.8	78	2.5	81	2.3
H04	No	Which of the following will most likely affect your adult height?	58	2.0	57	2.6	60	3.3
N02	Yes	Which of the following refers only to living things?	61	3.3	63	5.1	58	4.6
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	54	3.0	54	4.3	53	4.9
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	80	2.7	82	3.2	78	4.3
N06	Yes	Where does a baby chick get its food while inside an egg?	37	3.4	30	4.8	44	4.9
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	42	3.6	35	4.9	50	4.9
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	52	3.3	42	4.6	60	4.4
O07	Yes	Which of the following animal produces milk for its young?	69	3.5	65	4.7	73	3.6
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	97	0.9	96	1.4	99	0.8
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	95	1.9	97	1.6	93	3.7
P08	Yes	Birds are different from insects in that birds have...	64	3.4	60	3.8	69	5.3
P09	Yes	Seeds develop from which part of a plant?	33	3.2	35	5.0	32	5.0
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	67	2.7	72	4.4	63	4.2
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	77	2.7	73	3.9	81	3.7
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	74	2.9	75	3.9	75	3.7
Q06	Yes	Which of the following pictures does not show an insect?	34	2.8	34	4.2	31	4.3
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	62	2.9	59	4.1	67	4.1
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	85	2.3	84	3.1	86	3.5
R06	Yes	Which of the following groups contains only animals with a backbone?	33	3.0	35	4.1	33	4.6
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	53	3.4	50	4.7	57	4.8
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	51	2.6	55	3.0	47	3.7
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	30	2.3	31	2.7	27	3.2
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	43	2.4	46	3.1	41	3.3
X02	Yes	Write down one reason why animals could not live in a world without plants.	79	2.0	76	2.7	81	2.7
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	84	1.8	84	2.7	83	2.3
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	61	2.3	64	2.9	58	3.5
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	76	2.3	73	3.0	79	3.2
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	53	2.1	52	2.9	54	3.0
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	65	2.3	65	3.5	65	3.1
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	50	2.6	51	3.7	49	3.3
Z02	Yes	Identify skin and skeletal features of various animals	57	2.1	59	3.0	57	3.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Norway SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall	Boys		Girls		
			% (se)	% (se)	% (se)	% (se)		
A06	No	Shown three objects floating in water, which weighs the most?	90	0.9	91	1.1	89	1.3
B01	No	A strong magnet will separate which of the following mixtures?	62	1.8	65	2.1	57	2.7
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	62	1.9	62	2.2	60	3.2
D01	No	Why are kettles and kitchen pans often made of copper?	49	1.9	48	2.9	50	2.8
E05	No	When you make soap bubbles, what is inside the bubbles?	67	1.7	69	2.4	63	2.9
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	76	1.7	75	2.5	76	2.0
G09	No	Which of the following pairs could together cause a rainbow?	91	1.2	91	1.4	91	1.7
H01	No	What happens to water when it boils?	90	1.3	90	1.9	91	1.7
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	41	3.5	48	4.8	34	4.6
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	61	3.2	62	4.6	58	4.2
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	52	2.9	50	4.5	55	4.5
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	70	3.2	70	4.1	67	4.7
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	64	2.8	66	4.4	60	3.9
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	46	3.6	45	5.6	49	4.7
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	59	2.8	59	3.3	60	4.3
P03	Yes	Which of the following is not used as an energy source?	32	3.0	39	3.7	21	4.0
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	28	2.7	34	3.9	19	3.8
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	40	3.1	40	3.5	41	5.2
P07	Yes	Which of the following travels fastest? (light)	48	3.4	59	4.2	37	5.0
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	50	3.2	49	5.0	52	5.1
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	75	3.1	79	3.8	72	4.7
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	42	3.4	51	4.4	32	4.4
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	56	3.6	61	4.8	50	5.1
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	21	3.0	29	4.6	13	3.1
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	55	3.1	55	4.0	57	5.4
R08	Yes	Which of the following makes its own light?	39	3.2	34	4.1	43	5.2
R09	Yes	Which of the following is an advantage of solar energy?	34	3.2	37	4.7	32	3.9
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	18	1.7	15	2.4	21	2.8
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	44	2.3	39	3.3	48	3.5
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	36	2.0	44	3.4	30	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Portugal SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	60	1.5	63	1.8	57	1.9
A10	No	The fossils of dinosaurs can be found where?	68	1.2	71	1.4	66	1.5
B02	No	Shown diagram, where is the saltiest water found?	75	1.4	76	1.8	73	2.0
C09	No	Where are large amounts of metals like iron and aluminum found?	35	1.7	35	2.0	36	2.4
D04	No	Shown diagram of Earth, which layer is the hottest?	69	1.6	69	2.4	70	2.1
E06	No	Which of the following is hottest? (astronomical bodies)	91	1.0	90	1.4	91	1.2
E09	No	Given several recent floods, when will it flood next?	34	1.7	34	2.0	34	2.5
F02	No	Each year the Earth moves once around which of the following?	64	1.9	64	2.8	65	2.2
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	54	1.7	55	2.4	54	2.1
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	68	1.6	72	2.3	64	2.2
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	24	1.5	24	1.7	24	2.4
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	39	2.3	41	2.3	37	3.1
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	26	2.4	26	4.1	26	3.2
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	77	2.9	71	3.8	82	3.5
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	33	2.7	36	3.9	30	3.9
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	15	1.7	16	2.1	15	2.4
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	49	2.5	50	3.0	49	3.3
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	11	1.2	11	1.7	11	1.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Portugal SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	83	1.0	82	1.2	85	1.3
C07	No	Which of the following is an example of the use of a renewable source?	49	1.9	48	2.1	50	3.0
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	70	1.8	70	2.3	70	2.5
O06	Yes	Write down one example of how computers help people do their work.	35	3.2	33	4.1	38	4.3
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	25	2.4	23	3.4	27	3.7
Q07	Yes	Which of the following statements is not an observation?	32	3.0	29	4.3	36	4.4
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	24	2.5	26	3.5	21	3.2
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	24	1.8	29	3.0	20	2.3
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	10	1.3	10	2.0	10	1.6
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	29	2.1	30	3.0	29	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Portugal SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	62	1.3	62	1.5	62	1.7
B03	No	If you throw each one of these things away, which will decay fastest?	80	1.4	77	1.9	84	1.5
B04	No	Where do humans interpret senses?	51	1.8	51	2.3	52	2.3
C06	No	Which animal eats only plants?	89	1.0	90	1.2	88	1.7
C08	No	What gas in the air do we need in order to live?	82	1.2	81	1.6	83	1.6
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	60	2.0	60	2.3	60	2.6
D03	No	Which of the following animals does not lay eggs?	84	1.2	85	1.6	83	1.8
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	55	1.8	56	2.3	54	2.4
F01	No	Which of the following plants is grown for food?	89	1.1	88	1.6	91	1.3
G05	No	Where does air go when a person breathes in?	87	1.3	87	1.8	87	1.6
G06	No	Shown diagram of plant, which part takes in the most water?	84	1.3	85	1.7	83	1.8
H02	No	How can washing your hands help keep you from getting sick?	75	1.4	74	1.8	75	2.1
H04	No	Which of the following will most likely affect your adult height?	53	2.0	55	2.4	51	2.5
N02	Yes	Which of the following refers only to living things?	70	2.9	63	4.3	75	3.4
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	40	2.4	36	4.2	43	3.0
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	56	2.4	56	3.9	56	3.3
N06	Yes	Where does a baby chick get its food while inside an egg?	28	2.5	29	3.5	28	3.4
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	38	3.0	35	4.1	41	3.5
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	52	3.3	49	4.2	56	4.6
O07	Yes	Which of the following animal produces milk for its young?	77	2.4	77	3.3	77	3.4
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	59	3.0	58	4.1	60	4.4
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	78	2.5	82	2.7	73	3.5
P08	Yes	Birds are different from insects in that birds have...	43	3.4	49	4.3	37	4.5
P09	Yes	Seeds develop from which part of a plant?	20	2.3	18	3.1	23	3.3
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	44	3.0	45	3.7	42	4.0
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	57	2.9	53	3.9	61	3.9
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	59	3.0	54	4.1	65	4.2
Q06	Yes	Which of the following pictures does not show an insect?	26	2.6	28	3.5	25	3.7
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	57	2.7	54	4.0	61	3.9
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	77	2.7	74	3.6	81	3.6
R06	Yes	Which of the following groups contains only animals with a backbone?	40	2.8	38	3.6	43	3.9
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	37	2.8	36	4.0	38	4.2
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	27	1.7	30	2.6	25	2.4
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	14	1.5	19	2.4	9	1.6
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	24	2.0	26	2.8	23	2.4
X02	Yes	Write down one reason why animals could not live in a world without plants.	68	2.5	63	3.3	72	2.8
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	62	2.3	60	3.4	64	2.6
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	27	2.1	22	2.5	31	2.8
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	54	2.0	54	3.1	53	2.7
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	22	1.8	26	2.4	18	2.1
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	47	2.4	48	3.3	47	3.0
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	14	1.6	15	2.2	13	1.8
Z02	Yes	Identify skin and skeletal features of various animals	41	2.3	43	3.1	40	3.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Portugal SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	80	0.9	83	1.1	77	1.4
B01	No	A strong magnet will separate which of the following mixtures?	72	1.4	76	1.9	68	1.7
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	74	1.6	74	1.8	75	2.2
D01	No	Why are kettles and kitchen pans often made of copper?	45	2.0	43	2.4	46	2.5
E05	No	When you make soap bubbles, what is inside the bubbles?	64	2.0	66	2.3	61	2.4
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	61	2.0	63	2.3	60	2.6
G09	No	Which of the following pairs could together cause a rainbow?	79	1.5	77	2.1	81	2.1
H01	No	What happens to water when it boils?	90	1.1	91	1.2	89	1.8
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	20	2.2	21	3.3	19	2.7
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	44	3.0	42	4.5	46	3.6
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	61	2.7	55	4.2	65	3.1
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	45	2.6	50	3.9	41	3.4
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	37	3.0	41	4.1	32	4.0
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	50	2.8	51	3.7	49	4.1
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	52	2.7	57	3.7	46	4.0
P03	Yes	Which of the following is not used as an energy source?	34	2.6	37	3.6	30	3.5
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	30	2.8	34	4.1	26	3.2
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	34	2.8	33	3.8	34	3.5
P07	Yes	Which of the following travels fastest? (light)	33	2.5	40	3.4	24	3.5
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	38	2.6	36	3.2	40	3.5
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	63	3.2	62	4.1	63	4.2
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	37	2.8	37	4.0	38	3.1
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	42	3.0	43	3.9	40	3.9
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	20	2.3	22	3.1	17	3.2
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	60	3.2	62	3.3	57	4.7
R08	Yes	Which of the following makes its own light?	57	2.9	55	3.7	59	4.3
R09	Yes	Which of the following is an advantage of solar energy?	42	2.5	37	3.7	48	4.2
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	22	1.9	21	2.5	23	2.6
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	25	1.5	24	2.2	25	2.2
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	20	1.8	25	2.2	15	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Singapore SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	80	1.0	81	1.0	78	1.4
A10	No	The fossils of dinosaurs can be found where?	86	0.8	88	0.7	85	1.1
B02	No	Shown diagram, where is the saltiest water found?	53	1.4	56	1.6	50	2.1
C09	No	Where are large amounts of metals like iron and aluminum found?	53	1.3	55	1.6	52	1.7
D04	No	Shown diagram of Earth, which layer is the hottest?	72	1.0	74	1.2	70	1.8
E06	No	Which of the following is hottest? (astronomical bodies)	93	0.6	92	0.8	93	0.8
E09	No	Given several recent floods, when will it flood next?	48	1.2	45	1.8	51	1.5
F02	No	Each year the Earth moves once around which of the following?	63	1.6	68	1.9	58	2.3
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	68	1.4	68	1.6	68	2.0
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	75	1.0	77	1.3	72	1.3
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	31	1.1	30	1.4	33	1.6
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	40	1.6	40	1.9	40	2.2
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	41	2.0	40	2.8	42	2.8
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	86	1.2	86	1.6	85	1.8
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	33	2.3	32	3.0	34	3.1
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	27	1.7	29	2.2	24	2.1
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	78	1.4	78	1.8	78	1.8
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	19	1.2	17	1.5	21	1.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Singapore SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	86	0.7	84	0.9	88	0.9
C07	No	Which of the following is an example of the use of a renewable source?	31	1.4	35	2.0	28	1.7
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	89	0.7	86	1.0	92	0.9
O06	Yes	Write down one example of how computers help people do their work.	74	1.7	70	2.5	77	2.3
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	62	2.1	60	2.5	64	3.1
Q07	Yes	Which of the following statements is not an observation?	44	2.0	43	2.5	45	3.0
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	38	2.1	36	2.8	39	2.8
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	44	1.9	45	2.5	42	2.4
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	37	2.0	36	2.6	37	2.6
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	21	1.7	22	2.1	21	2.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Singapore SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	68	1.1	68	1.2	67	1.4
B03	No	If you throw each one of these things away, which will decay fastest?	54	1.9	52	2.1	56	2.5
B04	No	Where do humans interpret senses?	58	1.3	59	1.6	56	1.9
C06	No	Which animal eats only plants?	93	0.6	95	0.7	92	0.9
C08	No	What gas in the air do we need in order to live?	90	0.7	92	0.9	89	1.2
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	82	0.8	80	1.3	84	1.1
D03	No	Which of the following animals does not lay eggs?	96	0.4	96	0.5	96	0.6
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	69	1.7	70	1.8	69	2.2
F01	No	Which of the following plants is grown for food?	84	1.1	84	1.4	85	1.5
G05	No	Where does air go when a person breathes in?	81	1.1	82	1.2	80	1.7
G06	No	Shown diagram of plant, which part takes in the most water?	84	0.7	84	1.1	84	1.0
H02	No	How can washing your hands help keep you from getting sick?	90	0.7	89	0.8	90	1.1
H04	No	Which of the following will most likely affect your adult height?	36	1.2	36	1.5	37	1.9
N02	Yes	Which of the following refers only to living things?	78	1.5	78	2.0	77	1.8
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	71	1.9	70	2.5	73	2.6
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	57	2.0	60	2.5	52	2.8
N06	Yes	Where does a baby chick get its food while inside an egg?	40	1.9	42	2.6	37	2.6
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	45	2.0	45	3.0	44	2.4
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	92	0.9	91	1.4	94	1.3
O07	Yes	Which of the following animal produces milk for its young?	77	1.6	76	2.3	78	2.4
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	94	0.9	94	1.3	95	1.2
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	76	1.7	81	2.4	72	2.8
P08	Yes	Birds are different from insects in that birds have...	73	1.7	76	2.3	70	2.8
P09	Yes	Seeds develop from which part of a plant?	64	1.7	61	2.7	66	2.2
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	73	1.5	79	1.9	66	2.5
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	72	1.9	68	2.5	75	2.5
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	77	1.8	73	2.2	81	2.6
Q06	Yes	Which of the following pictures does not show an insect?	67	1.8	69	2.8	64	2.5
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	41	1.6	39	2.4	42	2.5
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	74	1.8	73	2.4	76	2.4
R06	Yes	Which of the following groups contains only animals with a backbone?	42	1.6	46	2.1	38	2.5
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	48	2.0	50	2.7	46	2.8
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	59	2.2	59	2.6	60	2.9
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	43	1.7	43	2.4	43	2.0
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	66	2.0	66	2.6	65	2.6
X02	Yes	Write down one reason why animals could not live in a world without plants.	85	1.0	84	1.3	87	1.6
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	95	0.4	95	0.7	97	0.7
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	79	1.4	78	1.8	80	1.7
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	67	1.4	65	1.9	68	1.9
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	51	1.8	51	2.3	52	2.0
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	69	1.6	67	2.0	70	1.8
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	52	2.0	53	2.3	51	2.4
Z02	Yes	Identify skin and skeletal features of various animals	76	1.4	75	1.7	78	2.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Singapore SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	88	0.6	88	0.7	89	0.9
B01	No	A strong magnet will separate which of the following mixtures?	77	0.9	77	1.3	77	1.3
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	76	1.2	76	1.4	75	1.5
D01	No	Why are kettles and kitchen pans often made of copper?	82	1.0	81	1.2	84	1.3
E05	No	When you make soap bubbles, what is inside the bubbles?	83	0.8	83	1.0	83	1.3
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	84	1.1	86	1.2	83	1.5
G09	No	Which of the following pairs could together cause a rainbow?	86	0.9	86	1.1	86	1.2
H01	No	What happens to water when it boils?	74	1.0	77	1.3	72	1.6
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	40	1.9	41	2.5	38	2.7
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	64	2.1	66	2.7	61	2.9
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	71	1.6	68	2.6	74	2.2
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	69	1.8	70	2.5	68	2.7
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	53	1.8	54	2.3	52	2.7
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	63	2.1	65	2.6	61	3.0
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	67	2.3	66	2.8	67	2.9
P03	Yes	Which of the following is not used as an energy source?	20	1.5	22	2.3	17	1.9
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	47	2.3	50	2.5	43	3.4
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	70	1.8	72	2.4	68	2.7
P07	Yes	Which of the following travels fastest? (light)	38	2.2	44	2.8	31	2.6
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	40	2.3	40	2.5	41	3.7
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	78	1.5	79	1.9	76	2.7
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	66	1.8	68	2.5	64	2.5
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	70	1.6	69	2.2	72	2.5
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	32	1.7	37	2.2	27	2.4
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	80	1.6	78	1.9	81	2.2
R08	Yes	Which of the following makes its own light?	48	2.3	52	2.7	43	2.9
R09	Yes	Which of the following is an advantage of solar energy?	36	1.9	38	2.3	35	2.4
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	45	1.7	43	2.1	48	2.2
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	60	1.8	60	2.4	60	2.1
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	57	2.0	58	2.3	56	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Thailand SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	35	1.6	37	2.1	33	1.9
A10	No	The fossils of dinosaurs can be found where?	60	1.7	60	2.2	60	2.1
B02	No	Shown diagram, where is the saltiest water found?	69	2.0	71	1.9	66	2.8
C09	No	Where are large amounts of metals like iron and aluminum found?	38	1.9	39	2.3	37	2.8
D04	No	Shown diagram of Earth, which layer is the hottest?	61	1.8	59	2.3	64	3.0
E06	No	Which of the following is hottest? (astronomical bodies)	94	0.9	93	1.5	95	1.0
E09	No	Given several recent floods, when will it flood next?	43	1.8	40	2.4	46	2.3
F02	No	Each year the Earth moves once around which of the following?	57	2.3	60	2.4	53	3.4
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	48	2.0	46	2.8	51	2.5
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	70	1.9	77	2.1	64	2.7
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	25	1.5	26	2.3	23	1.8
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	32	2.5	32	2.9	33	2.8
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	27	3.0	27	3.7	28	4.4
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	64	2.5	63	3.5	66	3.2
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	24	3.1	24	3.7	23	4.8
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	18	2.1	22	3.4	14	2.0
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	69	2.3	64	3.3	73	2.6
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	25	1.9	28	2.7	23	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Thailand SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	92	1.0	90	1.5	94	0.9
C07	No	Which of the following is an example of the use of a renewable source?	49	2.1	49	2.4	49	3.0
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	80	2.0	79	2.5	83	2.2
O06	Yes	Write down one example of how computers help people do their work.	47	3.3	45	4.5	50	4.6
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	40	3.0	38	4.6	42	3.9
Q07	Yes	Which of the following statements is not an observation?	37	3.4	37	5.2	36	3.8
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	37	2.9	39	4.4	36	3.9
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	49	3.0	47	3.9	50	3.6
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	36	2.8	36	3.4	37	3.3
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	14	1.7	14	2.4	14	2.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Thailand SCALE=Life Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	70	1.3	68	1.9	73	1.9
B03	No	If you throw each one of these things away, which will decay fastest?	63	1.9	62	2.5	64	2.3
C06	No	Which animal eats only plants?	94	0.7	94	1.0	94	0.9
C08	No	What gas in the air do we need in order to live?	66	2.1	64	2.5	68	2.8
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	75	1.7	74	2.5	76	2.4
D03	No	Which of the following animals does not lay eggs?	96	0.8	95	1.2	97	1.0
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	46	2.2	44	3.2	47	2.4
F01	No	Which of the following plants is grown for food?	94	0.8	94	1.1	94	1.2
G05	No	Where does air go when a person breathes in?	66	2.3	69	2.9	63	2.7
G06	No	Shown diagram of plant, which part takes in the most water?	91	1.2	92	1.1	91	2.1
H02	No	How can washing your hands help keep you from getting sick?	72	2.1	68	3.2	76	2.0
H04	No	Which of the following will most likely affect your adult height?	28	1.8	32	2.3	25	2.2
N02	Yes	Which of the following refers only to living things?	77	2.7	73	4.0	82	3.0
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	28	3.0	32	4.1	25	3.4
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	29	2.3	29	3.2	29	4.1
N06	Yes	Where does a baby chick get its food while inside an egg?	36	3.5	35	4.2	37	5.2
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	25	2.8	25	4.0	25	3.9
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	78	2.4	77	3.2	78	3.7
O07	Yes	Which of the following animal produces milk for its young?	85	2.3	88	2.8	81	3.1
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	76	3.0	75	3.6	77	3.5
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	83	2.1	84	3.3	82	3.1
P08	Yes	Birds are different from insects in that birds have...	58	2.3	58	3.7	57	3.4
P09	Yes	Seeds develop from which part of a plant?	69	3.3	73	3.9	65	4.8
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	33	2.5	30	4.0	36	4.6
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	45	3.7	41	5.0	48	4.4
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	58	3.3	61	4.1	55	5.2
Q06	Yes	Which of the following pictures does not show an insect?	10	2.5	4	1.9	16	4.4
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	27	2.8	29	4.5	26	3.6
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	63	3.1	61	4.6	65	4.2
R06	Yes	Which of the following groups contains only animals with a backbone?	74	3.1	74	3.8	74	3.9
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	26	3.3	25	4.0	26	4.3
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	13	1.6	17	2.3	9	1.9
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	13	1.6	12	2.0	14	2.0
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	47	2.8	43	4.0	50	3.3
X02	Yes	Write down one reason why animals could not live in a world without plants.	57	2.5	54	3.0	60	3.1
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	75	2.0	72	3.1	78	2.3
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	52	2.3	54	2.9	51	3.4
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	37	2.2	38	3.3	37	3.1
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	23	2.0	23	2.7	22	2.8
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	20	1.7	21	2.7	19	1.8
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	11	1.5	9	2.3	13	2.4
Z02	Yes	Identify skin and skeletal features of various animals	24	1.9	23	2.0	24	2.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Thailand SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	89	0.9	89	1.1	89	1.5
B01	No	A strong magnet will separate which of the following mixtures?	66	1.7	66	2.3	67	2.3
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	69	2.3	65	2.6	73	2.9
D01	No	Why are kettles and kitchen pans often made of copper?	59	2.1	58	3.3	61	2.6
E05	No	When you make soap bubbles, what is inside the bubbles?	57	2.5	62	2.7	52	3.3
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	67	2.5	67	3.5	68	2.3
G09	No	Which of the following pairs could together cause a rainbow?	82	1.6	82	2.1	82	2.1
H01	No	What happens to water when it boils?	75	1.8	75	2.4	74	2.3
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	24	2.9	28	4.4	20	2.7
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	25	2.4	26	3.2	23	3.3
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	30	2.3	29	3.2	31	3.6
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	64	2.7	62	4.3	66	3.8
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	39	2.7	42	3.8	35	4.4
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	58	3.0	52	4.5	64	3.9
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	45	2.9	47	5.4	43	4.3
P03	Yes	Which of the following is not used as an energy source?	27	3.1	32	4.5	23	3.3
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	22	2.8	24	4.9	21	2.9
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	29	3.6	31	5.7	28	4.0
P07	Yes	Which of the following travels fastest? (light)	22	3.2	29	5.0	15	3.1
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	57	3.5	51	5.0	62	3.8
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	37	4.5	41	5.4	34	5.2
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	38	3.4	37	4.4	39	5.4
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	47	2.9	47	3.9	47	4.3
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	15	2.5	20	3.6	11	3.1
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	64	3.1	63	5.6	65	4.4
R08	Yes	Which of the following makes its own light?	25	3.4	27	4.3	23	4.0
R09	Yes	Which of the following is an advantage of solar energy?	18	2.3	23	4.0	13	2.6
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	30	2.6	25	3.5	34	3.1
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	16	2.8	17	3.9	16	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=England SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	76	1.0	80	1.2	72	1.4
A10	No	The fossils of dinosaurs can be found where?	86	0.9	85	1.2	86	1.3
B02	No	Shown diagram, where is the saltiest water found?	74	1.2	74	2.0	75	1.5
C09	No	Where are large amounts of metals like iron and aluminum found?	44	1.6	49	2.2	41	2.3
D04	No	Shown diagram of Earth, which layer is the hottest?	84	1.3	86	1.5	82	1.9
E06	No	Which of the following is hottest? (astronomical bodies)	95	0.9	94	1.3	96	0.9
E09	No	Given several recent floods, when will it flood next?	43	1.6	42	2.3	44	1.9
F02	No	Each year the Earth moves once around which of the following?	75	1.7	75	2.1	74	2.1
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	68	1.4	68	1.9	68	2.1
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	77	1.4	79	1.9	75	1.8
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	30	1.8	33	2.6	26	1.8
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	48	1.8	52	2.3	43	2.4
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	32	2.6	36	3.9	29	3.4
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	72	2.6	74	3.1	70	3.9
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	54	2.3	57	4.0	50	3.4
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	35	2.1	40	2.6	30	2.8
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	74	1.7	74	2.5	73	2.4
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	40	1.9	42	2.8	39	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=England SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	88	0.6	86	1.0	90	0.9
C07	No	Which of the following is an example of the use of a renewable source?	46	1.7	47	2.4	44	2.0
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	80	1.3	77	2.0	84	1.5
O06	Yes	Write down one example of how computers help people do their work.	74	2.5	72	3.0	76	3.4
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	43	2.5	38	3.7	47	3.4
Q07	Yes	Which of the following statements is not an observation?	53	3.0	52	3.8	53	4.0
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	48	3.2	48	4.5	48	4.0
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	52	2.1	53	2.9	52	2.8
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	35	2.2	36	2.6	34	3.2
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	28	2.0	24	2.3	33	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=England SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	76	0.9	76	1.2	76	1.2
B03	No	If you throw each one of these things away, which will decay fastest?	80	1.1	81	1.5	80	1.5
B04	No	Where do humans interpret senses?	71	1.4	70	2.1	72	1.7
C06	No	Which animal eats only plants?	91	0.9	93	1.3	90	1.1
C08	No	What gas in the air do we need in order to live?	86	1.0	86	1.6	86	1.4
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	67	1.3	67	2.2	68	2.0
D03	No	Which of the following animals does not lay eggs?	96	0.6	95	0.9	97	0.8
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	63	1.7	64	2.0	63	2.3
F01	No	Which of the following plants is grown for food?	88	0.9	89	1.2	88	1.4
G05	No	Where does air go when a person breathes in?	86	1.0	87	1.3	86	1.5
G06	No	Shown diagram of plant, which part takes in the most water?	88	1.1	88	1.4	88	1.4
H02	No	How can washing your hands help keep you from getting sick?	94	0.8	95	0.9	94	1.0
H04	No	Which of the following will most likely affect your adult height?	45	1.4	42	2.0	47	2.1
N02	Yes	Which of the following refers only to living things?	79	2.1	75	3.4	82	2.7
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	31	2.5	33	3.4	29	3.2
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	71	2.6	73	3.7	70	3.1
N06	Yes	Where does a baby chick get its food while inside an egg?	40	3.1	41	3.9	39	4.0
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	43	2.5	42	3.6	44	3.9
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	70	2.1	64	3.1	76	3.2
O07	Yes	Which of the following animal produces milk for its young?	72	2.4	72	3.4	72	3.0
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	96	1.0	95	1.7	97	1.3
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	91	1.3	92	2.1	91	2.2
P08	Yes	Birds are different from insects in that birds have...	63	2.3	57	3.7	67	3.1
P09	Yes	Seeds develop from which part of a plant?	35	2.7	36	3.8	34	3.9
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	73	2.8	75	3.5	71	3.8
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	58	2.7	53	3.5	63	3.9
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	77	2.0	79	3.0	75	3.1
Q06	Yes	Which of the following pictures does not show an insect?	43	2.8	47	3.9	40	3.9
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	67	2.5	67	3.5	66	3.4
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	87	2.0	87	2.8	87	2.4
R06	Yes	Which of the following groups contains only animals with a backbone?	47	2.7	46	4.0	47	4.0
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	68	2.8	69	3.7	67	3.7
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	61	1.8	58	2.9	63	2.6
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	28	1.6	31	2.4	24	2.3
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	55	2.2	57	2.7	53	2.7
X02	Yes	Write down one reason why animals could not live in a world without plants.	85	1.4	83	1.8	87	2.2
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	91	1.1	89	1.8	92	1.6
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	63	2.0	61	2.9	65	2.2
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	70	1.8	68	2.4	72	2.2
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	42	2.7	39	2.8	45	3.6
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	67	1.9	66	2.5	68	2.4
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	46	2.1	47	2.9	45	2.7
Z02	Yes	Identify skin and skeletal features of various animals	72	1.9	71	2.7	74	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=England SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	89	0.7	89	1.0	89	0.9
B01	No	A strong magnet will separate which of the following mixtures?	81	1.2	84	1.5	77	1.7
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	72	1.4	68	1.9	75	2.2
D01	No	Why are kettles and kitchen pans often made of copper?	70	1.5	67	2.6	73	2.0
E05	No	When you make soap bubbles, what is inside the bubbles?	71	1.3	72	2.1	70	2.0
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	75	1.6	77	2.2	74	2.1
G09	No	Which of the following pairs could together cause a rainbow?	94	0.7	92	1.0	96	0.9
H01	No	What happens to water when it boils?	72	1.5	74	2.0	70	2.1
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	29	2.5	34	4.3	25	3.1
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	61	2.5	64	3.7	58	3.8
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	75	2.1	70	3.6	79	2.7
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	54	3.0	55	4.3	53	3.7
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	38	2.8	40	4.2	36	3.8
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	63	3.1	64	3.6	62	4.1
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	53	2.9	53	3.7	54	4.3
P03	Yes	Which of the following is not used as an energy source?	36	3.2	40	5.2	32	3.7
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	27	2.3	26	3.3	28	3.2
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	59	1.9	65	3.4	55	3.2
P07	Yes	Which of the following travels fastest? (light)	50	2.4	54	3.8	48	3.6
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	60	2.8	63	3.9	57	3.3
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	66	2.7	67	4.4	66	3.8
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	61	2.8	61	4.0	61	3.6
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	72	2.8	69	3.9	74	3.2
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	29	2.3	36	3.9	24	3.3
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	69	2.6	78	3.5	60	3.5
R08	Yes	Which of the following makes its own light?	50	3.0	57	4.0	45	4.0
R09	Yes	Which of the following is an advantage of solar energy?	38	2.6	46	4.3	31	3.4
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	42	2.0	35	2.6	49	2.6
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	59	1.7	59	2.4	59	2.4
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	36	2.2	43	3.0	30	2.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Scotland SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	74	1.3	78	1.4	71	1.7
A10	No	The fossils of dinosaurs can be found where?	84	1.1	84	1.4	85	1.1
B02	No	Shown diagram, where is the saltiest water found?	75	1.4	75	1.6	75	1.9
C09	No	Where are large amounts of metals like iron and aluminum found?	34	1.9	38	2.3	30	2.1
D04	No	Shown diagram of Earth, which layer is the hottest?	84	1.1	84	1.6	85	1.4
E06	No	Which of the following is hottest? (astronomical bodies)	95	0.7	94	1.2	96	0.8
E09	No	Given several recent floods, when will it flood next?	41	1.5	40	1.9	42	2.4
F02	No	Each year the Earth moves once around which of the following?	67	2.0	69	2.8	64	2.3
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	64	1.6	64	2.1	64	2.1
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	71	1.5	74	2.1	68	2.1
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	33	1.7	35	2.2	31	2.2
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	41	1.9	42	2.3	40	2.5
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	31	2.8	38	4.4	24	3.2
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	63	2.6	62	3.7	64	3.4
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	48	3.2	53	4.5	44	4.6
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	36	2.2	44	2.4	27	2.8
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	72	1.9	74	2.6	69	2.6
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	27	1.7	27	2.4	27	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Scotland SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	88	0.7	86	1.1	89	0.8
C07	No	Which of the following is an example of the use of a renewable source?	46	1.8	45	2.6	46	2.1
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	82	1.6	79	2.2	85	1.7
O06	Yes	Write down one example of how computers help people do their work.	71	2.4	67	4.0	75	3.1
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	36	2.6	34	3.2	37	3.5
Q07	Yes	Which of the following statements is not an observation?	50	3.3	47	4.1	54	4.3
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	36	2.7	37	3.7	36	3.9
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	49	2.3	51	3.1	47	2.6
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	35	2.1	34	2.6	35	2.3
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	23	1.8	21	2.2	26	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Scotland SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	76	1.1	77	1.3	76	1.5
B03	No	If you throw each one of these things away, which will decay fastest?	67	1.8	64	2.4	70	1.9
B04	No	Where do humans interpret senses?	68	1.5	69	1.9	68	2.0
C06	No	Which animal eats only plants?	88	1.1	91	1.2	86	1.8
C08	No	What gas in the air do we need in order to live?	88	0.8	87	1.4	90	1.1
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	68	1.5	69	2.1	67	2.1
D03	No	Which of the following animals does not lay eggs?	95	0.7	95	0.9	95	1.2
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	62	2.0	61	2.8	64	2.2
F01	No	Which of the following plants is grown for food?	88	1.2	88	1.5	89	1.5
G05	No	Where does air go when a person breathes in?	85	1.2	84	1.5	86	1.6
G06	No	Shown diagram of plant, which part takes in the most water?	86	1.2	85	1.7	88	1.5
H02	No	How can washing your hands help keep you from getting sick?	93	0.8	92	1.2	95	0.8
H04	No	Which of the following will most likely affect your adult height?	38	1.8	35	2.0	42	2.3
N02	Yes	Which of the following refers only to living things?	79	2.3	76	3.3	83	2.9
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	32	2.4	33	3.6	31	3.1
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	68	2.3	66	3.3	69	2.9
N06	Yes	Where does a baby chick get its food while inside an egg?	36	2.8	37	3.6	35	4.0
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	39	2.6	36	3.6	41	3.9
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	65	2.8	63	3.8	68	3.5
O07	Yes	Which of the following animal produces milk for its young?	66	2.7	61	3.4	70	3.7
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	94	1.3	94	1.8	94	2.0
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	91	1.4	91	1.9	91	2.0
P08	Yes	Birds are different from insects in that birds have...	67	2.7	64	3.2	71	3.2
P09	Yes	Seeds develop from which part of a plant?	26	2.5	30	3.3	21	3.0
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	72	2.5	73	3.0	70	3.7
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	59	2.4	61	3.0	58	4.1
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	73	2.5	71	3.0	75	3.4
Q06	Yes	Which of the following pictures does not show an insect?	44	3.1	48	3.8	39	4.3
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	60	2.7	53	3.5	69	3.9
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	80	2.6	81	2.9	78	3.9
R06	Yes	Which of the following groups contains only animals with a backbone?	40	2.2	37	3.3	44	3.2
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	60	2.7	63	3.4	57	4.2
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	53	2.3	54	3.1	53	2.6
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	32	1.7	30	2.5	34	2.6
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	56	1.9	56	2.2	57	2.8
X02	Yes	Write down one reason why animals could not live in a world without plants.	77	1.7	75	2.5	80	1.8
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	87	1.5	88	1.9	87	1.9
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	56	1.9	53	2.9	59	2.6
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	70	2.1	69	2.8	72	2.6
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	43	1.8	42	2.2	45	2.9
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	64	2.2	66	2.7	63	3.2
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	47	2.1	48	2.4	45	3.1
Z02	Yes	Identify skin and skeletal features of various animals	71	1.5	72	2.1	69	2.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Scotland SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	89	0.7	88	0.9	90	0.9
B01	No	A strong magnet will separate which of the following mixtures?	75	1.3	76	1.9	73	1.5
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	74	1.4	71	2.1	77	2.0
D01	No	Why are kettles and kitchen pans often made of copper?	73	1.4	73	2.0	73	1.7
E05	No	When you make soap bubbles, what is inside the bubbles?	66	2.1	66	2.6	65	2.4
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	74	1.5	72	1.9	75	1.9
G09	No	Which of the following pairs could together cause a rainbow?	91	1.0	90	1.2	92	1.3
H01	No	What happens to water when it boils?	68	1.8	70	2.4	67	2.3
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	31	2.2	32	3.5	30	3.1
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	51	2.8	50	4.3	51	3.5
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	70	2.4	68	3.8	71	3.5
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	65	2.2	67	3.3	63	3.3
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	34	2.4	38	3.6	31	3.2
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	57	2.4	52	3.3	61	3.7
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	49	3.0	55	3.8	43	4.0
P03	Yes	Which of the following is not used as an energy source?	40	2.2	43	3.8	36	2.9
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	30	2.7	35	4.2	26	3.1
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	57	2.5	59	3.4	55	3.8
P07	Yes	Which of the following travels fastest? (light)	34	2.7	47	3.4	21	3.5
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	51	2.4	52	3.4	50	3.3
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	66	2.5	68	3.1	63	3.8
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	58	2.6	60	3.2	55	3.9
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	60	2.6	60	2.7	59	4.1
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	15	1.7	19	2.8	9	1.7
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	61	3.0	64	3.9	57	3.8
R08	Yes	Which of the following makes its own light?	47	2.6	47	3.5	47	3.9
R09	Yes	Which of the following is an advantage of solar energy?	38	2.5	40	3.6	34	3.2
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	40	2.0	40	2.5	41	2.6
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	49	2.2	49	2.4	49	3.3
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	44	1.7	50	2.1	36	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=United States SCALE=Earth Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	83	0.9	84	1.0	81	1.1
A10	No	The fossils of dinosaurs can be found where?	89	0.6	89	0.8	89	0.8
B02	No	Shown diagram, where is the saltiest water found?	79	1.1	78	1.2	79	1.4
C09	No	Where are large amounts of metals like iron and aluminum found?	47	1.8	52	2.2	43	2.2
D04	No	Shown diagram of Earth, which layer is the hottest?	86	1.1	89	1.4	83	1.2
E06	No	Which of the following is hottest? (astronomical bodies)	95	0.4	95	0.7	96	0.6
E09	No	Given several recent floods, when will it flood next?	51	1.3	48	1.6	54	2.4
F02	No	Each year the Earth moves once around which of the following?	77	1.3	80	1.7	74	2.0
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	73	1.0	75	1.5	72	1.4
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	72	1.1	76	1.3	67	1.7
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	28	1.4	30	2.3	26	1.8
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	41	1.1	45	1.8	38	1.5
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	54	2.3	54	3.1	54	3.0
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	75	1.8	76	3.0	75	2.8
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	53	2.4	54	2.9	51	2.9
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	33	1.5	38	2.5	28	1.8
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	83	1.1	84	1.6	82	1.6
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	28	1.5	29	2.0	27	1.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=United States SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	89	0.5	89	0.9	90	0.5
C07	No	Which of the following is an example of the use of a renewable source?	49	1.0	52	1.6	46	1.5
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	85	0.7	83	1.0	86	1.0
O06	Yes	Write down one example of how computers help people do their work.	81	1.7	81	2.5	82	2.0
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	61	2.0	54	2.4	67	2.8
Q07	Yes	Which of the following statements is not an observation?	58	2.1	59	3.4	58	3.2
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	54	1.9	56	2.7	51	2.6
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	59	1.5	59	2.1	59	2.3
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	48	1.5	49	2.4	47	2.1
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	46	1.3	43	1.9	50	2.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=United States SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	71	0.7	71	1.0	72	1.0
B03	No	If you throw each one of these things away, which will decay fastest?	79	1.2	80	1.1	79	1.6
B04	No	Where do humans interpret senses?	72	1.1	73	1.2	71	1.4
C06	No	Which animal eats only plants?	94	0.5	94	0.7	93	0.7
C08	No	What gas in the air do we need in order to live?	87	0.8	86	1.0	87	1.2
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	80	0.9	81	1.3	78	1.3
D03	No	Which of the following animals does not lay eggs?	96	0.6	96	1.1	96	0.5
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	68	1.3	68	1.5	67	1.7
F01	No	Which of the following plants is grown for food?	86	0.9	88	1.1	84	1.3
G05	No	Where does air go when a person breathes in?	89	0.8	89	1.0	89	1.0
G06	No	Shown diagram of plant, which part takes in the most water?	88	0.9	88	1.0	88	1.1
H02	No	How can washing your hands help keep you from getting sick?	96	0.5	96	0.6	97	0.6
H04	No	Which of the following will most likely affect your adult height?	41	1.6	42	2.0	40	1.8
N02	Yes	Which of the following refers only to living things?	74	1.8	72	3.2	75	1.7
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	62	2.2	64	2.7	59	2.8
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	68	2.7	69	3.6	67	2.7
N06	Yes	Where does a baby chick get its food while inside an egg?	44	2.9	44	3.3	45	3.3
O02	Yes	Why did seeds placed on moist cotton sprout, but not those covered with water?	46	2.2	42	3.0	49	2.8
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	81	1.5	83	1.8	78	2.1
O07	Yes	Which of the following animal produces milk for its young?	71	2.1	71	3.2	71	2.8
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	97	0.6	97	1.0	97	0.8
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	95	0.7	95	1.4	95	0.9
P08	Yes	Birds are different from insects in that birds have...	69	1.9	68	3.1	70	1.9
P09	Yes	Seeds develop from which part of a plant?	37	1.9	39	3.2	36	2.3
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	80	1.4	82	2.3	77	2.0
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	62	1.9	65	2.8	59	2.9
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	80	1.5	78	2.7	82	2.3
Q06	Yes	Which of the following pictures does not show an insect?	62	2.0	65	2.5	59	3.3
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	60	2.2	56	2.8	65	2.8
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	83	1.8	83	1.9	83	3.4
R06	Yes	Which of the following groups contains only animals with a backbone?	55	2.0	58	2.8	52	3.1
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	59	2.1	62	2.8	57	3.1
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	64	1.6	65	2.3	63	1.6
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	29	1.6	30	2.2	29	2.1
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	58	1.6	59	2.5	57	2.5
X02	Yes	Write down one reason why animals could not live in a world without plants.	83	1.1	81	2.0	85	1.5
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	94	0.6	94	0.7	93	0.9
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	59	1.9	60	2.7	59	2.3
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	74	1.4	74	1.7	74	1.9
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	53	1.2	53	2.3	53	2.0
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	77	1.3	79	1.5	76	1.8
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	64	1.6	67	2.2	61	1.9
Z02	Yes	Identify skin and skeletal features of various animals	78	1.3	81	1.8	76	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=United States SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall	Boys		Girls		
			% (se)	% (se)	% (se)	% (se)		
A06	No	Shown three objects floating in water, which weighs the most?	89	0.5	90	0.6	89	0.6
B01	No	A strong magnet will separate which of the following mixtures?	77	0.9	81	0.9	73	1.4
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	70	1.1	69	1.6	70	1.4
D01	No	Why are kettles and kitchen pans often made of copper?	75	1.2	73	1.4	77	1.6
E05	No	When you make soap bubbles, what is inside the bubbles?	76	1.2	79	1.8	74	1.6
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	84	1.1	84	1.6	83	1.1
G09	No	Which of the following pairs could together cause a rainbow?	91	0.7	91	1.1	92	0.8
H01	No	What happens to water when it boils?	82	1.2	84	1.3	81	1.4
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	31	1.8	27	2.3	36	2.7
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	60	2.0	61	3.4	60	2.2
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	71	2.0	66	2.6	76	2.4
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	62	2.5	62	4.1	61	2.4
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	44	2.1	53	3.4	36	2.8
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	57	2.4	56	3.7	58	2.7
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	53	2.5	57	3.2	50	3.2
P03	Yes	Which of the following is not used as an energy source?	38	1.8	39	2.7	36	2.4
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	21	1.6	25	2.2	18	2.0
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	53	2.3	57	3.0	50	3.3
P07	Yes	Which of the following travels fastest? (light)	43	1.9	54	3.1	34	2.5
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	51	2.4	55	2.8	47	3.1
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	62	2.7	70	3.9	53	3.6
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	43	2.4	46	3.4	40	3.3
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	69	2.2	70	3.6	67	4.0
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	21	1.8	22	2.5	19	2.7
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	72	1.9	70	3.0	75	2.4
R08	Yes	Which of the following makes its own light?	55	2.5	60	3.0	51	4.1
R09	Yes	Which of the following is an advantage of solar energy?	47	1.8	57	3.1	36	2.5
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	43	1.6	42	2.0	44	2.5
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	67	1.6	67	1.7	67	2.3
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	42	1.5	47	1.8	37	2.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Slovenia SCALE=Earth Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A08	No	What covers most of the Earth's surface?	82	0.9	84	1.2	81	1.4
A10	No	The fossils of dinosaurs can be found where?	81	1.1	82	1.3	80	1.5
B02	No	Shown diagram, where is the saltiest water found?	87	1.1	89	1.3	86	1.6
C09	No	Where are large amounts of metals like iron and aluminum found?	48	2.1	50	2.7	46	2.6
D04	No	Shown diagram of Earth, which layer is the hottest?	81	1.5	84	1.7	79	2.2
E06	No	Which of the following is hottest? (astronomical bodies)	97	0.5	97	0.8	98	0.7
E09	No	Given several recent floods, when will it flood next?	64	1.7	62	2.0	66	2.4
F02	No	Each year the Earth moves once around which of the following?	65	2.2	68	2.5	62	3.3
F03	No	Shown diagrams of rocks before and after being rubbed against hard steel, circle hardest rock.	72	1.8	75	2.1	70	3.0
G07	No	Shown several diagrams of a tree and its shadow, which shows the shadow at noon?	82	1.3	86	1.7	79	2.2
G08	No	Which of the following pictures best shows how an iceberg floats in sea water?	33	1.4	34	2.1	32	2.1
H03	No	Shown diagram with river, draw an arrow showing direction of water flow.	57	2.1	60	2.6	54	2.7
N01	Yes	Given temperatures and precipitation (table) in four towns, where could it have snowed?	55	2.9	56	3.8	55	4.2
O04	Yes	The Moon produces no light, and yet it shines at night. Why is this?	72	2.8	72	4.1	72	3.5
O09	Yes	Why do mountains sometimes still have snow on their tops when the snow on lower parts has melted?	47	3.4	44	4.4	51	4.0
Y01	Yes	Why do the sun and Moon appear the same size when you look at them from Earth?	29	2.2	34	3.5	24	2.6
Z01A	Yes	Shown diagram of river flowing through wide plain, write one reason this is a good place for farming	59	2.3	55	3.3	62	3.0
Z01B	Yes	Shown diagram of river flowing through wide plain, write one reason this is a bad place for farming	36	2.0	35	3.2	38	2.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Slovenia SCALE=Environment and other content

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A07	No	Which plant is not usually grown for food?	82	1.0	81	1.1	84	1.3
C07	No	Which of the following is an example of the use of a renewable source?	37	1.9	41	2.3	34	2.4
E08	No	What happens to plants and fish when a factory pours large amounts of hot water into a river?	84	1.3	81	2.0	87	1.5
O06	Yes	Write down one example of how computers help people do their work.	76	2.5	75	3.9	77	3.6
P06	Yes	To find out whether seeds grow better in light or dark, where would you put seeds?	36	2.5	32	3.5	40	3.9
Q07	Yes	Which of the following statements is not an observation?	38	3.1	40	4.6	36	3.6
R02	Yes	Which statement gives the best start toward finding which of three light bulbs is brightest?	37	3.0	35	3.9	39	3.8
W05A	Yes	Write down two different things that people can do to help reduce air pollution. 1st reason.	69	2.5	68	3.0	70	3.4
W05B	Yes	Write down two different things that people can do to help reduce air pollution. 2nd reason.	47	2.6	45	3.6	49	2.9
X03	Yes	Write as completely as possible why large oil spills in rivers and seas are harmful to the environment.	21	1.8	18	2.6	24	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Slovenia SCALE=Life Science

ITEM	REL	LABEL	Fourth Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A09	No	What happens if the body takes in more food than it uses?	73	1.2	70	1.4	75	1.7
B03	No	If you throw each one of these things away, which will decay fastest?	56	1.9	56	2.2	55	2.5
B04	No	Where do humans interpret senses?	30	1.6	34	2.1	24	2.2
C06	No	Which animal eats only plants?	98	0.6	97	0.8	99	0.6
C08	No	What gas in the air do we need in order to live?	87	1.3	88	1.5	86	2.0
D02	No	Shown diagram of mouth, which teeth are used for grinding food?	79	1.5	75	1.9	82	1.8
D03	No	Which of the following animals does not lay eggs?	93	0.8	93	1.0	93	1.3
E07	No	What changes would you expect in pulse and breathing after running a 50 metre race?	75	1.9	74	2.5	76	2.3
F01	No	Which of the following plants is grown for food?	86	1.4	87	2.0	86	2.1
G05	No	Where does air go when a person breathes in?	91	1.2	92	1.5	90	1.9
G06	No	Shown diagram of plant, which part takes in the most water?	86	1.5	87	1.7	86	2.1
H02	No	How can washing your hands help keep you from getting sick?	87	1.4	85	1.6	89	1.9
H04	No	Which of the following will most likely affect your adult height?	57	1.7	56	2.4	58	2.2
N02	Yes	Which of the following refers only to living things?	84	2.6	84	3.1	83	4.3
N03	Yes	Which of the following Celsius measures is closest to your temperature when you are not sick?	59	2.7	57	4.0	61	4.3
N05	Yes	Shown drawing of a bird's webbed foot, where would you be most likely to find such a bird?	71	2.6	74	3.9	67	3.3
N06	Yes	Where does a baby chick get its food while inside an egg?	60	3.2	62	4.4	60	4.4
O02	Yes	Why did seeds placed on most cotton sprout, but not those covered with water?	38	2.7	36	4.3	41	4.1
O03	Yes	Shown pictures of the stages of a plants growth, in which order did they occur?	77	2.5	74	4.6	79	3.5
O07	Yes	Which of the following animal produces milk for its young?	83	2.0	86	2.9	80	3.2
P01	Yes	When this caterpillar becomes an adult, which of the following pictures will it look like?	87	1.9	88	2.5	87	2.9
P02	Yes	Which of the following pictures shows plants commonly found in a desert?	89	2.0	91	2.3	87	3.0
P08	Yes	Birds are different from insects in that birds have...	42	2.8	43	3.8	41	4.2
P09	Yes	Seeds develop from which part of a plant?	68	2.7	69	4.0	68	4.1
Q01	Yes	Shown pictures of the stages in a butterfly's development, in which order did they take place?	56	2.8	57	4.1	55	4.7
Q02	Yes	What is the best reason for including fruits and leafy vegetables in a healthy diet?	80	2.5	77	4.3	83	2.9
Q05	Yes	When an animal breathes faster and its heart beats faster, the animal is most likely...	79	2.3	80	3.1	78	3.6
Q06	Yes	Which of the following pictures does not show an insect?	39	3.6	38	5.2	41	4.2
R03	Yes	What will likely happen when an insect carries pollen from the flowers of a tree to those of a small plant?	79	2.4	77	3.8	81	2.9
R04	Yes	What is the most important reason for people to use a sunscreen when they are outside in sunlight?	85	2.6	81	4.3	89	2.4
R06	Yes	Which of the following groups contains only animals with a backbone?	41	2.9	44	4.0	37	4.5
R07	Yes	Select environment a worm would prefer in terms of light and moisture.	63	3.0	65	4.6	62	3.1
W02	Yes	Write down one thing your heart does that helps the other parts of your body.	49	2.3	49	3.0	49	2.9
W03	Yes	Write down the reason why we get thirsty on a hot day and have to drink a lot.	44	2.6	44	3.2	43	3.6
W04	Yes	The human brain is inside the skull. Write down one advantage of the skull being thick and strong.	46	2.2	46	2.7	47	3.1
X02	Yes	Write down one reason why animals could not live in a world without plants.	87	1.6	84	2.3	90	2.0
X04	Yes	Shown pictures of stages in a frog's growth, indicate order of the stages.	89	1.5	85	2.3	91	2.1
X05	Yes	Identify characteristics of fish with respect to backbone and environment.	76	1.8	73	2.8	78	2.2
Y02A	Yes	Write down two changes that occur in children's bodies as they become adults. 1st answer	55	2.3	56	3.4	53	3.0
Y02B	Yes	Write down two changes that occur in children's bodies as they become adults. 2nd answer	25	2.3	24	2.6	25	2.9
Y03A	Yes	Besides escaping, what are two ways animals protect themselves? 1st answer	67	2.0	65	2.9	69	2.7
Y03B	Yes	Besides escaping, what are two ways animals protect themselves? 2nd answer	41	2.4	40	3.1	43	3.0
Z02	Yes	Identify skin and skeletal features of various animals	67	2.1	68	2.5	67	3.0

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Slovenia SCALE=Physical Science

			Fourth Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Shown three objects floating in water, which weighs the most?	88	0.7	89	0.8	88	1.1
B01	No	A strong magnet will separate which of the following mixtures?	73	1.7	77	2.4	70	2.4
C05	No	Same brick is put on a scale in three different ways. What will the scale show?	89	1.2	88	1.7	91	1.4
D01	No	Why are kettles and kitchen pans often made of copper?	68	2.2	66	2.6	72	3.0
E05	No	When you make soap bubbles, what is inside the bubbles?	70	1.5	74	2.0	67	2.3
F04	No	Which of the following sets of time measurements is in order from shortest to longest?	87	1.4	85	1.6	89	2.0
G09	No	Which of the following pairs could together cause a rainbow?	93	1.0	93	1.3	94	1.4
H01	No	What happens to water when it boils?	95	0.9	94	1.6	96	1.0
N04	Yes	Shown picture of block of wood floating in fresh water, select picture of block in salt water.	46	3.2	46	4.0	45	4.7
N07	Yes	Where does Keisha get the energy to push her bicycle uphill?	46	2.8	42	4.5	49	4.1
N08	Yes	What is a powder made up of both white specks and black specks is likely to be? (mixture)	61	3.2	61	4.4	62	4.9
N09	Yes	Shown diagrams of various boxes on scales, which has the least mass?	61	3.0	70	3.9	53	4.2
O01	Yes	Which picture shows the best way for 50 kg child to balance 25 kg child on seesaw?	54	3.0	62	4.5	47	3.5
O05	Yes	Shown diagram of a beam of light striking a mirror, which diagram shows reflected beam?	56	2.7	51	4.2	60	3.8
O08	Yes	Which of the following is the easiest way to separate a mixture of iron filings and sand?	47	3.1	46	4.6	48	4.1
P03	Yes	Which of the following is not used as an energy source?	40	3.2	45	4.4	35	4.3
P04	Yes	Compare mass of beaker of water and a weight with mass of beaker of water with weight inside.	48	2.8	50	4.4	47	4.0
P05	Yes	Shown pictures of magnets after being dipped into substance below it, which substance could be coffee?	52	3.0	60	4.4	44	4.0
P07	Yes	Which of the following travels fastest? (light)	50	3.3	57	4.2	42	4.8
Q03	Yes	Which item is most likely to stay the same after being buried in wet ground for several years?	67	3.1	67	4.4	65	3.6
Q04	Yes	When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen?	94	1.5	96	1.6	92	2.5
Q08	Yes	Shown picture of pencil lying in front of mirror, draw reflection of the pencil.	55	3.1	62	4.0	47	4.2
Q09	Yes	Why does the liquid in a thermometer rise when exposed to heat?	40	3.1	44	4.3	37	4.3
R01	Yes	A watering can is almost filled with water. Draw line to show surface of the water when can is tipped.	25	2.6	32	3.8	19	3.3
R05	Yes	Shown picture of children playing with string telephone, one string tight and one slack, who can hear?	52	2.8	51	4.1	52	3.7
R08	Yes	Which of the following makes its own light?	56	2.9	55	4.6	57	4.5
R09	Yes	Which of the following is an advantage of solar energy?	55	3.0	57	4.1	53	3.9
W01	Yes	Shown pictures of sugar cubes and loose sugar, which will dissolve faster? Why?	32	2.4	29	2.9	34	3.0
X01	Yes	Shown pictures of bowls of soup, one covered and one uncovered, which will stay hot longer? Why?	45	2.4	44	3.3	47	3.4
Z03	Yes	Shown diagram of blocks being compared on balances, which weighs the most? Why?	36	2.5	44	2.9	30	3.3

REL: Release Status (Yes= Item in Released Item Set)