In this questionnaire you will find questions about the following topics:

- You, your family, and your home
- · How you think about your life
- · Your school
- · Your school schedule and learning time
- · School science learning in school
- · Your view on science

Please read each question carefully and answer as accurately as you can.

In this questionnaire, there are no right or wrong answers. Your answers should be the ones that are right for yourself.

You may ask for help if you do not understand something or are not sure how to answer a question.

Some questions relate to school science. Please think of all the different subjects and courses in your school that teach content related to broad science. Broad science is science in general and is not limited to subjects or courses that are taught at school. Your school might teach school science in different subjects such as physics, chemistry, biology, Earth and geology, space and astronomy, applied sciences and technology (e.g. design and technology), or your school teaches a general or integrated science course (e.g. Science (Physics/Chemistry), Science Syllabus T).

Please note that the forward button used to proceed to the next question is located at the bottom right hand corner of your screen. In some instances you may need to scroll down to the bottom of your screen to access this forward button.

Your answers will be combined with others to make totals and averages in which no individual can be identified. All your answers will be kept confidential.



What level of study (e.g. Sec 4, Grade 10) are you in? (Please select from the drop-down menu to answer the question.) ST001Q01TA01 Level of Study Select... • Level of Study (ST001Q01TA01) Select... Secondary 1 or Grade 7 Secondary 2 or Grade 8 Secondary 3 or Grade 9 Secondary 4 or Grade 10 Secondary 5 JC1 or Grade 11 JC2 or Grade 12

Which one of the following programmes are you in?	
Please select one response.)	
	CT002001T401
Secondary education	ST002Q01TA01
Post-secondary education	ST002Q01TA02

On what date were you born?

(Please select the day, month, and year from the drop-down menus to answer the question.)

Day

ST003Q01TA01

Select...

• Day (ST003Q01TA01) Select...

25

29

ST003Q02TA01 Month Select... Month (ST003Q02TA01) Select... January February March April May June July August September October November December ST003Q03TA01 Year Select... • Year (ST003Q03TA01) Select... 1998 1999 2000 2001

Consistency check rule

Rule: IF ($^ST003Q01TA01 = null OR ^ST003Q02TA01 = null OR ^ST003Q03TA01 = null)$

Message: Please enter your complete birth date.

Are you female or male?	
Please select one response.)	
emale	ST004Q01TA01
ale	ST004Q01TA02

What is the highest level of schooling completed by your mother?	
If you are not sure which box to choose, please ask the test administrator for help. (Please select one response.)	
Upper secondary education	ST005Q01TA01
Lower secondary education	ST005Q01TA03
Primary education	ST005Q01TA04
She did not complete primary education	ST005Q01TA05

Does	your	mother	have	any	of the	following	qualifications?
------	------	--------	------	-----	--------	-----------	-----------------

If you are not sure how to answer this question, please ask the test administrator for help.

	Yes	No
PhD	ST006Q01TA01	ST006Q01TA02
University Bachelor's degree (with/without honours), Master's degree	ST006Q02TA01	ST006Q02TA02
Polytechnic diploma	ST006Q03TA01	ST006Q03TA02
Post-secondary certification (e.g. GCE A-level or ITE certification)	ST006Q04TA01	ST006Q04TA02

you are not sure which box to choose, please ask the test administrator for help.	
lease select one response.)	
pper secondary education	ST007Q01TA01
ower secondary education	ST007Q01TA03
imary education	ST007Q01TA04
e did not complete primary education	ST007Q01TA05

Does your father have any of the following qualifications?

If you are not sure how to answer this question, please ask the test administrator for help.

	Yes	No
PhD	ST008Q01TA01	ST008Q01TA02
University Bachelor's degree (with/without honours), Master's degree	ST008Q02TA01	ST008Q02TA02
Polytechnic diploma	ST008Q03TA01	ST008Q03TA02
Post-secondary certification (e.g. GCE A-level or ITE certification)	ST008Q04TA01	ST008Q04TA02

Which of the following are in your home?

	Yes	No
A desk to study at	ST011Q01TA01	ST011Q01TA02
A room of your own	ST011Q02TA01 O	ST011Q02TA02
A quiet place to study	ST011Q03TA01	ST011Q03TA02
A computer you can use for school work	ST011Q04TA01 O	ST011Q04TA02
Educational software	ST011Q05TA01	ST011Q05TA02
A link to the Internet	ST011Q06TA01	ST011Q06TA02
Classic literature (e.g. Shakespeare)	ST011Q07TA01	ST011Q07TA02
Books of poetry	ST011Q08TA01 O	ST011Q08TA02
Works of art (e.g. paintings)	ST011Q09TA01	ST011Q09TA02
Books to help with your school work	ST011Q10TA01	ST011Q10TA02

Technical reference books	ST011Q11TA01	ST011Q11TA02
A dictionary	ST011Q12TA01	ST011Q12TA02
Books on art, music, or design	ST011Q16NA01	ST011Q16NA02
Air-conditioner	ST011Q17TA01	ST011Q17TA02
Domestic helper (e.g. full/part-time maid)	ST011Q18TA01	ST011Q18TA02

How many of these are there at your home?

	None	One	Тwo	Three or more
Televisions	ST012Q01TA01	ST012Q01TA02	ST012Q01TA03	ST012Q01TA04
Cars	ST012Q02TA01	ST012Q02TA02	ST012Q02TA03	ST012Q02TA04
Rooms with a bath or shower	ST012Q03TA01	ST012Q03TA02	ST012Q03TA03	ST012Q03TA04
Hand phones with Internet access (e.g. smartphones)	ST012Q05NA01	ST012Q05NA02	ST012Q05NA03	ST012Q05NA04
Computers (desktop computer, portable laptop, or notebook)	ST012Q06NA01	ST012Q06NA02	ST012Q06NA03	ST012Q06NA04
Tablet computers (e.g. iPad®, Samsung® Galaxy Tab™)	ST012Q07NA01	ST012Q07NA02	ST012Q07NA03	ST012Q07NA04
E-book readers (e.g. Kindle™, Kobo)	ST012Q08NA01	ST012Q08NA02	ST012Q08NA03	ST012Q08NA04
Musical instruments (e.g. guitar, piano)	ST012Q09NA01	ST012Q09NA02	ST012Q09NA03	ST012Q09NA04

How	many	books	are	there	in	your	home?
-----	------	-------	-----	-------	----	------	-------

There are usually about 40 books per metre of shelving. Do not include magazines, newspapers, or your school books.

(Please select one response.)

0-10 books	ST013Q01TA01
11-25 books	ST013Q01TA02
26-100 books	ST013Q01TA03
101-200 books	ST013Q01TA04
201-500 books	ST013Q01TA05
More than 500 books	ST013Q01TA06

The following two questions concern your mother's job:	
she is not working now, please tell us her last main job.)	
hat is your mother's main job? .g. school teacher, kitchen-hand, sales manager) ease type in the job title.	ST014Q01TA01
hat does your mother do in her main job? .g. teaches high school students, helps the cook prepare meals in a restaurant, manages a sales team) ease use a sentence to describe the kind of work she does or did in that job.	ST014Q02TA01

The following two questions concern your father's job:	
he is not working now, please tell us his last main job.)	
hat is your father's main job? e.g. school teacher, kitchen-hand, sales manager) lease type in the job title.	ST015Q01TA01
hat does your father do in his main job? e.g. teaches high school students, helps the cook prepare meals in a restaurant, manages a sales team) lease use a sentence to describe the kind of work he does or did in that job.	ST015Q02TA01

Thinking about the previous academic year: to what extent do you disagree or agree with the following statements?

	Strongly disagree	Disagree	Agree	Strongly agree
My parents are interested in my school activities.	ST123Q01NA01	ST123Q01NA02	ST123Q01NA03	ST123Q01NA04
My parents support my educational efforts and achievements.	ST123Q02NA01	ST123Q02NA02	ST123Q02NA03	ST123Q02NA04
My parents support me when I am facing difficulties at school.	ST123Q03NA01	ST123Q03NA02	ST123Q03NA03	ST123Q03NA04
My parents encourage me to be confident.	ST123Q04NA01	ST123Q04NA02	ST123Q04NA03	ST123Q04NA04

In what country were you and your parents born?			
(Please select one response in each column.)			
	You	Mother	Father
Singapore	ST019AQ01T01	ST019BQ01T01	ST019CQ01T01
Other country	ST019AQ01T06	ST019BQ01T06	ST019CQ01T06

Branching rule

Rule: IF ^ST019AQ01T01 = 0 THEN GOTO ^ST021 ELSE GOTO ^ST022

How old were you when you arrived in Singapore?

(Please select from the drop-down menu to answer the question. If you were less than 12 months old, please select "age 0-1" (age zero to one).)



• (ST021Q01TA01) Select... age 0 - 1 age 1 age 2 age 3 age 4 age 5 age 6 age 7 age 8 age 9 age 10 age 11 age 12 age 13 age 14 age 15

age 16

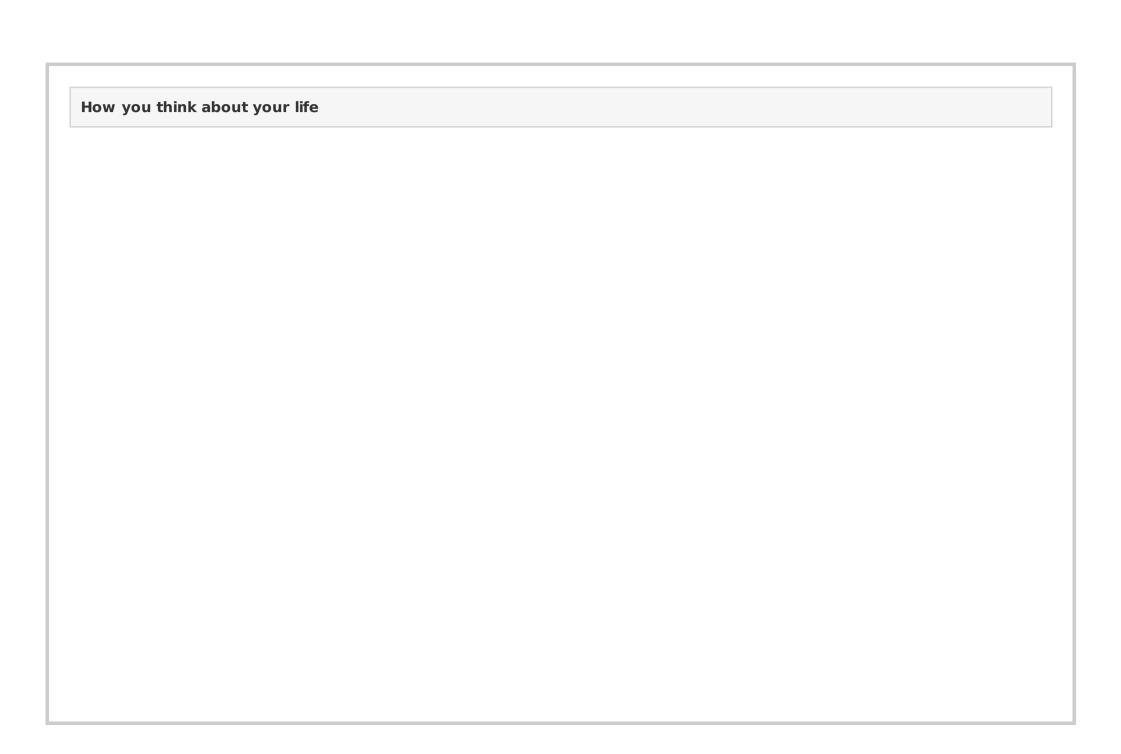
What language do you speak at home most of the time?	
Please select one response.)	
inglish	ST022Q01TA01
Chinese	ST022Q01TA02
1a la y	ST022Q01TA03
āmil	ST022Q01TA04
Other language	ST022Q01TA05

How old were you when you started pre-school or kindergarten? (Please choose from the drop-down menu to answer the question.) ST125Q01NA01 Years Select... • Years (ST125Q01NA01) Select... 1 year or younger 2 years 3 years 4 years 5 years 6 years or older I did not attend pre-school or kindergarten I do not remember

How old were you when you started primary school? (Please choose from the drop-down menu to answer the question.) Years • Years (ST126Q01TA01) Select... 3 or younger 4 5 6 7 8 9 or older

Have you	ever re	peated a	level of	study?
----------	---------	----------	----------	--------

	No, never	Yes, once	Yes, twice or more
During primary school	ST127Q01TA01	ST127Q01TA02	ST127Q01TA03
During lower secondary education	ST127Q02TA01	ST127Q02TA02	ST127Q02TA03
During upper secondary education	ST127Q03TA01	ST127Q03TA02	ST127Q03TA03



Which of the following do you <u>expect</u> to complete?	
Please select one response.)	
Lower secondary	ST111Q01TA01
Upper secondary	ST111Q01TA03
Post-secondary certification (e.g. GCE A-level or ITE certification)	STI11Q01TA04
Polytechnic diploma	ST111Q01TA05
University Bachelor's Degree (with/without honours), Masters Degree	ST111Q01TA06

ease type in the job title.		ST114Q01TA01	

To what extent do you disagree or agree with the following statements about yourself?

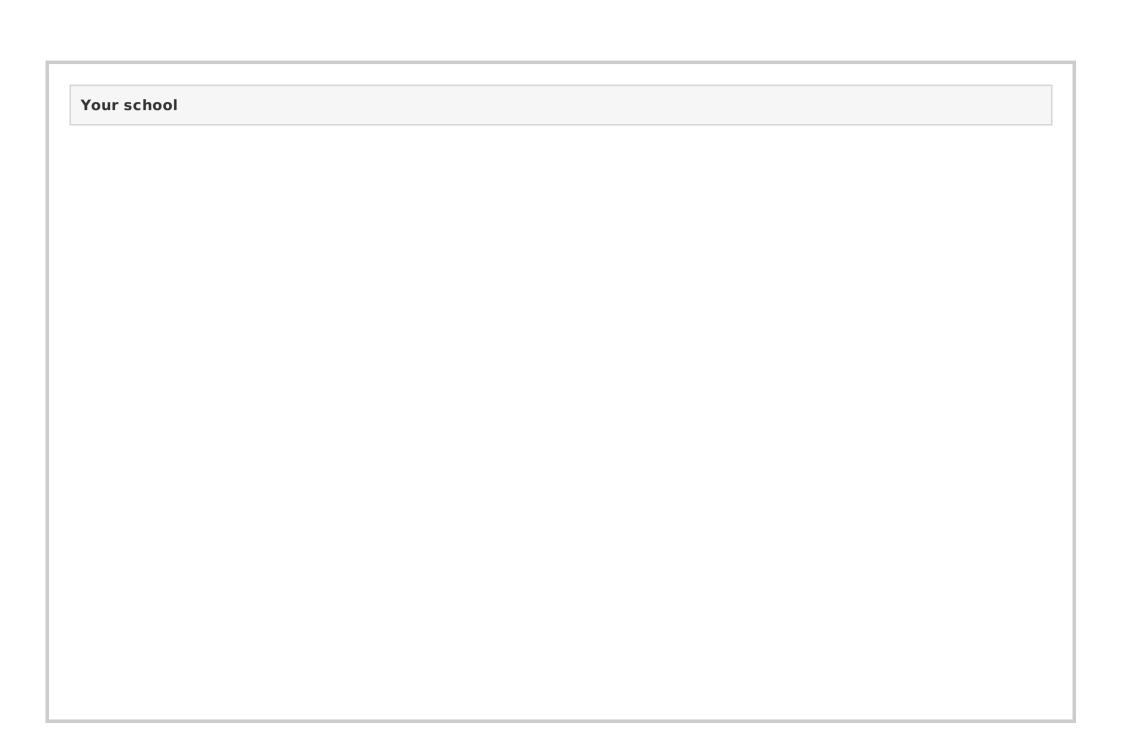
	Strongly disagree	Disagree	Agree	Strongly agree
I often worry that it will be difficult for me taking a test.	ST118Q01NA01	ST118Q01NA02	ST118Q01NA03	ST118Q01NA04
I worry that I will get poor grades at school.	ST118Q02NA01	ST118Q02NA02	ST118Q02NA03	ST118Q02NA04
Even if I am well-prepared for a test I feel very anxious.	ST118Q03NA01	ST118Q03NA02	ST118Q03NA03	ST118Q03NA04
I get very tense when I study for a test.	ST118Q04NA01	ST118Q04NA02	ST118Q04NA03	ST118Q04NA04
I get nervous when I don't know how to solve a task at school.	ST118Q05NA01	ST118Q05NA02	ST118Q05NA03	ST118Q05NA04

To what extent do you disagree or agree with the following statements about yourself?

	Strongly disagree	Disagree	Agree	Strongly agree
I want top grades in most or all of my courses.	ST119Q01NA01	STI19Q01NA02	ST119Q01NA03	ST119Q01NA04
I want to be able to select from among the best opportunities available when I graduate.	ST119Q02NA01 O	ST119Q02NA02	ST119Q02NA03	ST119Q02NA04
I want to be the best, whatever I do.	ST119Q03NA01	ST119Q03NA02	ST119Q03NA03	ST119Q03NA04
I see myself as an ambitious person.	ST119Q04NA01	ST119Q04NA02	ST119Q04NA03	STI19Q04NA04
I want to be one of the best students in my class.	ST119Q05NA01	ST119Q05NA02	ST119Q05NA03	ST119Q05NA04

Please read the descriptions about the following three students. Based on the information provided here, how much would you disagree or agree with the statement that this student is <u>motivated</u>?

	Strongly disagree	Disagree	Agree	Strongly agree
William gives up easily when confronted with a problem and is often not prepared for his classes. William is motivated.	ST121Q01NA01	ST121Q01NA02 O	ST121Q01NA03	ST121Q01NA04
Susan mostly remains interested in the tasks she starts and sometimes does more than what is expected from her. Susan is motivated.	ST121Q02NA01	ST121Q02NA02	ST121Q02NA03	ST121Q02NA04
David wants to get top grades at school and continues working on tasks until everything is perfect. David is motivated.	ST121Q03NA01	ST121Q03NA02	ST121Q03NA03	ST121Q03NA04



To what extent do you disagree or agree with the following statements about yourself?

	Strongly disagree	Disagree	Agree	Strongly agree
I prefer working as part of a team to working alone.	ST082Q01NA01	ST082Q01NA02	ST082Q01NA03	ST082Q01NA04
I am a good listener.	ST082Q02NA01	ST082Q02NA02	ST082Q02NA03	ST082Q02NA04
I enjoy seeing my classmates be successful.	ST082Q03NA01	ST082Q03NA02	ST082Q03NA03	ST082Q03NA04
I take into account what others are interested in.	ST082Q08NA01	ST082Q08NA02	ST082Q08NA03	ST082Q08NA04
I find that teams make better decisions than individuals.	ST082Q09NA01	ST082Q09NA02	ST082Q09NA03	ST082Q09NA04
I enjoy considering different perspectives.	ST082Q12NA01	ST082Q12NA02	ST082Q12NA03	ST082Q12NA04
I find that teamwork raises my own efficiency.	ST082Q13NA01	ST082Q13NA02	ST082Q13NA03	ST082Q13NA04
I enjoy cooperating with peers.	ST082Q14NA01	ST082Q14NA02	ST082Q14NA03	ST082Q14NA04 O

Thinking about your school: to what extent do you agree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
I feel like an outsider (or left out of things) at school.	ST034Q01TA01	ST034Q01TA02	ST034Q01TA03	ST034Q01TA04
I make friends easily at school.	ST034Q02TA01	ST034Q02TA02	ST034Q02TA03	ST034Q02TA04
I feel like I belong at school.	ST034Q03TA01	ST034Q03TA02	ST034Q03TA03	ST034Q03TA04
I feel awkward and out of place at my school.	ST034Q04TA01	ST034Q04TA02	ST034Q04TA03	ST034Q04TA04
Other students seem to like me	ST034Q05TA01	ST034Q05TA02	ST034Q05TA03	ST034Q05TA04
I feel lonely at school.	ST034Q06TA01	ST034Q06TA02	ST034Q06TA03	ST034Q06TA04

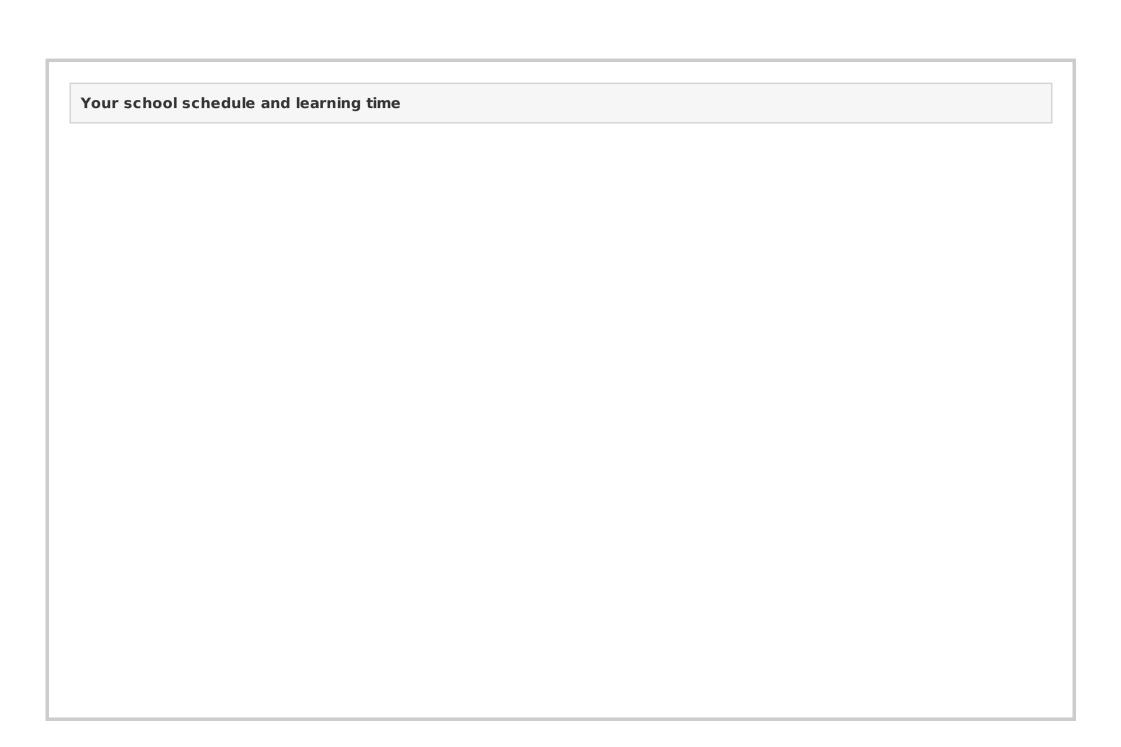
During the past 12 months, how often have you had the following experiences at school?

	Never or almost never	A few times a year	A few times a month	Once a week or more
Teachers called on me less often than they called on other students.	ST039Q01NA01	ST039Q01NA02	ST039Q01NA03	ST039Q01NA04
Teachers graded me harder than they graded other students.	ST039Q02NA01	ST039Q02NA02 O	ST039Q02NA03	ST039Q02NA04
Teachers gave me the impression that they think I am less smart than I really am.	ST039Q03NA01	ST039Q03NA02	ST039Q03NA03	ST039Q03NA04
Teachers disciplined me more harshly than other students.	ST039Q04NA01	ST039Q04NA02	ST039Q04NA03	ST039Q04NA04
Teachers ridiculed me in front of others.	ST039Q05NA01	ST039Q05NA02	ST039Q05NA03	ST039Q05NA04
Teachers said something insulting to me in front of others.	ST039Q06NA01	ST039Q06NA02	ST039Q06NA03	ST039Q06NA04

During the past 12 months, how often have you had the following experiences in school?

	Never or almost never	A few times a year	A few times a month	Once a week or more
I got called names by other students.	ST038Q01NA01	ST038Q01NA02	ST038Q01NA03	ST038Q01NA04
I got picked on by other students.	ST038Q02NA01	ST038Q02NA02	ST038Q02NA03	ST038Q02NA04
Other students left me out of things on purpose.	ST038Q03NA01	ST038Q03NA02	ST038Q03NA03	ST038Q03NA04
Other students made fun of me.	ST038Q04NA01	ST038Q04NA02	ST038Q04NA03	ST038Q04NA04
I was threatened by other students.	ST038Q05NA01	ST038Q05NA02	ST038Q05NA03	ST038Q05NA04
Other students took away or destroyed things that belonged to me.	ST038Q06NA01	ST038Q06NA02	ST038Q06NA03	ST038Q06NA04
I got hit or pushed around by other students.	ST038Q07NA01	ST038Q07NA02	ST038Q07NA03	ST038Q07NA04
Other students spread nasty rumours about me.	ST038Q08NA01	ST038Q08NA02	ST038Q08NA03	ST038Q08NA04





Please enter a number in each row.	
umber of class periods per week in English:	ST059Q01TA01
umber of class periods per week in mathematics:	ST059Q02TA01
Number of class periods per week in science:	ST059Q03TA01

Consistency check rule

Rule: IF (^ST059Q01TA01 >15 or ^ST059Q02TA01 >15 or ^ST059Q03TA01 >15)

Message: Please review the values you entered.

In a normal, full week at school, how many class periods are you required to attend in total? (Please move the slider to the number of class periods per week.) ST060Q01NA01 Number of ALL class periods or more

Consistency check rule

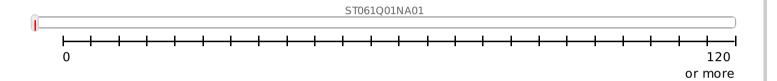
Rule: IF (^ST060Q01NA01 < 10 or ^ST060Q01NA01 >60)

Message: Please review the values you entered.

How many minutes, on average, are there in a class period?

(Please move the slider to the number of minutes per class period.)

Average minutes in a class period



Consistency check rule

Rule: IF (^ST061Q01NA01 < 10 OR ^ST061Q01NA01 >80)

Message: Please review the values you entered.

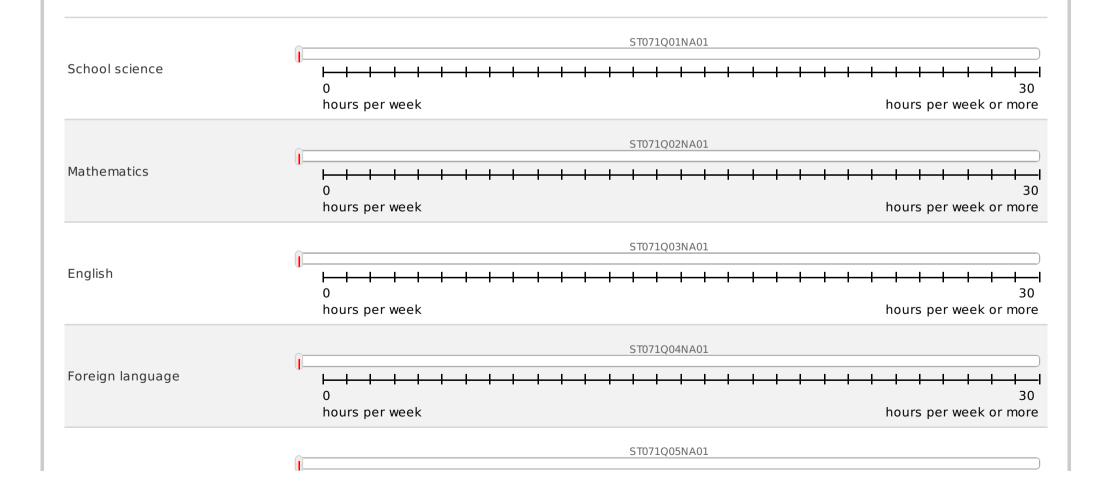
In the last two full weeks of school, how often did the following things occur?

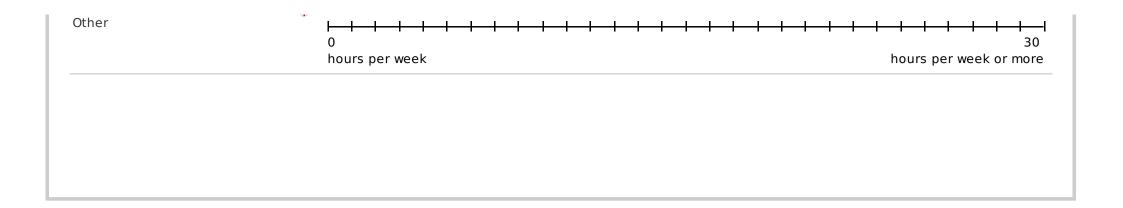
	None	One or two times	Three or four times	Five or more times
I skipped a whole school day	ST062Q01TA01	ST062Q01TA02	ST062Q01TA03	ST062Q01TA04
I skipped some classes	ST062Q02TA01	ST062Q02TA02	ST062Q02TA03	ST062Q02TA04
I arrived late for school	ST062Q03TA01	ST062Q03TA02	ST062Q03TA03	ST062Q03TA04

This school year, approximately how many hours per week do you spend learning <u>in addition to your required school schedule</u> in the following subjects?

(Please include the total hours for homework, additional instruction, and private study.)

(Please move the bar to the number of total hours. Select "0" (zero) if you do not do homework, study or practice for a subject.)





Consistency check rule

Rule: IF (^ST071Q01NA01 >20 OR ^ST071Q02NA01 >20 OR ^ST071Q03NA01 >20 OR ^ST071Q04NA01 >20 OR ^ST071Q05NA01 >20)

Message: Please review the values you entered.

This school year, on average, how many days do you attend physical education classes each week?

(Please select from the drop-down menu to answer the question.)

ST031Q01NA01

• (ST031Q01NA01)

Select...

0 days

1 day

2 days

3 days

4 days

5 days

Outside of school, during the past 7 days, on how many days did you engage in the following?

(Please select one response from the drop-down menus to answer the guestions.)

Moderate physical activities for a total of at least 60 minutes per day (e.g. walking, climbing stairs, riding a bike to school, skateboarding)



• Moderate physical activities for a total of at least 60 minutes per day (e.g. walking, climbing stairs, riding a bike to school, skateboarding) (ST032Q01NA01)

Select...

0 days

1 day

2 days

3 days

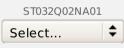
4 days

5 days

6 days

7 days

Vigorous physical activities for at least 20 minutes per day that made you sweat and breathe hard (e.g. running, cycling, aerobics, soccer, skating, swimming)



• Vigorous physical activities for at least 20 minutes per day that made you sweat and breathe hard (e.g. running, cycling, aerobics, soccer, skating, swimming) (ST032Q02NA01)

Select...

0 days

1 day

2 days

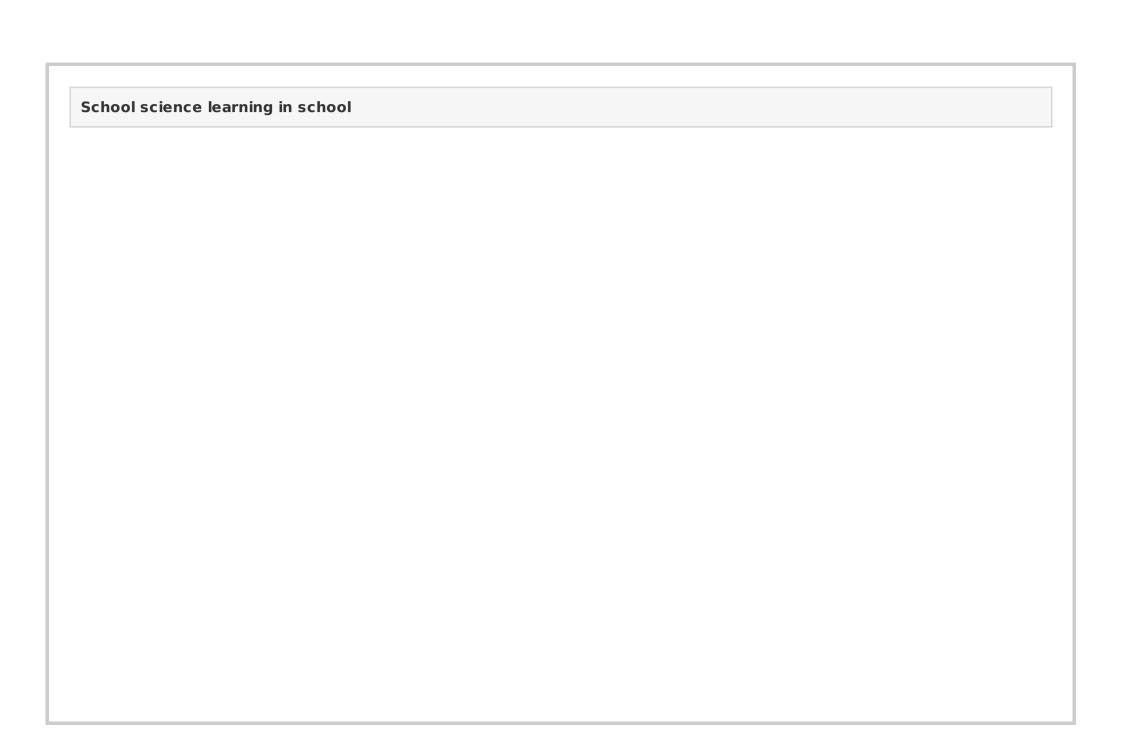
3 days 4 days

5 days

6 days

7 days





Which of the following school science courses did you attend this school year or last school year? (Please select all that apply in each row.) This year Last year ST063Q01NA01 ST063Q01NB02 Physics ST063Q02NA01 ST063Q02NB02 Chemistry ST063003NA01 ST063O03NB02 Biology ST063Q05NA01 ST063O05NB02 Applied sciences and technology (e.g. Design and Technology) ST063Q06NA01 ST063Q06NB02 General, integrated, or comprehensive science course (e.g. Science (Physics/Chemistry), Science Syllabus T)

Branching rule Rule: IF (^ST063Q01NA01 >0 OR ^ST063Q02NA01 >0 OR ^ST063Q03NA01 >0 OR ^ST063Q05NA01 >0 OR ^ST063Q06NA01 >0) THEN GOTO ^ST064 ELSE GOTO ^STInfo6

	No, not at all	Yes, to a certain degree	Yes, I can choose freely
I can choose the school science course(s) I study.	ST064Q01NA01	ST064Q01NA02	ST064Q01NA03
I can choose the level of difficulty.	ST064Q02NA01	ST064Q02NA02 O	ST064Q02NA03
I can choose the number of school science courses or class periods.	ST064Q03NA01	ST064Q03NA02	ST064Q03NA03

How often do these things happen in your school science lessons?

	Every lesson	Most lessons	Some lessons	Never or hardly ever
Students don't listen to what the teacher says.	ST097Q01TA01	ST097Q01TA02	ST097Q01TA03	ST097Q01TA04
There is noise and disorder.	ST097Q02TA01	ST097Q02TA02	ST097Q02TA03	ST097Q02TA04
The teacher has to wait a long time for students to quieten down.	ST097Q03TA01	ST097Q03TA02	ST097Q03TA03	ST097Q03TA04
Students cannot work well.	ST097Q04TA01	ST097Q04TA02	ST097Q04TA03	ST097Q04TA04
Students don't start working for a long time after the lesson begins.	ST097Q05TA01	ST097Q05TA02	ST097Q05TA03	ST097Q05TA04

When learning school science topics at school, how often do the following activities occur?

	In all lessons	In most lessons	In some lessons	Never or hardly ever
Students are given opportunities to explain their ideas.	ST098Q01TA01	ST098Q01TA02	ST098Q01TA03	ST098Q01TA04
Students spend time in the laboratory doing practical experiments.	ST098Q02TA01	ST098Q02TA02	ST098Q02TA03	ST098Q02TA04
Students are required to argue about science questions.	ST098Q03NA01	ST098Q03NA02	ST098Q03NA03	ST098Q03NA04
Students are asked to draw conclusions from an experiment that they have conducted.	ST098Q05TA01	ST098Q05TA02	ST098Q05TA03	ST098Q05TA04
The teacher explains how a school science idea can be applied to a number of different phenomena (e.g. the movement of objects, substances with similar properties).	ST098Q06TA01	ST098Q06TA02	ST098Q06TA03	ST098Q06TA04
Students are allowed to design their own experiments.	ST098Q07TA01	ST098Q07TA02	ST098Q07TA03	ST098Q07TA04
There is a class debate about investigations.	ST098Q08NA01	ST098Q08NA02	ST098Q08NA03	ST098Q08NA04
The teacher clearly explains the relevance of broad science concepts to our lives.	ST098Q09TA01	ST098Q09TA02	ST098Q09TA03	ST098Q09TA04
Students are asked to do an investigation to test ideas.	ST098Q10NA01	ST098Q10NA02	ST098Q10NA03	ST098Q10NA04



then answering the following questions, please keep one of your current school sc ubject this should be.	ience subjects in mind all the time. You are free to choose which
camples of science subjects :	
ure Physics, Pure Chemistry, Pure Biology, Science (Physics), Science (Chemistry), S	Science (Biology), Science 'T', Lower Sec Science etc
That is the name of this school science subject? Please type in the name of the subject.)	ST065Q01NA01

How often do these things happen in your school science lessons?

	Every lesson	Most lessons	Some lessons	Never or hardly ever
The teacher shows an interest in every student's learning.	ST100Q01TA01	ST100Q01TA02	ST100Q01TA03	ST100Q01TA04
The teacher gives extra help when students need it.	ST100Q02TA01	ST100Q02TA02	ST100Q02TA03	ST100Q02TA04
The teacher helps students with their learning.	ST100Q03TA01	ST100Q03TA02	ST100Q03TA03	ST100Q03TA04
The teacher continues teaching until the students understand.	ST100Q04TA01	ST100Q04TA02	ST100Q04TA03	ST100Q04TA04
The teacher gives students an opportunity to express opinions.	ST100Q05TA01	ST100Q05TA02	ST100Q05TA03	ST100Q05TA04

How often do these things happen in your lessons for this school science course?

(Remember to answer this question in reference to the school science course you indicated earlier.)

	Never or almost never	Some lessons	Many lessons	Every lesson or almost every lesson
The teacher explains scientific ideas.	ST103Q01NA01	ST103Q01NA02	ST103Q01NA03	ST103Q01NA04 O
A whole class discussion takes place with the teacher.	ST103Q03NA01	ST103Q03NA02	ST103Q03NA03	ST103Q03NA04
The teacher discusses our questions.	ST103Q08NA01	ST103Q08NA02	ST103Q08NA03	ST103Q08NA04
The teacher demonstrates an idea.	ST103Q11NA01	ST103Q11NA02	ST103Q11NA03	ST103Q11NA04

How often do these things happen in your lessons for this school science course?

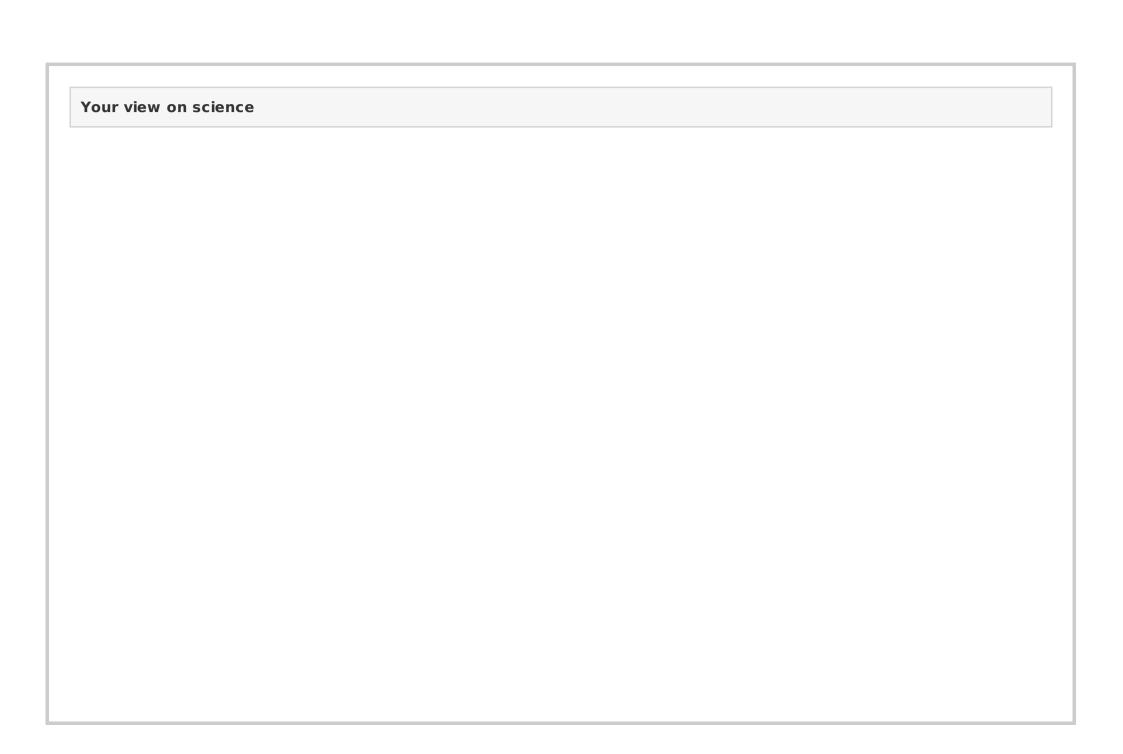
(Remember to answer this question in reference to the school science course you indicated earlier.)

	Never or almost never	Some lessons	Many lessons	Every lesson or almost every lesson
The teacher tells me how I am performing in this course.	ST104Q01NA01	ST104Q01NA02	ST104Q01NA03	ST104Q01NA04
The teacher gives me feedback on my strengths in this school science subject.	ST104Q02NA01	ST104Q02NA02 O	ST104Q02NA03	ST104Q02NA04
The teacher tells me in which areas I can still improve.	ST104Q03NA01	ST104Q03NA02	ST104Q03NA03	ST104Q03NA04
The teacher tells me how I can improve my performance.	ST104Q04NA01	ST104Q04NA02	ST104Q04NA03	ST104Q04NA04
The teacher advises me on how to reach my learning goals.	ST104Q05NA01	ST104Q05NA02	ST104Q05NA03	ST104Q05NA04

How often do these things happen in your lessons for this school science course?

(Remember to answer this question in reference to the school science course you indicated earlier.)

	Never or almost never	Some lessons	Many lessons	Every lesson or almost every lesson
The teacher adapts the lesson to my class's needs and knowledge.	ST107Q01NA01	ST107Q01NA02	ST107Q01NA03	ST107Q01NA04
The teacher provides individual help when a student has difficulties understanding a topic or task.	ST107Q02NA01	ST107Q02NA02	ST107Q02NA03	ST107Q02NA04
The teacher changes the structure of the lesson on a topic that most students find difficult to understand.	ST107Q03NA01	ST107Q03NA02	ST107Q03NA03	ST107Q03NA04



How informed are you about the following environmental issues?

	I have never heard of this	I have heard about this but I would not be able to explain what it is really about	I know something about this and could explain the general issue	I am familiar with this and I would be able to explain this well
The increase of greenhouse gases in the atmosphere	ST092Q01TA01	ST092Q01TA02	ST092Q01TA03	ST092Q01TA04
The use of genetically modified organisms (GMO)	ST092Q02TA01	ST092Q02TA02	ST092Q02TA03	ST092Q02TA04
Nuclear waste	ST092Q04TA01	ST092Q04TA02	ST092Q04TA03	ST092Q04TA04
The consequences of clearing forests for other land use	ST092Q05TA01	ST092Q05TA02	ST092Q05TA03	ST092Q05TA04
Air pollution	ST092Q06NA01	ST092Q06NA02	ST092Q06NA03	ST092Q06NA04
Extinction of plants and animals	ST092Q08NA01	ST092Q08NA02	ST092Q08NA03	ST092Q08NA04
Water shortages	ST092Q09NA01	ST092Q09NA02	ST092Q09NA03	ST092Q09NA04



Do you think problems associated with the environmental issues below will improve or get worse over the next 20 years?

	Improve	Stay about the same	Get worse
Air pollution	ST093Q01TA01	ST093Q01TA02	ST093Q01TA03
Extinction of plants and animals	ST093Q03TA01	ST093Q03TA02	ST093Q03TA03
Clearing of forests for other land use	ST093Q04TA01	ST093Q04TA02	ST093Q04TA03
Water shortages	ST093Q05TA01	ST093Q05TA02	ST093Q05TA03
Nuclear waste	ST093Q06TA01	ST093Q06TA02	ST093Q06TA03
The increase of greenhouse gases in the atmosphere	ST093Q07NA01	ST093Q07NA02	ST093Q07NA03
The use of genetically modified organisms (GMO)	ST093Q08NA01	ST093Q08NA02	ST093Q08NA03

How much do you disagree or agree with the statements about yourself below?

	Strongly disagree	Disagree	Agree	Strongly agree
I generally have fun when I am learning broad science topics.	ST094Q01NA01	ST094Q01NA02	ST094Q01NA03	ST094Q01NA04
I like reading about broad science.	ST094Q02NA01	ST094Q02NA02	ST094Q02NA03	ST094Q02NA04
I am happy working on broad science topics.	ST094Q03NA01	ST094Q03NA02	ST094Q03NA03	ST094Q03NA04
I enjoy acquiring new knowledge in broad science.	ST094Q04NA01	ST094Q04NA02	ST094Q04NA03	ST094Q04NA04
I am interested in learning about broad science.	ST094Q05NA01	ST094Q05NA02	ST094Q05NA03	ST094Q05NA04

To what extent are you interested in the following broad science topics?

	Not interested	Hardly interested	Interested	Highly interested	I don't know what this is
Biosphere (e.g. ecosystem services, sustainability)	ST095Q04NA01	ST095Q04NA02	ST095Q04NA03	ST095Q04NA04	ST095Q04NA05
Motion and forces (e.g. velocity, friction, magnetic and gravitational forces)	ST095Q07NA01	ST095Q07NA02	ST095Q07NA03	ST095Q07NA04	ST095Q07NA05
Energy and its transformation (e.g. conservation, chemical reactions)	ST095Q08NA01	ST095Q08NA02	ST095Q08NA03	ST095Q08NA04	ST095Q08NA05
The Universe and its history	ST095Q13NA01	ST095Q13NA02	ST095Q13NA03	ST095Q13NA04	ST095Q13NA05
How science can help us prevent disease	ST095Q15NA01	ST095Q15NA02	ST095Q15NA03	ST095Q15NA04	ST095Q15NA05

How much do you agree with the statements below?

	Strongly Agree	Agree	Disagree	Strongly Disagree
Making an effort in my school science subject(s) is worth it because this will help me in the work I want to do later on.	ST113Q01TA01	ST113Q01TA02	ST113Q01TA03	ST113Q01TA04
What I learn in my school science subject(s) is important for me because I need this for what I want to do later on.	ST113Q02TA01	ST113Q02TA02	ST113Q02TA03	ST113Q02TA04
Studying my school science subject(s) is worthwhile for me because what I learn will improve my career prospects.	ST113Q03TA01	ST113Q03TA02	ST113Q03TA03	ST113Q03TA04
Many things I learn in my school science subject(s) will help me to get a job.	ST113Q04TA01	ST113Q04TA02	ST113Q04TA03	ST113Q04TA04

How easy do you think it would be for you to perform the following tasks on your own?

	I could do this easily	I could do this with a bit of effort	I would struggle to do this on my own	I couldn't do this
Recognise the science question that underlies a newspaper report on a health issue	ST129Q01TA01	ST129Q01TA02 O	ST129Q01TA03	ST129Q01TA04
Explain why earthquakes occur more frequently in some areas than in others	ST129Q02TA01	ST129Q02TA02 O	ST129Q02TA03	ST129Q02TA04
Describe the role of antibiotics in the treatment of disease	ST129Q03TA01	ST129Q03TA02 O	ST129Q03TA03	ST129Q03TA04
Identify the science question associated with the disposal of garbage	ST129Q04TA01	ST129Q04TA02 O	ST129Q04TA03	ST129Q04TA04
Predict how changes to an environment will affect the survival of certain species	ST129Q05TA01	ST129Q05TA02	ST129Q05TA03	ST129Q05TA04
Interpret the scientific information provided on the labelling of food items	ST129Q06TA01	ST129Q06TA02	ST129Q06TA03	ST129Q06TA04
Discuss how new evidence can lead you to change your understanding about the possibility of life on Mars	ST129Q07TA01	ST129Q07TA02 O	ST129Q07TA03	ST129Q07TA04
Identify the better of two explanations for the formation of acid rain	ST129Q08TA01	ST129Q08TA02	ST129Q08TA03	ST129Q08TA04

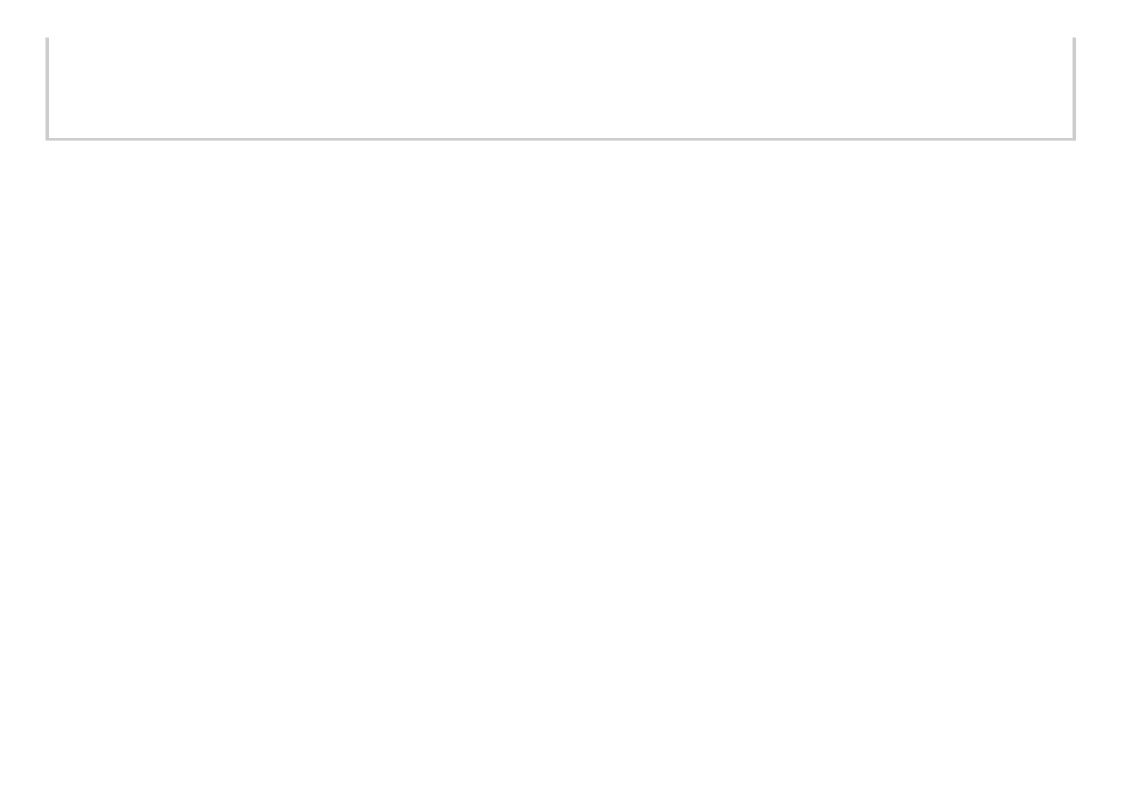


How much do you disagree or agree with the statements below?

	Strongly disagree	Disagree	Agree	Strongly agree
A good way to know if something is true is to do an experiment.	ST131Q01NA01	ST131Q01NA02	ST131Q01NA03	ST131Q01NA04
Ideas in broad science sometimes change.	ST131Q03NA01	ST131Q03NA02	ST131Q03NA03	ST131Q03NA04
Good answers are based on evidence from many different experiments.	ST131Q04NA01	ST131Q04NA02	ST131Q04NA03	ST131Q04NA04
It is good to try experiments more than once to make sure of your findings.	ST131Q06NA01	ST131Q06NA02	ST131Q06NA03	ST131Q06NA04
Sometimes broad science scientists change their minds about what is true in science.	ST131Q08NA01	ST131Q08NA02	ST131Q08NA03	ST131Q08NA04
The ideas in broad science books sometimes change.	ST131Q11NA01 O	ST131Q11NA02	ST131Q11NA03	ST131Q11NA04

How often do you do these things?

	Very often	Regularly	Sometimes	Never or hardly ever
Watch TV programmes about broad science	ST146Q01TA01	ST146Q01TA02	ST146Q01TA03	ST146Q01TA04
Borrow or buy books on broad science topics	ST146Q02TA01	ST146Q02TA02	ST146Q02TA03	ST146Q02TA04
Visit websites about broad science topics	ST146Q03TA01	ST146Q03TA02	ST146Q03TA03	ST146Q03TA04
Read broad science magazines or science articles in newspapers	ST146Q04TA01	ST146Q04TA02	ST146Q04TA03	ST146Q04TA04
Attend a science club or science interest-group meetings	ST146Q05TA01	ST146Q05TA02	ST146Q05TA03	ST146Q05TA04
Simulate natural phenomena in computer programs/virtual labs	ST146Q06NA01	ST146Q06NA02	ST146Q06NA03	ST146Q06NA04
Simulate technical processes in computer programs/virtual labs	ST146Q07NA01	ST146Q07NA02	ST146Q07NA03	ST146Q07NA04
Visit websites of ecology organisations (e.g. NParks website)	ST146Q08NA01	ST146Q08NA02	ST146Q08NA03	ST146Q08NA04
Follow news of science, environmental, or ecology organizations via blogs and microblogging	ST146Q09NA01	ST146Q09NA02	ST146Q09NA03	ST146Q09NA04



On the most recent day you attended school, did you do any of the following before going to school?

	Yes	No
Eat breakfast	ST076Q01NA01	ST076Q01NA02
Study for school or homework	ST076Q02NA01	ST076Q02NA02
Watch TV/DVD/Video	ST076Q03NA01	ST076Q03NA02
Read a book/newspaper/magazine	ST076Q04NA01	ST076Q04NA02
Internet/Chat/Social networks (e.g. Facebook, Twitter)	ST076Q05NA01	ST076Q05NA02
Play video-games	ST076Q06NA01	ST076Q06NA02
Meet friends or talk to friends on the phone	ST076Q07NA01	ST076Q07NA02
Talk to your parents	ST076Q08NA01	ST076Q08NA02
Work in the household or take care of other family members	ST076Q09NA01	ST076Q09NA02
Work for pay	ST076Q10NA01	ST076Q10NA02

Exercise or practice a sport	ST076Q11NA01	ST076Q11NA02

On the most recent day you attended school, did you do any of the following after leaving school?

	Yes	No
Eat dinner	ST078Q01NA01	ST078Q01NA02
Study for school or homework	ST078Q02NA01	ST078Q02NA02
Watch TV/DVD/Video	ST078Q03NA01	ST078Q03NA02
Read a book/newspaper/magazine	ST078Q04NA01	ST078Q04NA02
Internet/Chat/Social networks (e.g. Facebook, Twitter)	ST078Q05NA01	ST078Q05NA02
Play video-games	ST078Q06NA01	ST078Q06NA02
Meet friends or talk to friends on the phone	ST078Q07NA01	ST078Q07NA02
Talk to your parents	ST078Q08NA01	ST078Q08NA02
Work in the household or take care of other family members	ST078Q09NA01	ST078Q09NA02
Work for pay	ST078Q10NA01	ST078Q10NA02

Exercise or practice a sport	ST078Q11NA01	ST078Q11NA02

How often do you do these things?				
(Please select one response in each row.)				
	Never or almost never	A few times a year	A few times a month	Once a week or more
Go on science-related field trips (e.g. the Science Centre, science museums, nature parks/walks, zoos, bird-park, aquarium, oceanarium)	ST151A01NA0	01 ST151A01NA02 O	ST151A01NA03 S	ST151A01NA0
Participate in science-related activities (science fair, science attachment, science camp or science quiz)	ST151A02NA0	01 ST151A02NA02	ST151A02NA03 S	ST151A02NA0

Do you study the following Geography subjects?		
Please select one response in each row.)		
	Yes	No
Geography	ST152A01TA01 ST	152A01TA0
Combined Humanities - Geography Elective	ST152A02TA01 ST	152A02TA0

Consistency check rule

Rule: IF ((^ST152A01TA01=1) AND (^ST152A02TA01 =1))

Message: You cannot take both <u>Geography</u> and <u>Combined Humanities - Geography Elective</u> at the same time.

How often do you do these things?				
(Please select one response in each row.)				
	Never or almost never	Sometimes	Often	Very ofter
Read magazines related to earth science (e.g. National Geographic)	ST153A01NA0	1 ST153A01NA02 S	ST153A01NA0)3 ST153A01NA0
Watch related documentaries on television	ST153A02NA0	1 ST153A02NA02 S	ST153A02NA0	03 ST153A02NA0
Take part in Earth Science/ Geography related activities in school (e.g. Geography club, field trips)	ST153A03NA0	1 ST153A03NA02 S	ST153A03NA0)3 ST153A03NA0

You are now ready to proceed to the next section.					