Attachment 3: Summary of Changes to School and Student Questionnaire Items Included in Original Submission

A. PISA 2012 Field Test School Questionnaire Items

- 1. Items that are the same as in 2003 School Questionnaire
- 2. Items revised from 2003 School Questionnaire
- 3. Items not included in 2003 School Questionnaire
- 4. Items in 2003 School Questionnaire that have been eliminated

B. PISA 2012 Field Test Student Questionnaire Items

Note: There are 4 different forms of the student questionnaire for the field test. Each student will complete one questionnaire estimated at 30 minutes.

- 1. Items that are the same as in 2003 Student Questionnaire
- 2. Items revised from 2003 Student Questionnaire
- 3. Items not included in 2003 Student Questionnaire
- 4. Items in 2003 Student Questionnaire that have been eliminated

A. PISA 2012 Field Test School Questionnaire

1. Items that are the same as in 2003 School Questionnaire

PISA 201	PISA 2012 Field Test School Questionnaire				
Item Numbe r	De Stem				
SC01	Is your school a public or a private school? A public school A private school	Q3			
SC02	About what percentage of your total funding for a typical school year comes from the following sources? (Please write a number in each row. Write 0 (zero) if no funding comes from that source.) a. Government (includes departments, local, state, and federal) b. Tuition, student fees, or school charges paid by parents c. Benefactors, donations, bequests, sponsorships, parent fundraising d. Other	Q4			
SC03	Which of the following best describes the community in which your school is located? a. A village, hamlet, or rural area (fewer than 3,000 people) b. A small town (3,000 to about 15,000 people) c. A town (15,000 to about 100,000 people) d. A city (100,000 to about 1,000,000 people) e. A large city (with over 1,000,000 people)	Q1			
SC07	As of February 1, 2011, what was the total school enrollment (number of students)? Number of boys Number of girls	Q2			
SC08	About what percentage of students in your school repeated a grade, at these levels, last academic year? (Please write a number in each row. Write 0 (zero) if nobody repeated a grade. Check the 'not available' box if the level does not exist in your school.)	Q6			

	a. The approximate percentage of students repeating a grade at middle/junior high school level (grades 7-9) in this school last year was:	
	b. The approximate percentage of students repeating a grade at high school level (grades 10-12) in this school last year was:	
SC10	How many of the following are on the mathematics staff of your school?	Q22
	Include both full-time and part-time teachers. A full-time teacher is employed at least 90% of the time as a teacher for the full school year. All other teachers should be considered part-time.	
	Please count only those teachers who have taught or will teach mathematics during the current school year.	
	(Please write a number in each space provided. Write 0 (zero) if there are none.)	
	Full Time/Part Time	
	Teachers of mathematics in TOTAL	
	Teachers of mathematics with a bachelor's or master's degree with a major in mathematics, mathematics education, statistics, physics, or engineering	
	Teachers of mathematics with a bachelor's or master's degree but not a major in mathematics, mathematics education, statistics, physics, or engineering	
	Teachers of mathematics with a bachelor's or master's degree in education	
	Teachers of mathematics with an associate's degree but not a bachelor's or master's degree	
SC15	[stem slightly changed from 2003 – asks about 10 th grade students instead of 15-year-old students]	Q19
	Schools sometimes organize instruction differently for students with different abilities and interests in mathematics. Which of the following options describe what your school does for the 10th grade students in mathematics classes?	
	(Please check one box in each row.)	
	For all classes/For some classes/Not for any classes	

	1
 a. Mathematics classes study similar content, but at different levels of difficulty. b. Different classes study different content or sets of mathematics topics that have different levels of difficulty. c. Students are grouped by ability within their mathematics classes. d. In mathematics classes, teachers use pedagogy suitable for students with heterogeneous abilities (i.e., students are not grouped by ability). 	
In your school, are assessments of students in the 10th grade used for any of the following purposes?	Q16
(Please check only one box in each row.)	
Yes/No	
To inform parents about their child's progress	
To make decisions about students' retention or promotion	
To group students for instructional purposes	
To compare the school to district, state, or national performance	
To monitor the school's progress from year to year	
To make judgments about teachers' effectiveness	
To identify aspects of instruction or the curriculum that could be improved	
To compare the school with other schools	
Think about the teachers in your school. How much do you agree with the following statements?	Q27
(Please check one box in each row.)	
Strongly Agree/Agree/Disagree/Strongly Disagree	
	b. Different classes study different content or sets of mathematics topics that have different levels of difficulty. c. Students are grouped by ability within their mathematics classes. d. In mathematics classes, teachers use pedagogy suitable for students with heterogeneous abilities (i.e., students are not grouped by ability). In your school, are assessments of students in the 10th grade used for any of the following purposes? (Please check only one box in each row.) Yes/No To inform parents about their child's progress To make decisions about students' retention or promotion To group students for instructional purposes To compare the school to district, state, or national performance To monitor the school's progress from year to year To make judgments about teachers' effectiveness To identify aspects of instruction or the curriculum that could be improved To compare the school with other schools Think about the teachers in your school. How much do you agree with the following statements? (Please check one box in each row.)

	The morale of teachers in this school is high.	
	Teachers work with enthusiasm.	
	Teachers take pride in this school.	
	Teachers value academic achievement.	
SC27	How much do you agree with these statements about <u>innovation</u> in your school?	Q24
	(Please check one box in each row.)	
	Strongly Agree/Agree/Disagree/Strongly Disagree	
	Mathematics teachers are interested in trying new methods and teaching practices.	
	There is a preference among mathematics teachers to stay with well-known methods and practices.	
	There are frequent disagreements between 'innovative' and 'traditional' mathematics teachers.	
SC28	How much do you agree with these statements about <u>teachers' expectations</u> in your school?	Q25
	(Please check one box in each row.)	
	Strongly Agree/Agree/Disagree/Strongly Disagree	
	There is consensus among mathematics teachers that academic achievement must be kept as high as possible.	
	There is consensus among mathematics teachers that it is best to adapt academic standards to the students' level sand needs.	
	There are frequent disagreements between mathematics teachers who consider each other to be 'too demanding' or 'too lax'.	
SC29	How much do you agree with these statements about <u>teaching goals</u> in your school?	Q26
	(Please check one box in each row.)	
	Strongly Agree/Agree/Disagree/Strongly Disagree	

SC30	There is consensus among mathematics teachers that the social and emotional development of students is as important as their acquisition of mathematical skills and knowledge in mathematics classes. There is consensus among mathematics teachers that the development of mathematical skills and knowledge in students is the most important objective in mathematics classes. There are frequent disagreements between mathematics teachers who consider each other as 'too focused on skill acquisition' or 'too focused on the affective development' of students. During the last year, have any of the following methods been used to monitor the practice of mathematics teachers at your school? (Please check one box in each row.) Yes/No Tests or assessments of student achievement Teacher peer review (of lesson plans, assessment instruments, lessons) Principal or senior staff observations of lessons Observation of classes by inspectors or other persons external to the school	Q23
National item (Q50)	Approximately what percentage of students at this school last year were eligible for free- or reduced-price lunches through the National School Lunch Program?	Q7

2. Items revised from 2003 School Questionnaire

The following table shows the wording of items in the final PISA 2012 Field Test School Questionnaire and the wording of the parallel items in the 2003 School Questionnaire. If the item was used in 2009 with the current wording this is noted. In some cases the overall item is the same as what appeared in 2003, but additional subitems have been added; this is noted where relevant.

2012		2003	
Item #	Item	Item #	Item
SC06	Similar to Q8, Q9, and Q10: focuses on weeks instead of days; (b) and (c) are closed-response instead of open; (d) is new	Q8, Q9, Q10	
	The following questions are about the amount of instructional time in your school. a. How many instructional weeks are in the school year?/52		 8. How many instructional days are in the school year? 9. On the average, how many hours in total are there in the school day?
	<30 hours/30-32 hours/33-35 hour/36-40 hours/41-45 hours/>45 hours/ b. On the average, how many hours in total are there in the school week? (include lunch breaks, study hall time, and after school activities)		(include lunch breaks, study hall time, and after school activities) 10. How many hours for instruction are there in the school week? (exclude lunch breaks and after school activities)
	<22 hours/22-26 hours/27-31 hours/32-36 hours/>36 hours c. How many hours for instruction in all subjects are there in the school week? (exclude lunch breaks and after school activities)		
	0 hours/1-2 hours/3-4 hours/5-6 hours/>6 hours	5	
	d. How many <u>hours</u> for instruction in mathematics are there in the school week? (exclude lunch breaks and after		

school activities)		
SCO9 Similar to Q21, included as is in 2009 School Questionnaire How many of the following teachers are on the staff of your school? Include both full-time and part-time teachers. A full-time teacher is employed at least 90% of the time as a teacher for the full school year. All other teachers should be considered part-time. (Please write a number in each space provided. Write 0 (zero) if there are none. a. Teachers in TOTAL b. Teachers fully certified by the state in the main assignment field c. Teachers with at least a bachelor's degree	Q21	How many of the following are on the MATHEMATICS staff of your school? Include both full-time and part-time teachers. A full-time teacher is employed at least 90% of the time as a teacher for the full school year. All other teachers should be considered part-time. Please count only those teachers who have taught or will teach mathematics during the current school year. (Please write a number in each space provided. Write 0 (zero) if there are none.) a) Teachers of mathematics with a bachelor's or master's degree with a major in mathematics, mathematics education, statistics, physics, or engineering c) Teachers of mathematics with a bachelor's or master's degree but not a major in mathematics, mathematics education, statistics, physics, or engineering d) Teachers of mathematics with a bachelor's or master's degree in education e) Teachers of mathematics with an

			master's degree
SC11	Similar to Q12 and included as is in 2009 School Questionnaire	Q12	
	At your school, what is the total number of students in the 10th grade?		In your school, about how many computers are:
	Approximately, how many computers are available for these students for educational purposes?		(Please write a number in each row. Write 0 (zero) if there are none.)
	Approximately, how many of these computers are connected to the Internet?		a) in the school altogether?
			b) available to 15-year-old students?
			c) available only to teachers?
			d) available only to administrative staff?
			e) connected to the Internet/World Wide Web?
			f) connected to a local area network (LAN)?
SC14	Is your school's capacity to provide instruction hindered by any of the following issues?	Q11	Is your school's capacity to provide instruction hindered by a shortage or inadequacy of any of the following?
	(Please check one box in each row.)		(Please check one box in each row.)
	Not at all/Very little/To some/extent A lot a) A lack of qualified science teachers		Not at all/Very little/To some/extent A lot
	b) A lack of qualified mathematics teachers		a) Availability of qualified mathematics teachers
	c) A lack of qualified English teachers		b) Availability of qualified science teachers
	d) A lack of qualified teachers of other subjects		c) Availability of qualified English teachers
	e) Shortage or inadequacy of science laboratory equipment		d) Availability of qualified foreign language

	f) Shortage or inadequacy of instructional materials (e.g., textbooks)		teachers e) Availability of experienced teachers .
	g) Shortage or inadequacy of computers for instruction h) Lack or inadequacy of Internet connectivity		f) Availability of substitute/replacement teachers
	i) Shortage or inadequacy of computer software for instructionj) Shortage or inadequacy of library materials		g) Availability of instructional support personnel (including technical or lab support)
	k) Shortage or inadequacy of school buildings and grounds		h) Instructional materials (e.g. textbooks)
	l) Shortage or inadequacy of heating/cooling and lighting systems		i) Budget for supplies (e.g. paper, pencils)
	m) Shortage or inadequacy of instructional space (e.g.,		j) School buildings and grounds
	classrooms)		k) Heating/cooling and lighting systems
			l) Instructional space (e.g. classrooms)
			m) Special equipment for disabled students
			n) Computers for instruction
			o) Computer software for instruction
			p) Calculators for instruction
			q) Library materials
			r) Audio-visual resources
			s) Science laboratory equipment and materials
SC17	Similar to Q18, included as is in 2009 School Questionnaire	Q18	
	Does your school offer any of the following options to students in the 10th grade whose first language is not English?		Does your school offer any of the following

	(Please check one box in each row.)		options to 15-year-old students whose first language is not English?
	Yes/no		(Please check one box in each row.)
	a. These students attend regular classes and receive additional periods of instruction aimed at developing English skills (e.g., reading literacy, grammar, vocabulary, communication).		No, not for any languages/Yes for one language/Yes for 2 or more languages/Not applicable
	b. Before transferring to regular classes, these students attend a preparatory program aimed at developing English skills (e.g., reading literacy, grammar, vocabulary, communication).		a) Instruction in their native language is offered as a separate subject specifically for these students (e.g. Spanish language/literature for native Spanish speakers).
	c. Before transferring to regular classes, these students receive some instruction in school subjects through their first language.		b) Instruction in their native language is offered as a separate subject for students who wish to learn the language (e.g.
	 d. These students receive significant amounts of instruction in their first language aimed at developing proficiency in both languages. 		Spanish language/literature for students who want to learn or improve Spanish). c) Instruction in other parts of the
	e. Class size is reduced to cater to the special needs of these students.		curriculum is offered in their language (e.g. mathematics course taught in Spanish).
SC21	(c) and (d) are new	Q20	
	What is the purpose of these additional mathematics lessons? (Please check one box in each row.) Yes No		In your school, do any of the following activities to promote engagement with mathematics occur? (Please check one box in each row)
	a. Enrichment mathematics only		Yes No a) Enrichment mathematics
	b. Remedial mathematics only		b) Remedial mathematics c) Mathematics competitions
	c. Both Enrichment mathematics and Remedial mathematics		d) Mathematics clubs e) Computer clubs (specifically related to mathematics)

	d. Without differentiation depending on the prior achievement level of the students		
SC22	c, d, k, l,r, and s are new	Q28	
5622	In your school, to what extent is the learning of students hindered by the following phenomena? (Please check one box in each row.) a) Student truancy b) Students skipping classes c) Students being late for classes during the school day d) Students not attending compulsory school events (e.g., school assemblies) or excursions e) Students lacking respect for teachers f) Disruption of classes by students g) Student use of alcohol or illegal drugs h) Students intimidating or bullying other students i) Students not being encouraged to achieve their full potential j) Poor student-teacher relations k) Teachers having to teach students of heterogeneous ability levels within the same class. l) Teachers having to teach students of diverse ethnic backgrounds (i.e., language, culture) within the same class. m) Teachers' low expectations of students n) Teachers not meeting individual students' needs o) Teacher absenteeism p) Staff resisting change q) Teachers being too strict with students r) Teachers being late for classes s) Teachers not being well prepared for classes	Q20	In your school, to what extent is the learning of students hindered by: (Please check one box in each row.) Not at all/Very little/To some extent/ A lot a) teachers' low expectations of students? b) student absenteeism? c) poor student-teacher relations? d) disruption of classes by students? e) teachers not meeting individual students' needs? f) teacher absenteeism? g) students skipping classes? h) students lacking respect for teachers? i) staff resisting change? j) student use of alcohol or illegal drugs? k) teachers being too strict with students? l) students intimidating or bullying other students?
			m) students not being encouraged to

			achieve their full potential?
SC32	Similar to Q13, items (b)and (h) are new	Q13	
	How often are the following factors considered when students are admitted to your school?		How much consideration is given to the following factors when students are admitted to your school?
	(Please check one box in each row.)		(Please check one box in each row.)
	Never/Sometimes/Always		Prerequisite/High priority /Considered /Not considered
	a. Student's record of academic performance in general (including placement tests)		a) Residence in a particular area
	b. Student's record of performance specifically in mathematics (including placement test)		b) Student's academic record (including placement tests)
	c. Recommendation of feeder schools		c) Recommendation of feeder schools
	d. Parents' endorsement of the instructional or religious philosophy of the school		d) Parents' endorsement of the instructional or religious
	e. Whether the student requires or is interested in a special program		philosophy of the school
	f. Preference given to family members of current or former students		e) Student need or desire for a special program
	g. Residence in a particular area		f) Attendance of other family members at the school (past or present)
	h. Other		the sensor (past of present)
SC33	Similar to Q29; response categories revised so item is more like version used in 2009	Q29	
	Regarding your school, who has a considerable responsibility f following tasks?	or the	In your school, who has the main
	(Please check as many boxes as appropriate in each row.)		responsibility for:

Principals/Teachers/School-level governing board/Local education agency/State education agency/U.S. Dept of Education

- a)Selecting teachers for hire
- b)Firing teachers
- c)Establishing teachers' starting salaries
- d)Determining teachers' salary increases
- e)Formulating the school budget
- $f) Deciding \ on \ budget \ allocations \ within \ the \ school$
- g)Establishing student disciplinary policies
- h)Establishing student assessment policies
- i)Approving students for admission to the school
- j)Choosing which textbooks are used
- k)Determining course content
- 1)Deciding which courses are offered

(Please check as many boxes as appropriate in each row.)

Not a main responsibility of the school/Appointed or elected school board /Principal /Department Head /Teacher(s)

- a) hiring teachers?
- b) firing teachers?
- c) establishing teachers' starting salaries?
- d) determining teachers' salary increases?
- e) formulating the school budget?
- f) deciding on budget allocations within the school?
- g) establishing student disciplinary policies?
- h) establishing student assessment policies?
- i) approving students for admittance to the school?
- j) choosing which textbooks are used?
- k) determining course content?
- 1) deciding which courses are offered?

3. Items Not Included in 2003 School Questionnaire

The following items were not included in the PISA 2003 School Questionnaire. Some items have appeared in other administrations of PISA (2000, 2006 or 2009) and this is noted where relevant.

[The following item was not administered in 2003 but was administered in 2009.]

 $\begin{tabular}{ll} We are interested in the options parents have when choosing a school for their\\ Q4 & children. \end{tabular}$

Which of the following statements best describes the schooling available to students in your location?

(Please check only one box.)	
(Treuse check only one box.)	
There are two or more other schools in this area that compete for our students.	\sqcup_1
There is one other school in this area that competes for our students.	\square_2
There are no other schools in this area that compete for our students.	\square_3

Q5			<i>y</i>	
	(Please check only one box.)			
	15 students or fewer	\square_{01}		
	16-20 students	\square_{02}		
	21-25 students	\square_{03}		
	26-30 students	\square_{04}		
	31-35 students	\square_{05}		
	36-40 students	\square_{06}		
	41-45 students	\square_{07}		
	46-50 students	\square_{08}		
	More than 50 students	\square_{09}		
Q12	Which of the following stat computers in your school? (Please check one box per row	ements describe the 10th grade st	udents' acc	cess to
			Yes	No
	 a) The school provides one or n rooms/labs for students' use 	nore specially equipped computer	\Box_1	\square_2
	b) The school provides a pool of an average class size) for stu		\square_1	\square_2
	c) The school provides each stu	dent with a laptop.	\square_1	\square_2
	d) Each student provides his or	her own laptop.	\square_1	\square_2

What is the average size of English classes in the 10th grade in your school?

•	e)	Each student has one laptop, partly funder partly funded by the students or their partly funded by the students or the students or the students of the students or the students of the		school an	d _]1	\square_2
	f)	Students have access to computers or lap only.	tops duri	ing classes	S _], [\square_2
1	g)	Students have access to computers or lap (e.g., during breaks or free lessons).	tops outs	side classe	es _	J ₁ [\square_2
Q13		In all subjects taken together, for how the 10th grade students to access the l			rk does th	e school ex	xpect
		(Please check only one box in each row.)					
			<10%	10- 25%	26-50%	51-75%	>75%
	a)	Work during class	\square_1	\square_2	\square_3	\square_4	\square_5
	b)	Homework	\Box_1	\square_2	\square_3	\square_4	\square_5
	c)	Assignments or projects	\square_1	\square_2	\square_3	\square_4	\square_5
[The follo	owi	ing item was not administered in 2003 but	was admi	inistered i	n 2009.]		
Q16		In this academic year, which of the follow in the 10th grade?	ing activ	ities does	your schoo	l offer to st	udents
		(Please check one box in each row.)					
				Yes	No		
;	a)	Band, orchestra or choir		\square_1	\square_2		
1	b)	School play or school musical		\square_1	\square_2		
,	c)	School yearbook, newspaper or magazine		\square_1	\square_2		
(d)	Volunteering or service activities		\square_1	\Box_2		
	e)	Mathematics club		\square_1	\square_2		

	f)	Mathematics competitions	\square_1	\square_2		
	g)	Chess club	\square_1	\square_2		
	h)	Club with a focus on computers/ Information and Communication Technology	\square_1	\square_2		
	i)	Art club or art activities	\square_1	\square_2		
	j)	Sports team or sports activities	\Box_1	\square_2		
[The fo Q19	llow	ring item was not administered in 2003 but In your school, are achievement data of procedures?			ountabili	ity
		Achievement data include aggregated sch graduation rates.	ool or grade-level test s	scores or gro	ıdes, or	
		(Please check one box in each row.)				
					Yes	No
	a)	Achievement data are posted publicly (e	.g., in the media)		\square_1	\square_2
	b)	Achievement data are tracked over time such as a district, state, or national educa	-	uthority,	\Box_1	\square_2
Q20		Does your school offer mathematics mathematics classes offered during (Please check only one box.)			the	
		Yes	\square_1	go to the questio		
		No	\square_2	go to Q	21	

Q23	your school <u>without</u> a diploma or an alternative credential (e.g., a GED)? Only include students who dropped out of school without a diploma or alternative credential (e.g., a GED), not students who moved or transferred to another school.	
Q24	Which statement below best characterizes parental expectations towards you school?	ır
	(Please check only one box.)	
	There is <i>constant pressure</i> from many parents, who expect our school to set very high academic standards and to have our students achieve them	\square_1
	Pressure on the school to achieve higher academic standards among students comes from a <i>minority of parents</i>	\square_2
	Pressure from parents on the school to achieve higher academic standards among students is <i>largely absent</i>	\square_3

 \square_3

During the last academic year, for what proportion of students did parents participate in the following school-related activities?

(Please write a number in each row. Write 0 (zero) if no parents participated in the activity. Write 100 (one hundred) if all parents participated in the activity)

		%
a)	Discussed their child's behavior with a teacher on their own initiative	
b)	Discussed their child's behavior on the initiative of one of their child's teachers	
c)	Discussed their child's academic progress with a teacher on their own initiative	
d)	Discussed their child's academic progress on the initiative of one of their child's teachers	
e)	Volunteered for physical activities, e.g., building maintenance, carpentry, gardening or yard work	
f)	Volunteered for extra-curricular activities, e.g., book club, school play, sports, field trip	
g)	Volunteered in the school library or media center	
h)	Assisted a teacher in the school	
i)	Appeared as a guest speaker	
j)	Participated in local school government, e.g., PTA, parent advisory council	
k)	Fundraising for the school	

Concerning appraisal of and/or feedback to teachers, to what extent have they directly led to any of the following?

(Please check one box in each row.)

		No change	A small change	A moderate change	A large change
a)	A change in salary.	\square_1	\square_2	\square_3	\square_4
	A financial bonus or another kind of monetary reward.	\square_1	\square_2	\square_3	\Box_4
	Opportunities for professional development activities.	\Box_1	\square_2	\square_3	\Box_4
	A change in the likelihood of career advancement.	\square_1	\square_2	\square_3	\Box_4
e)	Public recognition from you.	\square_1	\square_2	\square_3	\square_4
	Changes in work responsibilities that make the job more attractive.	\Box_1	\square_2	\square_3	\Box_4
	Role in school development initiatives (e.g., curriculum development group, development of school objectives).	\Box_1	\square_2	\square_3	\Box_4

[The following item was not administered in 2003 but was administered in 2009.]

Below are statements about your management of this school. Please indicate the frequency of the following activities and behaviors in your school during the last academic year.

(Please check only one box in each row.)

	Less than once a year	Once a year		Once a month	Once a week	More than once weel
a) I work to enhance the school's reputation in the community.	\Box_1	\square_2	\square_3	\Box_4	\square_5	\Box_6

b)	I use student performance results to develop the school's educational goals.	\Box_1	\square_2	\square_3	\Box_4	\Box_4	\Box_6
c)	I make sure that the professional development activities of teachers are in accordance with the teaching goals of the school.	\square_1	\square_2	\square_3	\square_4	\square_5	\Box_6
d)	I ensure that teachers work according to the school's educational goals.	\Box_1	\square_2	\square_3	\Box_4	\Box_5	\Box_6
e)	I promote teaching practices based on recent educational research.	\square_1	\square_2	\square_3	\Box_4	\Box_5	\Box_6
f)	I praise teachers whose students are actively participating in learning.	\Box_1	\square_2	\square_3	\square_4	\square_5	\Box_6
g)	When a teacher has problems in his/her classroom, I take the initiative to discuss matters.	\Box_1	\square_2	\square_3	\Box_4	\Box_5	\Box_6
h)	I draw teachers' attention to the importance of students' development of critical and social capacities.	\Box_1	\square_2	\square_3	\Box_4	\square_5	\Box_6
i)	I pay attention to disruptive behavior in classrooms.	\square_1	\square_2	\square_3	\Box_4	\square_5	\Box_6
j)	I provide staff with opportunities to participate in school decision-making.	\Box_1	\square_2	\square_3	\Box_4	\square_5	\Box_6
k)	I engage teachers to help build a school culture of continuous improvement.	\Box_1	\square_2	\square_3	\square_4	\square_5	\Box_6
1)	I ask teachers to participate in reviewing management practices	\Box_1	\square_2	\square_3	\square_4	\square_5	\Box_6
m)	When a teacher brings up a classroom problem, we solve the problem together.	\Box_1	\square_2	\square_3	\Box_4	\square_5	\Box_6
n)	I discuss the school's academic goals with teachers at faculty meetings.	\square_1	\square_2	\square_3	\Box_4	\square_5	\Box_6

	o)	I refer to the school's academic goals when making curricular decisions with teachers.	\square_1	\square_2	\square_3	\square_4	\square_5	\square_6
	p)	I discuss academic performance results with the faculty to identify curricular strengths and weaknesses.	\square_1	\square_2	\square_3	\Box_4	\square_5	\Box_6
	q)	I lead or attend in-service activities concerned with instruction.	\square_1	\square_2	\square_3	\square_4	\square_5	\Box_6
	r)	I set aside time at faculty meetings for teachers to share ideas or information from in-service activities.	\square_1	\square_2	\square_3	\square_4	□5	\Box_6
	s)	I conduct informal observations in classrooms on a regular basis (informal observations are unscheduled, last at least 5 minutes, and may or may not involve written feedback or a formal conference).	\square_1	\square_2	\square_3	\Box_4	□5	□ ₆
	t)	I review student work products when evaluating classroom instruction.	\square_1	\square_2	\square_3	\square_4	\square_5	\Box_6
	u)	I ensure that the classroom priorities of teachers are consistent with the goals and direction of the school.	\square_1	\square_2	\square_3	\square_4	\square_5	\Box_6
Q35		During the last three months, what pattended a program of professional		_	_	•		
		A program of professional development teaching skills or pedagogical practices. The total length of the program must lateaching and education of mathematics.	It may or st for at le	· may not	lead to a	recognize	ed qualific	cation.
		a) All staff at your school					%	
		h) Staff who teach mathematics at your so	hool				%	

[The following item was not administered in 2003 but was administered in 2000.]

Who has the main responsibility for career guidance of students in the 10th grade Q36 at your school? (Please check only one box.) \Box_1 Not applicable, career guidance is not available in this school. \square_2 All teachers share the responsibility for career guidance. \square_3 Specific teachers have the main responsibility for career guidance. \square_4 We have one or more specific career guidance counselors employed at school. We have one or more specific career guidance counselors who regularly visit the \square_5 school. [The following item was not administered in 2003 but was administered in 2006.] If career guidance is available at your school, which of the statements below best Q37 describes the situation for students in the 10th grade? Please skip this question if career guidance is not available at your school. Otherwise, please check only one box. \Box_1 Career guidance is sought voluntarily by students.

Career guidance is formally scheduled into students' time at school.

 \square_2

[The following item was not administered in 2003 but was administered in 2006.]

To what extent do you feel that teachers in your school concentrate on developing **Q38** in students the skills and knowledge that will help them in tertiary (postsecondary) education? (Please check only one box.) \Box_1 These skills and knowledge are not a major part of teachers' pedagogical activities These skills and knowledge are integrated into teachers' pedagogical activities, but \square_2 they are not emphasized \square_3 These skills and knowledge are a focus of teachers' pedagogical activities 039 Which of the following measures aimed at quality assurance and improvement do you have in your school? (Please check one box in each row.) Yes No a) A written specification of the school's curricular profile and \Box_1 \square_2 educational goals b) Written specification of student performance standards \Box_1 \square_2 c) Systematic recording of data, including teacher and student attendance and graduation rates, test results, professional \square_1 \square_2 development of teachers d) Analysis of professional development needs and development of a professional development plan for \Box_1 \square_2 teachers and school leadership e) Internal evaluation/self-evaluation \Box_1 \square_2 f) External evaluation \Box_1 \square_2

 \Box_1

 \square_2

g) Seeking written feedback from students (e.g., regarding

classes, teachers or resources)

	h)	Teacher mentoring	\square_1	\square_2
	i)	Regular consultation aimed at school improvement with one or more experts over a period of at least six months	\Box_1	\square_2
	j)	Implementation of a standardized policy for mathematics (e.g., school curriculum with shared instructional materials accompanied by staff development and training.)	\Box_1	\Box_2
	k)	The school has written induction information for new teachers	\Box_1	\Box_2
	1)	The school takes new teachers through the induction information	\Box_1	\square_2
Q40		Which of the following statements apply in your school?		
		A policy refers to written rules known to those concerned by the	пе ропсу.	
		(Please check one box in each row.)		
			Yes	No
	a)	The school has a policy on how to use computers in mathematics instruction, (e.g., amount of computer use in mathematics classes, use of specific mathematics computer programs).	\Box_1	\Box_2
	b)	All the 10th grade mathematics classes in the school use the same textbook.	\square_1	\Box_2
	c)	Mathematics teachers in the school follow a standardized curriculum that specifies content at least on a monthly basis.	\square_1	\square_2

$\label{eq:continuous} \mbox{How is the attendance of students at your school monitored?} \\ \mbox{Q41}$

Q42

	(Please check one box in each row.)		
		Yes	No
a)	Student attendance is recorded every morning.	. \square_1	\square_2
b)	Student attendance is recorded in every class.	\Box_1	\square_2
c)	Students (or their parents) report their absence school.	es to the \Box_1	\square_2
d)	Principal or other member of the school leader personally monitors students' attendance.	ship \Box_1	\square_2
	At your school, how is student truancy follow	wed-up?	
	(Please check all that apply.)		
		Truancy once R	anagtad on angaine
		or twice	epeated or ongoing truancy
a)	Oral warning to student	or twice \Box_1	truancy \Box_1
	Oral warning to student Extra duties for student, e.g., picking up litter, additional assignments, giving up breaks or staying after school	or twice	truancy
b)	Extra duties for student, e.g., picking up litter, additional assignments, giving up	or twice □1	$ au_1$
b)	Extra duties for student, e.g., picking up litter, additional assignments, giving up breaks or staying after school	or twice \Box_1 \Box_1	$ au_1$
b) c) d)	Extra duties for student, e.g., picking up litter, additional assignments, giving up breaks or staying after school Written warning to student Agreement/contract about attendance with	or twice \Box_1 \Box_1	truancy
b)c)d)e)	Extra duties for student, e.g., picking up litter, additional assignments, giving up breaks or staying after school Written warning to student Agreement/contract about attendance with student	or twice \Box_1 \Box_1 \Box_1	$truancy$ \Box_1 \Box_1

	h)	Home visit	\Box_1		\Box_1	
	i)	Consultation with student by specialized staff, e.g., social worker or guidance counselor	\Box_1		\square_1	
	j)	Suspension	\square_1		\Box_1	
	k)	Expulsion	\Box_1		\Box_1	
Q43		Which of the following statements apply	y in your school	?		
		A policy refers to written rules known to tho	se concerned by	the policy.		
		(Please check one box in each row.)				
			:	Yes	No	Don't know
	a)	The school had a policy for monitoring and to student truancy three years ago.	reacting	\square_1	\square_2	\square_3
	b)	The leadership of the school regarded stud truancy as a problem three years ago.	ent	\Box_1	\square_2	\square_3
	c)	The school currently has a policy for monit reacting to student truancy.	coring and	\square_1	\square_2	\square_3
Follow	ing i	tem was not in 2003 School Questionnaire bu	ıt included in 200	9 School Q	uestionn	aire
Q44		n your school, how likely is it that a stude to another school because of the followin		grade woı	ıld be tr	ansferred
	ļ	f students are never transferred, please finish	n here. Thank you	l .		
	((Please check one box in each row.)				
			Not likely	Likel	<i>y</i>	Very likely
	a) l	Low academic achievement	\square_1	\square_2		\square_3
	h) I	High academic achievement	\square_1	\square_2		\square_3

c) Behavioral problems	\sqcup_1	\sqcup_2	\square_3
d) Special learning needs	\square_1	\square_2	\square_3
e) Parents' or guardians' request	\square_1	\square_2	\square_3
f) Other	\square_1	\square_2	\square_3

The following four questions are about financial education in your school. Financial education involves topics such as money and transactions; planning and managing finances (including saving and spending; credit and debt; and financial decision-making); risk and reward (investment and insurance); and financial landscape (including consumer rights and responsibilities and understanding of the wider financial, economic and social system).

Q45	Is financial education compulsory in your school?	
	(Please check only one box.)	
	Yes	\square_1
	No	\square_2

Which of the statements below describe the teaching of financial education at your school?

For each statement, please indicate the number of hours of financial education of this type for students in the 10th grade during the last academic year?

(Please check one box in each row.)

		Not at all	1-4 hours a year	5-19 hours year	20-49 hours a year	50 or more hours a year
a)	It is taught as a separate subject.	\square_1	\square_2	\square_3	\square_4	\square_5
b)	It is taught as a cross-curricular subject.	\square_1	\square_2	\square_3	\Box_4	\Box_5
c)	It is taught as part of business or economics courses.	\Box_1	\square_2	\square_3	\square_4	\square_5
d)	It is taught as part of other social sciences and humanities subjects (e.g., history, geography, home economics, civics).	\Box_1	\square_2	\square_3	\Box_4	\Box_5
e)	It is taught as part of mathematics.	\square_1	\square_2	\square_3	\square_4	\Box_5
f)	It is available as an extracurricular activity.	\Box_1	\square_2	\square_3	\Box_4	\Box_5
	For the following two statements pleas	se respond	with yes or	no.		
	(Please check one box in each row.)					
			Y	es	No)
g)	It is provided by people from outside school, from private sector finance in (e.g., commercial bank, insurance con	stitutions]1	\Box_2	!

h) It is provided by people from outside your school, NOT from private sector finance institutions (e.g., Department of Commerce, Reserve Bank). $\Box_1 \qquad \Box_2$

Which of the statements below best describes the situation for students in the **Q47** 10th grade regarding the availability of financial education in your school? (Please check only one box.) \Box_1 Financial education is not available. Financial education has been available for less than two \square_2 years. Financial education has been available for two years or \square_3 more. Which of the statements below best describe the situation for teachers at your **Q48** school regarding professional development in financial education? (Please check one box in each row.) Not applicable Yes No a) Financial education is required as part of pre-service education for teachers who \square_1 \square_2 \square_3 teach financial education. b) Financial education is offered as part of preservice education for teachers who teach \Box_1 \square_2 \square_3 financial education. c) Professional development in financial education is available to teachers who teach \Box_1 \square_2 \square_3 financial education. d) Teachers have attended professional

 \Box_1

 \square_2

 \square_3

development in financial education in the

past 12 months.

4. Items in 2003 School Questionnaire that have been eliminated:

Item #	Stem
Q5	Are the following grade levels found in your school?
	a) Kindergarten
	o) Ungraded school
Q14	Think about the students in your school. How much do you agree with
	the following statements?
	a) Students enjoy being in school
	a) Students enjoy being in school.b) Students work with enthusiasm.
	c) Students take pride in this school. d) Students value academic achievement.
	e) Students are cooperative and respectful.
	f) Students value the education they can receive in this school.
	g) Students value the education they can receive in this school.
	g) students do their best to learn as much as possible.
Q15	Generally, in your school, how often are 15-year-old students assessed
	using:
	a) Standardized tests?
	b) Teacher-developed tests?
	c) Teachers' evaluations of students?
	d) Student portfolios?
	e) Student assignments/projects/homework?
Q17	About how many 15-year-old students in your school have a first
	language that is not English?
	a) 40% or more
	b) 20% or more but less than 40%
	c) 10% or more but less than 20%
	d) Less than 10%
Q30	In your school, which of the following bodies expert a direct influence
	on decision-making about staffing, budgeting, instruction content and
	assessment practices?
	a) Local, state or national education authorities (e.g. Department of
	Education)
	b) Appointed or elected school board.
	c) Employers
	d) Parent groups
	e) Teacher groups (e.g. Staff Association, curriculum committees, union)
	f) Student groups (e.g. Student Association, youth organization) g) External examination boards
	8) External examination doards

B. PISA 2012 Field Test Student Questionnaire

1. Items that are the same as in the 2003 Student Questionnaire $\,$

	12 Field Test Student Questionnaire	PISA 2003 Student Questio nnaire
Item Numb er	Stem	Item Number
Q1	What grade are you in?	Q1
	grade	
Q2	When were you born? (Please write the month, day, and year you were born.) 19 Month Day Year	Q2
Q3	Are you female or male? Female Male	Q3A
Q4	Which best describes you? (Please check only one box.) I am Hispanic or Latino. I am <u>not</u> Hispanic or Latino.	Q3B
Q5	Which of these categories best describes your race? (Please check one or more boxes.) White Black or African American Asian	Q3C

	American Indian or Alaska Native Native Hawaiian or Other Pacific Islander	
Q7	Did you attend kindergarten?	Q20
	No No	
	Yes	
Q9	Have you ever repeated a grade?	Q22
	(Please check only one box in each row.)	
	Yes, twice or	
	No, never Yes, once more	
	In kindergarten	
	In grades 1-6	
	In grades 7-9	
	In grades 10-12	
Q10	In the last two full weeks you were in school, how many times did you arrive late for school?	Q26
	(Please check only one box.)	
	None	
	One or two times	
	Three or four times	
	Five or more times	
Q15A	What is your mother's main job?	Q07
	(e.g., school teacher, cook, sales manager) (If she is not working now, please tell us her last main job.)	
	Please write in the job title.	

QB	What does your mother do in her main job? (e.g., teaches high school students, helps prepare meals in a restaurant, manages a sales team) Please use a sentence to describe the kind of work she does or did in that job. ———————————————————————————————————	Q08
Q18	What is your mother currently doing? (Please check only one box.)	Q05
	Working full-time for pay	
	Working part-time for pay	
	Not working, but looking for a job	
	Other (e.g., home duties, retired)	
Q19A	What is your father's main job? (e.g., school teacher, cook, sales manager) (If he is not working now, please tell us his last main job.) Please write in the job title	Q09
Q19B	What does your father do in his main job? (e.g., teaches high school students, helps prepare meals in a restaurant, manages a sales team) Please use a sentence to describe the kind of work he does or did in that job. ———————————————————————————————————	Q10
Q22	What is your father currently doing? (Please check only one box.)	Q06
	Working full-time for pay	
	Working part-time for pay	
	Not working, but looking for a job	
	Other (e.g., home duties, retired)	

Q23	In what country were you and your parents born?	Q15a
	(Please check one box in each column.)	
	You Mother Father United States* Other country	
Q24	If <u>you</u> were NOT born in the United States how old were you when you arrived in the United States? If you were less than 12 months old, please write zero (0). If you were born in the United States please skip this question and go to Q 25.	Q15b
Q26	What language do you speak at home most of the time? (Please check only one box.)	Q16
	English	
	Spanish	
	Other language	
Q29	How many books are there in your home? There are usually about 15 books per foot of shelving. Do not include magazines, newspapers, or your schoolbooks. (Please check only one box.)	Q19
	0-10 books	
	11-25 books	
	26-100 books	
	101-200 books	
	201-500 books	

	More	e than 500 books	
Q30		Thinking about your views on mathematics: To what extent do you agree with the following statements?	Q28
		(Please check only one box in each row.)	
		Strongly agree Agree Disagree Strongly disagree	
	a)	I enjoy reading about mathematics.	
	b)	Making an effort in mathematics is worth it because it will help me in the work that I want to do later on.	
	c)	I look forward to my mathematics lessons.	
	d)	I do mathematics because I enjoy it.	
	e)	Learning mathematics is worthwhile for me because it will improve my career prospects.	
	f)	I am interested in the things I learn in mathematics.	
	g)	Mathematics is an important subject for me because I need it for what I want to study later on.	
	h)	I will learn many things in mathematics that will help me get a job.	

Q43	Thinking about studying mathematics: To what extent do you agree with the following statements?	Q30
	(Please check only one box in each row.)	
	Strongly agree Agree Disagree Strongly disagree	
	 a) I often worry that it will be difficult for me in mathematics classes b) I am just not good at mathematics. 	
	c) I get very tense when I have to do mathematics homework.	
	d) I get good grades in mathematics.	
	e) I get very nervous doing mathematics problems.	
	f) I learn mathematics quickly.	
	g) I have always believed that mathematics is one of my best subjects.	
	h) I feel helpless when doing a mathematics problem.	
	 i) In my mathematics class, I understand even the most difficult work. 	
	j) I worry that I will get poor grades in mathematics.	
	^{J/} I worry that I will get poor grades in mathematics.	

Q51	Thinking about your mathematics classes: To what extent do you agree with the following statements?					
	(Please check only one box in each row.) Strongly agree Agree Disagree Strongly disagree					
	a) I would like to be the best in my class in mathematics.					
	b In mathematics I enjoy working with other students in groups.					
	c) I try very hard in mathematics because I want to do better on the exams than the others.					
	d When we work on a project in mathematics, I think that it is a good idea to combine the ideas of all the) students in a group.					
	e) I make a real effort in mathematics because I want to be one of the best.					
	f) I do my best work in mathematics when I work with other students.					
	g) In mathematics I always try to do better than the other students in my class.					
	h In mathematics, I enjoy helping others to work well in a group.					
	i) In mathematics I learn most when I work with other students in my class.					
	j) I do my best work in mathematics when I try to do better than others.					
Q53	There are different ways of studying mathematics: To what extent do you agree with the following statements?	Q32				
	(Please check only one box in each row.)					
	Strongly agree Agree Disagree Strongly disagree					
	a) When I study for a mathematics test, I try to figure out what are the most important parts to learn.					

	b) When I am solving mathematics problems, I often think of new ways to get the answer. c) When I study mathematics, I make myself check to see if I remember the work I have already done. d) When I study mathematics, I try to figure out which concepts I still have not understood properly. e) I think about how the mathematics I have learned can be used in everyday life. f) I go over some problems in mathematics so often that I feel as if I could solve them in my sleep. g) When I study for mathematics, I learn as much as I can by heart. h) I try to understand new concepts in mathematics by relating them to things I already know. i) In order to remember the method for solving a mathematics problem, I go through examples again and again. When I cannot understand something in mathematics, I always search for more information to clarify the problem. When I am solving a mathematics problem, I often think about how the solution might be applied to other interesting questions. l) When I study mathematics, I start by working out exactly what I need to learn. m) To learn mathematics, I try to remember every step in a procedure. n) When learning mathematics, I try to relate the work to things I have learned in other subjects.		
Q72	In a normal, full week at school, how many class periods do you have in total?	Q33c	
	Number of ALL class periods class periods		
Q87	Thinking about the teachers at your school: To what extent do you agree with the following statements? (Please check only one box in each row.)	Q25	
	Strongly agree Agree Disagree Strongly disagree		
	a) Students get along well with most teachers.		
	b) Most teachers are interested in students' well-being.		
	Most of my teachers really listen to what I have to say.		
	d) If I need extra help, I will receive it from my teachers.		
	e) Most of my teachers treat me fairly.		

Q89	Thinking about what you have learned in school: To what extent do you agree with	Q24
	the following statements?	
	(Please check only one box in each row.)	
	Strongly agree Agree Disagree Strongly disagree	
	a) School has done little to prepare me for adult life when I leave school.	
	b) School has been a waste of time.	
	c) School helped give me confidence to make decisions.	
	d) School has taught me things which could be useful in a job.	

2. Items changed from 2003 Student Questionnaire

2012		2003	
Item #	Item	Item #	Item
ST08	How old were you when you started first grade?Years	Q21	How old were you when you started elementary school?
Q13	Bachelor's degree or higher broken out into 3 categories to capture 4-year, Master's and PhD. What is the highest grade or level of school you expect to complete? (Please check only one box.) Less than high school High school Vocational or technical certificate (such as cosmetology or auto mechanics) Associate's degree (2-year degree from a community college) Bachelor's degree (4-year college degree) Master's degree Doctoral or professional degree such as medicine or law	Q23	Which of the following do you expect to complete? (Please check as many as apply.) a) Middle or junior high school b) High school c) Vocational or technical certificate after high school (such as cosmetology or auto mechanics) d) Associate's degree e) Bachelor's degree or higher.

Q14	Expanded categoires to include siblings, combined "other female gaurdian/male gaurdian with Mother/Father	Q4	Who usually lives at home with you? (Please check as many boxes as apply.)
	Who usually lives at home with you?		a) Mother
	Yes No a) Mother (including stepmother or foster mother)		b) Other female guardian (e.g., stepmother or foster mother) c) Father
	b) Father (including stepfather or foster father)c) Brother(s) (including stepbrothers)		d) Other male guardian (e.g., stepfather or foster father)
	d) Sister(s) (including stepsisters)		e) Others (e.g. brother, sister, cousin, grandparents)
	e) Grandparent(s)		
	f) Others (e.g., cousin)		
Q16	Combined "completed grade 12" and "completed GED" into single category and references specific grades	Q11	Which of the following did your mother complete at school?
	What is the highest level of schooling (not including college) completed by your mother?		(Please check as many boxes as apply.)
	If you are not sure which box to choose, please ask the test administrator for help.		a) High school diploma b) High school equivalency or GED c) Middle or junior high school
	(Please check only one box.)		d) Elementary school e) None of the above
	She completed grade 12 (high school diploma or GED)		
	She completed grade 9		

	She completed grade 6		
	She did not complete grade 6		
Q17	Does your mother have any of the following degrees, certificates, or diplomas?	Q12	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.		(Please check as many boxes as apply.)
	(Please check one box in each row.)		a) Bachelor's, master's, doctorate or
	Yes No		professional degree such as law or medicine
	Master's, doctoral, or professional degree such as medicine or law		b) Associate's degree
	Bachelor's degree (4-year college degree) Associate's degree (2-year degree from a community college)		3,
	Vocational or technical certificate/diploma after high school (such as cosmetology or auto mechanics)		c) Vocational or technical certificate/diploma after high school
Q20	What is the highest level of schooling (not including college) completed by your father?	Q13	Which of the following did your father complete at school?
	If you are not sure how to answer this question, please ask the test administrator for help.		(Please check as many boxes as apply.)
	(Please check only one box.)		a) High school diploma b) High school equivalency or GED
	He completed grade 12 (high school diploma or GED)		c) Middle or junior high school d) Elementary school e) None of the above
	He completed grade 9		5, 2.500 57 600 600 600
	He completed grade 6		
	He did not complete grade 6		

Q21	Does your father have any of the following degrees, certificates or diplomas?	Q14	Does your father have any of the following qualifications?
	If you are not sure which box to choose, please ask the test administrator for help.		(Please check as many boxes as apply.)
	 Yes No a. Master's, doctoral, or professional degree such as medicine or law b. Bachelor's degree (4-year college degree) c. Associate's degree (2-year degree from a community college) d. Vocational or technical certificate/diploma after high school (such as cosmetology or auto mechanics) 		 a) Bachelor's, master's, doctorate or professional degree such as law or medicine b) Associate's degree c) Vocational or technical certificate/diploma after high school
Q27	Deleted "Your own calculator; added items n) and o) Which of the following are in your home? (Please check one box in each row.) Yes No a) A desk to study at b) A room of your own	Q17	Which of the following do you have in your home? (Please check as many boxes as apply.) a) A desk to study at b) A room of your own c) A quiet place to study
	c) A quiet place to study		d) A computer you can use for school work
	d) A computer you can use for school work e) Educational software		e) Educational software f) A link to the Internet g) Your own calculator

f) A link to the Internet	h) Classic literature (e.g., Shakespeare, Jane
	Austen, Mark Twain)
g) Classic literature (e.g., Shakespeare)	i) Books of poetry
h) Books of poetry	
i) Works of art (e.g., paintings)	j) Works of art (e.g., paintings)
	k) Books to help with your school work
j) Books to help with your school work	
k) Technical reference books or manuals	l) A dictionary
l) A dictionary	m) A dishwasher
1) If dictionary	
m) A dishwasher	
n) A DVD player	
a) A duract magne	
o) A guest room	
p) A high-speed Internet connection	
q) A musical instrument	
q) A musicai mistrument	

Q28	Add "with a bathtub or shower " to item e)	Q18	How many of these do you have at your home?
	How many of these are there at your home?		
	(Please check only one box in each row.)		(Please check only one box in each row.)
	None One Two Three or more		
	a) Cell phones		a) Cellular phone
	a) Cen phones		b) Television
	b) Televisions		c) Computer
	c) Computers		_
	d) Cars		d) Car
			e) Bathroom
	e) Bathrooms with a bathtub or shower		

Q38	Scale changed item (f) to 1:10,000 How confident do you feel about having to do the following mathematics tasks? (Please check only one box in each row.) Very confident Confident Not very confident a) Using a train schedule to figure out how long it would take to get from one place to another. b) Calculating how much cheaper a TV would be after a 30% discount. c) Calculating how many square feet of tile you need to cover a floor. d) Understanding graphs presented in newspapers. e) Solving an equation like 3x+5= 17. f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3) = (x + 3) (x - 3). h) Calculating the gas mileage of a car.	Q29	How confident do you feel about having to do the following mathematics tasks? (Please check only one box in each row.) a) Using a train timetable to work out how long it would take to get from one place to another. b) Calculating how much cheaper a TV would be after a 30% discount. c) Calculating how many square feet of tile you need to cover a floor. d) Understanding graphs presented in newspapers. e) Solving an equation like $3x+5=17$ f) Finding the actual distance between two places on a map with a 1:100 scale. g) Solving an equation like $2(x+3)=(x+3)(x-3)$. h) Calculating the gas mileage of a car.

Q60	Added English and Science to Mathematics; records specific grade in each	Q42	In your last school report, how did
	subject for the last report card and in the last school the student attended.		your grade in mathematics compare with the passing grade?
	What grade did you receive in the following subjects both on your last		
	report card and the last school you attended?		(Please check only one box.)
	For each subject consider the specific course in that subject you were taking. If taking more than one course in a subject, include only your highest grade.		At or above the passing grade Below the passing grade
	(Please check only one box on each row.)		
	Last report card		
	a) English		
	b) Mathematics		
	c) Science		
Q61	Added English and Science to Mathematic; breaks first response option into "Above the passing grade" and "At the passing grade"	Q42	In your last school report, how did your grade in mathematics compare with the passing grade?
	On your last report card, how did your grade compare with the passing		
	grade in each subject area?		(Please check only one box.)
	For each subject consider the specific course in that subject you were taking. If taking more than one course in a subject, include only your highest grade.		At or above the passing grade Below the passing grade
	(Please check only one box on each row.)		
	Above the passing grade At the passing grade Below the passing grade		
	a) English		
	b) Mathematics		
	c) Science		
Q62	The original item b), d) and h) have been deleted and new ones have been inserted, item e) has been modified	Q29	How confident do you feel about having to do the following

(Please check only one box on each row.) Frequently Sometimes Rarely Never a) Using a train schedule, figuring out how long it would take to get from one place to another. b) Calculating how much more expensive a computer would be after adding tax. c) Calculating how many square meters of tile you need to cover a floor. d) Understanding scientific tables presented in an article. e) Solving an equation like 6x² + 5 = 29 f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3) = (x + 3)(x - 3) h) Calculating the power consumption of an electronic appliance per week. (Please check only one box in each row.) a) Using a train timetable to work out how long it would take to get from one place to another. b) Calculating how much cheaper TV would be after a 30% discount of tile you need to cover a floor. d) Understanding graphs presented in newspapers. e) Solving an equation like 3x+5=17 f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3)=(x+3)(x-3). h) Calculating the gas mileage of a car.		Have you been taught to do the following types of mathematics tasks		mathematics tasks?
a) Using a train schedule, figuring out how long it would take to get from one place to another. b) Calculating how much more expensive a computer would be after adding tax. c) Calculating how many square meters of tile you need to cover a floor. c) Calculating how many square meters of tile you need to cover a floor. d) Understanding graphs presented in an article. e) Solving an equation like 6x² + 5 = 29 f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3) = (x + 3)(x - 3) h) Calculating the power consumption of an electronic appliance per week. Q70 From 2009, adds items a) and c) out how long it would take to get from one place to another. b) Calculating how much cheaper TV would be after a 30% discount of tile you need to cover a floor. d) Understanding graphs presented in newspapers. e) Solving an equation like 3x+5=17 f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3) = (x + 3)(x - 3) h) Calculating the power consumption of an electronic appliance per week.		during your time in school? (Please check only one box on each row.)		(Please check only one box in each row.)
one place to another. b) Calculating how much more expensive a computer would be after adding tax. c) Calculating how many square fee of tile you need to cover a floor. c) Calculating how many square meters of tile you need to cover a floor. d) Understanding graphs presented in newspapers. e) Solving an equation like 3x+5=17 f) Finding the actual distance between two places on a map with a 1:10,000 scale. f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3) = (x + 3)(x - 3) h) Calculating the power consumption of an electronic appliance per week. Q70 From 2009, adds items a) and c) Q33a How many minutes, on average, a		Frequently Sometimes Rarely Never		
of tile you need to cover a floor. c) Calculating how many square meters of tile you need to cover a floor. d) Understanding graphs presented in newspapers. e) Solving an equation like 3x+5=17 f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3) = (x + 3)(x - 3) h) Calculating the power consumption of an electronic appliance per week. Q70 From 2009, adds items a) and c) of tile you need to cover a floor. d) Understanding graphs presented in newspapers. e) Solving an equation like 3x+5=17 f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3)=(x+3)(x-3). h) Calculating the gas mileage of a car.				b) Calculating how much cheaper a TV would be after a 30% discount.
c) Calculating how many square meters of tile you need to cover a floor. d) Understanding scientific tables presented in an article. e) Solving an equation like $3x+5=17$ f) Finding the actual distance between two places on a map with $1:100$ scale. g) Solving an equation like $2(x+3)=(x+3)(x-3)$ h) Calculating the power consumption of an electronic appliance per week. g) Solving an equation like $2(x+3)=(x+3)(x-3)$ h) Calculating the power consumption of an electronic appliance per week. Q70 From 2009, adds items a) and c) Q33a How many minutes, on average, a				c) Calculating how many square feet of tile you need to cover a floor.
d) Understanding scientific tables presented in an article. e) Solving an equation like 6x² + 5 = 29 f) Finding the actual distance between two places on a map with a 1:10,000 scale. g) Solving an equation like 2(x+3) = (x + 3)(x - 3) h) Calculating the power consumption of an electronic appliance per week. Q70 From 2009, adds items a) and c) 3x+5=17 f) Finding the actual distance between two places on a map with a 2(x+3)=(x+3)(x-3). h) Calculating the gas mileage of a car.		c) Calculating how many square meters of tile you need to cover a floor.		d) Understanding graphs presented in newspapers.
e) Solving an equation like $6x^2 + 5 = 29$ f) Finding the actual distance between two places on a map with a 1:100 scale. g) Solving an equation like $2(x+3) = (x+3)(x-3)$ h) Calculating the power consumption of an electronic appliance per week. Q70 From 2009, adds items a) and c) between two places on a map with 1:100 scale. g) Solving an equation like $2(x+3) = (x+3)(x-3)$. h) Calculating the gas mileage of a car.		d) Understanding scientific tables presented in an article.		
f) Finding the actual distance between two places on a map with a $1:10,000$ scale. g) Solving an equation like $2(x+3) = (x+3)(x-3)$ h) Calculating the power consumption of an electronic appliance per week. Q70 From 2009, adds items a) and c) Q33a How many minutes, on average, and a standard many minutes, and a standard many many many many many many many many				between two places on a map with a
g) Solving an equation like $2(x+3) = (x+3)(x-3)$ h) Calculating the power consumption of an electronic appliance per week. Q70 From 2009, adds items a) and c) Q33a How many minutes, on average, as				
per week. Q70 From 2009, adds items a) and c) Q33a How many minutes, on average, as		g) Solving an equation like $2(x+3) = (x+3)(x-3)$		h) Calculating the gas mileage of a car.
	Q70	From 2009, adds items a) and c)	Q33a	How many minutes, on average, are
How many minutes, on average, are there in a class period for the Minutes in a class period:		How many minutes, on average, are there in a class period for the		-

	following subjects?		
	a) Minutes in a class period in English: Minutes		
	b) Minutes in a class period in mathematics: Minutes		
	c) Minutes in a class period in science: Minutes		
Q7	From 2009, adds items a) and c); stem is reworded How many class periods per week do you typically have for the following subjects?	Q33b	In the last full week you were in school, how many class periods did you spend in mathematics? Number of mathematics class periods:
	a) Number of class periods per week in class periods class periods	s	
	b) Number of class periods per week in mathematics: ————————————————————————————————————	s	
	c) Number of class periods per week in class periods science:	S	

Q78		Q38	How often do these things happen in your mathematics classes?
	Items b), f), h), i), k) have been deleted		(Please check only one box in each row.)
	How often do these things happen in your mathematics classes?		a) The teacher shows an interest in every student's learning.
	(Please check only one box in each row.)		b) Students don't listen to what the
	Every Class Most Classes Some Classes Never or hardly ever		teacher says.
			c) The teacher gives extra help when students need it.
	a) The teacher shows an interest in every student's learning.		d) Students work from books and
	b) The teacher gives extra help when students need it.		other printed material.
	c) Students work from books and other printed material.		e) The teacher helps students with their
	d) The teacher helps students with their learning.		learning.
			f) There is noise and disorder.
	e) The teacher continues teaching until the students understand.		g) The teacher continues teaching until the students understand.
	f) The teacher gives students an opportunity to express opinions.		h) The teacher has to wait a long time for students to quiet down.
			i) Students cannot work well.
			j) The teacher gives students an opportunityto express opinions.
			k) Students don't start working for a longtime after the class begins.

Q82	Contains the items deleted from Q38
	How often do these things happen in your mathematics classes?
	(Please check only one box in each row.)
	Every Class Most Classes Some Classes Never or hardly ever
	a) Students don't listen to what the teacher says.
	b) There is noise and disorder.
	c) The teacher has to wait a long time for students to quiet down.
	d) Students cannot work well.
	e) Students don't start working for a long time after the lesson begins.

3. Items not included in the 2003 Student Questionnaire

The following items were not included in the PISA 2003 Student Questionnaire. Some items have appeared in other administrations of PISA (2000, 2006 or 2009) and this is noted where relevant.

[Not included in 2003 but administered in 2009.] Did you attend pre-school? **Q6** No \square_1 Yes, for one year or less \square_2 Yes, for more than one year \square_3 In the last two full weeks of school, how many times did you skip school? Q11 (Please check only one box.) None \square_1 \square_2 One or two times Three or four times \square_3 \square_4 Five or more times In the last two full weeks of school, how many times did you miss school? Q12 (Please check only one box.) \square_1 None One or two times \square_2 Three or four times \square_3 \square_4 Five or more times

	Please read the paragraph below. Then, indicate for each of the explanations
Q31	that follow how likely it is to apply to you, given the situation.

You have been studying for a mathematics quiz and you are getting tired. Your friends want you to stop studying and go to a movie with them. Although you think it would be fun, you decide to continue studying for the quiz instead of going with them.

How likely are the following reasons for YOU doing this in the situation?

(Please check only one box in each row.)

	Very likely	Likely	Unlikely	Very unlikely
a) I think that studying hard for my mathematics quiz is worth it because it will help me in my future career.	□1	□2	□3	□4
b) I just think that studying mathematics is fun.	□1	□2	□3	□4
c) I will not go out because my parents expect me to do well on my mathematics quiz.	□1	□2	□3	□4
d) I think that it is more important for to me to get better mathematics grades than to go out with my friends.	□1	□2	□3	□4

Please read the paragraph below. Then, indicate for each of the explanations **Q32** that follow how likely it is to apply to you, given the situation.

You have decided to read a book about the history of mathematics in your free time that was not assigned in school.

How likely are the following reasons for YOU doing this in the situation?

			Very likely	Likely	Unlikely	Very unlikely
	a)	Reading about the history of mathematics in my free time will help me get better grades than the other students in my class.	□1	□2	□3	□4
	b)	Reading about the history of mathematics in my free time will help me obtain the job I want.	□1	□2	□3	□4
	c)	Reading about the history of mathematics in my free time is enjoyable.	□1	□2	□3	□4
	d)	My parents want me to read about the history of mathematics as much as I can.	□1	□2	□3	□4
Q33		Please read the paragraph below. The that follow how likely it is to apply to	you, give	n the situat	ion.	
		Your school has a mathematics club. I mathematics problems against other			_	
		How likely are the following reasons th	at you have	e done this?		
		(Please check only one box in each row.)				
			Very likely	Likely	Unlikely	Very unlikely
	a)	My parents encouraged me to join the club.	□1	□2	□3	□4
	b)	I want to get the highest grade in all of my mathematics classes.	□1	□2	□3	□4
	c)	I am interested in solving mathematics problems.	□1	□2	□3	□4
	d)	It will give me practice mastering the mathematics skills that I will	□1	□2	□3	□4

need in my future career.

Please read the sentence below. Then, indicate for each of the explanations that follow how likely it is to apply to you, given the situation.

You decide to pay closer attention in your mathematics class than in your other classes.

How likely are the following reasons that you have done this?

(Please check only one box in each row.)

	Very likely	Likely	Unlikely	Very unlikely
a) Paying attention in mathematics will be useful when I have a career.	□1	□2	□3	□4
b) Paying attention in mathematics will help me do better on exams than the other students in my class.	□1	□2	□3	□4
c) I pay attention in mathematics class because I enjoy it.	□1	□2	□3	□4
d) I pay attention in mathematics because my parents will be disappointed if I do not do well in mathematics.	□1	□2	□3	□4

Q35 Please read the paragraph below. Then, indicate for each of the explanations that follow how likely it is to apply to you, given the situation.

You have 25 hours a week to study for your classes. You usually study 12 hours a week for your mathematics class, almost the same as the total time spent studying science, English, foreign languages, and history combined.

How likely are the following reasons that you do this?

	Very likely	Likely	Unlikely	Very unlikely
a) I study more for mathematics class because learning many things in mathematics will help me get a job.	□1	□2	□3	□4
b) I study more for mathematics class because I want to get higher grades than anyone else.	□1	□2	□3	□4
c) I study more for mathematics class because mathematics is fun.	□1	□2	□3	□4
d) I study more for mathematics class because my parents make me.	□1	□2	□3	□4

Thinking about how people important to you view mathematics: How strongly do you agree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
a) Most of my friends do well in mathematics.	□1	□2	□3	□4
b) Most of my friends work hard at mathematics.	□1	□2	□3	□4
c) My friends enjoy taking mathematics tests.	□1	□2	□3	□4
d) My parents believe it's important for me to study mathematics.	□1	□2	□3	□4
e) My parents believe that mathematics is important for my career.	□1	□2	□3	$\Box 4$
f) My parents like mathematics.	□1	□2	□3	$\Box 4$
g) My teachers believe it is important for	□1	□2	$\Box 3$	$\Box 4$

		me to study mathematics.				
	h)	My teachers think it is important for me to do well in mathematics.	□1	□2	□3	□4
	i)	The people in my life whose opinions I value are good at mathematics.	□1	□2	□3	□4
	j)	People whose opinions I value think that mathematics is an important subject.	□1	□2	□3	□4
Q37		Thinking about your friends: To what statements?	extent do y	ou agree v	with the fol	lowing
		(Please check only one box in each row.)				
			Strongly agree	Agree	Disagree	Strongly disagree
	a)	My friends enjoy reading about mathematics.	□1	□2	□3	□4
	b)	My friends look forward to their mathematics lessons.	□1	□2	□3	□4
	c)	My friends do mathematics because they enjoy it.	□1	□2	□3	□4
	d)	My friends are interested in learning mathematics.	□1	□2	□3	□4
	e)	My friends think making an effort in mathematics is worth it because it will help them later on.	□1	□2	□3	□4
	f)	My friends think mathematics will help them with the subjects that they want to study further on in school.	□1	□2	□3	□4
	g)	My friends believe mathematics is an important subject for them to study.	□1	□2	□3	$\Box 4$

	h)	My friends think that studying mathematics will help them get a job.				1	□2		□3 □4		
Q39		If you had to choose between the fo			he foll	owing	option	ıs whic	h wou	ld you prefer?	
		(Please show how close your opinion is to the statements below by checking one of the boxes numbered 1to 7 in each row.)									
	a)	I am interested in mathematics lessons more than in any other lessons.	□01	□02	□03	□04	□05	□06	□07	I am interested in mathematics lessons less than in any other lessons.	
	b)	I would be happy to drop mathematics if I could.	□01	□02	□03	□04	□05	□06	□07	I would be sad to drop mathematics if I had to.	
	c)	I enjoy reading about mathematics.	□01	□02	□03	□04	□05	□06	□07	I avoid reading about mathematics.	
	d)	I plan to do as much mathematics as possible during my education.	□01	□02	□03	□04	□05	□06	□07	I plan to do as little mathematics as possible during my education.	
	e)	I avoid doing mathematics problems and puzzles outside mathematics lessons.	□01	□02	□03	□04	□05	□06	□07	I enjoy doing mathematics problems and puzzles outside mathematics lessons.	
Q4	0	To what exten	t do yo	u agre	e with	the fol	lowing	g stater	nents?		

		Strongly agree			Neither agree nor disagre e			Strongly disagre e
a)	I am interested in mathematics lessons more than in any other lessons.	□01	□02	□03	□04	□05	□06	□07
b)	I would be happy to drop mathematics if I could.	□01	□02	□03	□04	□05	□06	□07
c)	I enjoy reading about mathematics.	□01	□02	□03	□04	□05	□06	□07
d)	I plan to do as much mathematics as possible during my education.	□01	□02	□03	□04	□05	□06	□07
e)	I avoid doing mathematics problems and puzzles outside mathematics lessons.	□01	□02	□03	□04	□05	□06	□07
f)	I look forward to my mathematics lessons.	□01	□02	□03	□04	□05	□06	□07
	To what extent do you	agree wit	h the fo	llowing	g statemen	its?		
	(Please check only one bo	ox in each 1	ow.)					
		Neither agree nor agree disagre e					Strongly disagre e	
a)	I am interested in mathematics lessons less than in any other lessons.	□01	□02	□03	□04	□05	□06	□07

Q41

	b) I would be sad to drop mathematics if I had to.	□01	□02	□03	□04	1 □05	□06	□07		
	c) I avoid reading about mathematics.	□01	□02	□03	□04	1 □05	□06	□07		
	d) I plan to do as little mathematics as possible during my education.	□01	□02	□03	□04	1 □05	□06	□07		
	e) I enjoy doing mathematics problems and puzzles outside mathematics lessons.	□01	□02	□03	□04	1 □05	□06	□07		
	I do not look forward f) to my mathematics lessons.	□01	□02	□03	□04	1 □05	□06	□07		
	Here we briefly describe some students. Please read each description and check the box on each line that shows how much each student is like you.									
	(Please check only one box	in each i	row.)							
			Very much like me	Like me	Some- what like me	A little like me	Not like me	Not like me at all		
a)	This student is interested i mathematics lessons more in any other lessons.		□1	□2	□3	□4	□5	□6		
b)	This student would be hap drop mathematics if he or could.		□1	□2	□3	□4	□5	□6		
c)	This student enjoys readin about mathematics.	g	□1	□2	□3	□4	□5	□6		

Q42

d)	This student plans to do as much mathematics as possible during his or her education.	□1	□2	□3	□4 □5	□6
e)	This student avoids doing mathematics problems and puzzles outside mathematics lessons.	□1	□2	□3	□4 □5	□6
f)	This student looks forward to his or her mathematics lessons.	□1	□2	□3	□4 □5	□6
	Thinking about your mathemated following statements?	atics less	sons: To wl	nat exten	t do you agre	e with the
	(Please check only one box in eac	h row.)				
			Strongly agree	Agree	Disagree	Strongly disagree
a)	If I invest enough effort I can suc in mathematics.	cceed	□1	□2	□3	□4
b)	Whether or not I do well in mathematics is completely up to	me.	□1	□2	□3	□4
c)	Family demands or other proble prevent me from putting a lot of		□1	□2	□3	$\Box 4$
	into my mathematics work.					
d)	into my mathematics work. If I had different teachers, I wou		□1	□2	□3	□4
d) e)	into my mathematics work. If I had different teachers, I wou harder in mathematics. If I wanted to I could perform w	ld try	□1 □1	□2 □2	□3	□ 4

Q44

You are a student in the following situation:

Q45

Each week, the your mathematics teacher gives a short quiz. Recently you performed poorly on these quizzes. Today you are trying to figure out why.

How likely are you to have these thoughts or feelings in this situation?

		Very likely	Likely	Slightly likely	Not a all likely
a)	I'm not very good at solving mathematics problems.	□1	□2	□3	□4
b)	I did not make a special effort to study this material in the mathematics textbook.	□1	□2	□3	□4
c)	My teacher did not explain the concepts well this week.	□1	□2	□3	□4
d)	This week I made bad guesses on the quiz.	□1	□2	□3	□4
e)	Sometimes the course material is too hard.	□1	□2	□3	□4
f)	I have not been studying enough lately.	□1	□2	□3	□4
g)	The teacher did not get students interested in the material.	□1	□2	□3	□4
h)	Sometimes I am just unlucky	$\Box 1$	□2	□3	□4

You are a student in the following situation:

Q46

Last week you were having difficulty understanding a new concept presented by the mathematics teacher. This week, however, you are beginning to catch on. Today you are trying to figure out why.

How likely are you to have these thoughts or feelings in this situation

		Very Likely	Likely	Slightly likely	Not at all likely
a)	I am very good at solving mathematics problems.	□1	□2	□3	□4
b)	I made a special effort to study this material in the mathematics textbook.	□1	□2	□3	□4
c)	The teacher explained it well this time.	□1	□2	□3	□4
d)	This week I made good guesses.	□1	□2	□3	□4
e)	I realized the course material was easy after all.	□1	□2	□3	□4
f)	I actually studied enough during the past week.	□1	□2	□3	□4
g)	The teacher got me interested in the material.	□1	□2	□3	□4
h)	Sometimes I am lucky.	□1	□2	□3	□4

Thinking about the mathematics you do for school: To what extent do you agree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
a) I have my homework finished in time for mathematics class.	□1	□2	□3	□4
b) I work hard on my mathematics homework.	□1	□2	□3	□4
c) I am prepared for my mathematics exams.	□1	□2	□3	□4
d) I study hard for mathematics quizzes.	□1	□2	□3	$\Box 4$
e) I keep studying until I understand mathematics material.	$\Box 1$	□2	□3	□4
f) I pay attention in mathematics class.	□1	□2	□3	$\Box 4$
g) I listen in mathematics class.	□1	□2	□3	□4
h) I avoid distractions when I am studying mathematics.	$\Box 1$	□2	□3	□4
 I keep my mathematics work well organized. 	□1	□2	□3	$\Box 4$

Thinking about your views on mathematics: To what extent do you agree with the following statements?

		Strongly agree	Agree	Disagree	Strongly disagre
a)	I plan on studying hard in mathematics.	□1	□2	□3	$\Box 4$
b)	I intend to seek external help to improve my mathematics skills.	□1	□2	□3	$\Box 4$
c)	I intend to get the best possible score on all of my mathematics exams.	□1	□2	□3	$\Box 4$
d)	I plan to do all I can to get good grades in mathematics.	□1	□2	□3	□4
e)	I intend to become better than my friends at mathematics.	□1	□2	□3	□4
f)	I intend to take additional mathematics courses.	$\Box 1$	□2	□3	$\Box 4$
g)	I plan on practicing mathematics problems each night on my own.	□1	□2	□3	$\Box 4$
h)	I am willing to do more work in my mathematics classes than is required.	□1	□2	□3	□4
i)	I plan on taking as many mathematics classes as I can during my education.	□1	□2	□3	□4
j)	I am planning on pursuing a career that involves mathematics.	□1	□2	□3	□4

a)	I intend to take additional mathematics courses after school finishes.	□1	I intend to take additional English courses after school finishes.	□2
b)	I plan on majoring in a subject in college that requires mathematics skills.	□1	I plan on majoring in a subject in college that requires science skills.	□2
c)	I am willing to study harder in my mathematics classes than is required.	□1	I am willing to study harder in my English classes than is required.	□2
d)	I plan on taking as many mathematics classes as I can during my education.	□1	I plan on taking as many science classes as I can during my education.	□2
e)	I am planning on pursuing a career that involves a lot of mathematics.	□1	I am planning on pursuing a career that involves a lot of	□2

	Always or almost always	Often	Sometime s	Never or rarely
a) I talk about mathematics problems with my friends.	□1	□2	□3	$\Box 4$
b) I help my friends with mathematics.	□1	□2	□3	□4
c) I do mathematics as an extracurricular activity.	□1	□2	□3	□4
d) I take part in mathematics competitions.	□1	□2	□3	□4
e) I do mathematics more than 2 hours a day outside of school.	□1	□2	□3	$\Box 4$
f) I play chess.	$\Box 1$	□2	$\Box 3$	$\Box 4$
g) I program computers.	□1	□2	□3	$\Box 4$
h) I do mathematics even though I do not like it.	□1	□2	□3	$\Box 4$
i) I participate in a mathematics club.	$\Box 1$	□2	$\Box 3$	$\Box 4$

a)	I do my best work in mathematics when I try to do better than others.	□1	I do my best work in mathematics when I work with other students.	□2
b)	I would like to be the best in my class in mathematics.	□1	In mathematics I enjoy working with other students in groups.	□2
c)	When we work on a project in mathematics, I think that it is a good idea to combine the ideas of all the students in a group.	□1	I try very hard in mathematics because I want to do better on the exams than the others.	□2
d)	In mathematics, I enjoy helping others to work well in a group.	□1	I make a real effort in mathematics because I want to be one of the best.	□2
e)	In mathematics I always try to do better than the other students in my class.	□1	In mathematics I learn most when I work with other students in my class.	□2

a)	When I study for a mathematics test, I try to work out what are the most important parts to learn.	□1	When I study for a mathematics test, I try to understand new concepts by relating them to things I already know.	□2	When I study for a mathematics test, I learn as much as I can by heart.	□3
b)	When I study mathematics, I try to figure out which concepts I still have not understood properly.	□1	When I study mathematics, I think of new ways to get the answer.	□2	When I study mathematics, I make myself check to see if I remember the work I have already done.	□3
c)	When I study mathematics, I try to relate the work to things I have learned in other subjects.	□1	When I study mathematics, I start by working out exactly what I need to learn.	□2	When I study mathematics, I go over some problems so often that I feel as if I could solve them in my sleep.	□3
d)	In order to remember the method for solving a mathematics problem, I go through examples again and again.	□1	I think about how the mathematics I have learned can be used in everyday life.	□2	When I cannot understand something in mathematics, I always search for more information to clarify the problem.	□3

${\begin{tabular}{ll} \label{table} Thinking about your views on mathematics: To what extent do you agree with the following statements? \\ \end{tabular}$

		Strongly agree	Agree	Disagree	Strongly disagree
a)	I try to use test-taking strategies that have worked for me in the past when I take a mathematics test.	□1	□2	□3	□4
b)	After I solve a mathematics test question, I ask myself if there was an easier way to do it.	□1	□2	□3	□4
c)	I pace myself in order to have enough time on mathematics tests.	□1	□2	□3	□4
d)	I consciously focus my attention on important information in the questions on mathematics tests.	□1	□2	□3	□4
e)	I read the instructions carefully before I begin a mathematics test.	□1	□2	□3	□4
f)	I think of several ways to solve a mathematics problem and choose the best one when taking a mathematics test.	□1	□2	□3	□4
g)	When I get confused during a mathematics test, I stop and reread the question.	□1	□2	□3	□4
h)	I know what kind of information is most important in solving a mathematics test question.	□1	□2	□3	□4

	i)	I use helpful strategi during a mathematic		ally		□2 □3	$\Box 4$		
Q56	How many hours do you typically spend per week attending out-of-school-time lessons in the following subjects?								
		These are only lessons in subjects that you are also learning at school, that you spend extratime extra time outside of normal school hours. The lessons may be given at your school, at your home, or somewhere else.							
		(Please check only one box in each row.)							
			I do not attend out-of- school time lessons in this subject	Less than 2 hours a week	2 or more but less than 4 hours a week	4 or more but less than 6 hours a week	6 or more hours a week		
	a)	English	\square_1	\square_2	\square_3	\Box_4	\Box_5		
	b)	Mathematics	\square_1	\square_2	\square_3	\square_4	\square_5		
	c)	Science	\square_1	\square_2	\square_3	\Box_4	\square_5		
	d)	Other Subjects	\square_1	\square_2	\square_3	\Box_4	\square_5		
Q57		For those subjects i	-			-	e indicate		
		Remedial lessons are respective subject, wh content for students w	ile enrichme	nt lessons a	ire providing				
		(Please check only on	e box in each	row.)					
					Remedial lessons	Enrichment lessons	Not applicable		
	a)	English			\square_1	\square_2	\square_3		
	b)	Mathematics			\square_1	\square_2	\square_3		
	c)	Science			\square_1	\square_2	\square_3		

d)	Other school subjects	\square_1	\square_2
e)	Study skills	\square_1	\square_2
Q58	Thinking about all school subjects: On average spend each week on the following?	e, how mai	ny hours do you
	When answering, include time spent on the weeker	nd too.	
a)	Homework or other material assigned by your teachers	1	hours per week
b)	Out of the time spent in (a), how many hours do y work on your homework with somebody overlooking and providing help if necessary ("guided homework"), either at school or elsewhere?		hours per week
c)	Work with a personal tutor (whether paid or not)	1	hours per week
d)	Attend out of school classes organized by a commercial company and paid for by your parent	ts1	hours per week
e)	Study with a parent or other family member	1	hours per week
f)	Practice content from school lessons by working a computer (e.g., learn vocabulary with training software)		hours per week

 \square_3

 \square_3

Thinking only about mathematics: On average, how many hours do you spend each week on the following?

	When answering, include time spent on the weekend	too.
a)	Homework or other material assigned by your teachers	hours per week
b)	Out of the time spent in (a), how many hours do you work on your homework with somebody overlooking and providing help if necessary ("guided homework"), either at school or elsewhere?	hours per week
c)	Work with a personal tutor (whether paid or not)	hours per week
d)	Attend out of school classes organized by a commercial company and paid for by your parents	hours per week
e)	Study with a parent or other family member	
		hours per week
f)	Practice mathematics using online software(e.g., learn vocabulary with training software)	hours per week

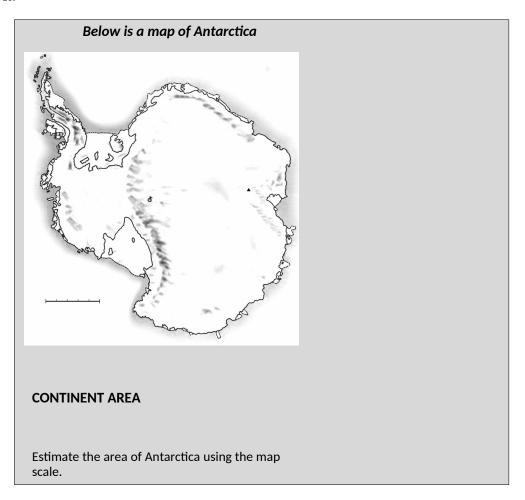
Thinking about mathematical concepts: How familiar are you with the following Q63 $$\,^{\circ}$$ terms?

		Never heard of it	Heard of it once or twice	Heard of it a few times	Heard of it often	Know it well, understa nd the concept
a)	Exponential Function	$\Box 1$	□2	$\Box 3$	$\Box 4$	□5
	Divisor	$\Box 1$	□2	□3	$\Box 4$	□5
	Quadratic Function	$\Box 1$	□2	□3	$\Box 4$	□5
	•	$\Box 1$	□2	$\Box 3$	$\Box 4$	□5
	Proper Number	$\Box 1$	□2	□3	$\Box 4$	□5
	Pythagorean Theorem	□1	□2	□3	□4	□5
f)	Linear Equation	□1	□2	□3	$\Box 4$	□5
g)	Vectors	□1	□2	□3	$\Box 4$	□5
h)	Complex Number	□1	□2	□3	□4	□5
i)	Rational Number					
j)	Radicals	□1	□2	□3	$\Box 4$	□5
k)	Subjunctive Scaling	$\Box 1$	□2	$\Box 3$	$\Box 4$	□5
1)	Polygon	$\Box 1$	□2	□3	$\Box 4$	□5
m)	Declarative Fraction	$\Box 1$	□2	$\Box 3$	$\Box 4$	□5
n)	Prime Number	$\Box 1$	□2	□3	$\Box 4$	□5
0)	Congruent Figure	$\Box 1$	□2	$\Box 3$	$\Box 4$	□5
	Cosine	$\Box 1$	□2	$\Box 3$	$\Box 4$	□5
_	Arithmetic Mean	$\Box 1$	□2	□3	$\Box 4$	□5
•		□1	□2	$\Box 3$	$\Box 4$	□5
	Area of a Circle	□1	□2	□3	$\Box 4$	□5
s)	Probability					

The next six questions are about your experience with different kinds of mathematics problems in school. You will see a mathematics problem, followed by some questions about your experience with the problem.

Please read each of the problems. You do NOT need to solve them.

Read the problem in the box below. Then answer the questions that follow Q64 $_{t.}$



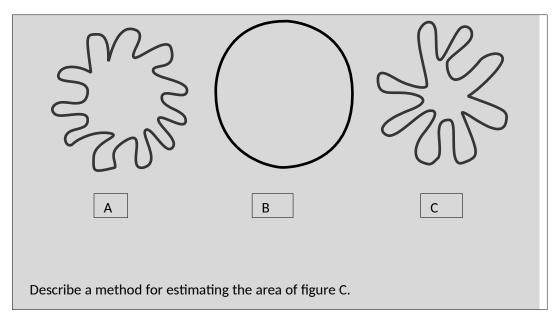
We want to know about your experience with this type of problem in school. Do not solve it!

(Please check only one box in each row.)

Frequently Sometime Rarely Never

a) e	now often have you encountered this type of problem in your nathematics lessons?	□1	□2	□3	□4
b е) р	How often have you encountered this type of problem in the tests you have taken in school?	□1	□2	□3	□4

Read the problem in the box below. Then answer the questions that follow it. $\ensuremath{\mathsf{Q65}}$



We want to know about your experience with this type of problem in school. Do not solve it!

		Frequently	Sometime s	Rarely	Never
a)	How often have you encountered this type of problem in your mathematics lessons?	□1	□2	□3	□4
b)	How often have you encountered this type of problem in the tests you have taken in school?	□1	□2	□3	□4

Read the problem in the box below. Then answer the questions that follow it.

A carpenter has 32 meters of timber and wants to make a border around a garden bed.

He is considering the following designs for the garden bed.

A

10m

D

10m

We want to know about your experience with this type of problem in school. Do not solve it!

(Please check only one box in each row.)

Q66

	Frequently	Sometimes	Rarely	Never
How often have you encountered a) this type of problem in your mathematics lessons?	□1	□2	□3	□4
h) How often have you encountered	$\Box 1$	□2	$\Box 3$	□4

b) How often have you encountered

this type of problem in the **tests** you have taken in school?

Q67

Read the problem in the box below. Then answer the questions that follow it.

	Time	8:00	9:00	10:00
Complete this table showing in the woman's blood at int		•		/e
Suppose the woman is given the morning.	n a dose of 300	milligrams of per	nicillin at 8 o'cl	ock in
This pattern continues: at the was present at the end of the		•	•	hat
A woman in the hospital red breaks the penicillin down s penicillin will remain active.	o that one hou	•	, ,	•

We want to know about your experience with this type of problem in school. Do not solve it!

		Frequently	Sometime s	Rarely	Never
a)	How often have you encountered this type of problem in your mathematics lessons?	□1	□2	□3	□4
b)	How often have you encountered this type of problem in the tests you have taken in school?	□1	□2	□3	□4

Read the problem in the box below. Then answer the questions that follow it.

Mei-Ling from Singapore was preparing to go to South Africa for 3 months as an exchange student. She needed to change some Singapore dollars (SGD) into South African rand (ZAR).

During these 3 months, the exchange rate had changed from 4.2 to 4.0 ZAR per SGD.

We want to know about your experience with this type of problem in school. Do not solve it!

(Please check only one box in each row.)

Q68

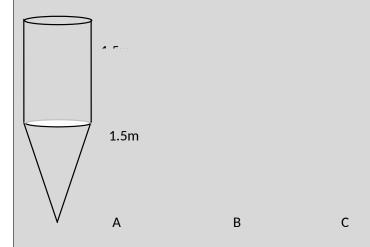
		Frequentl Y	Sometime s	Rarely	Never
a)	How often have you encountered this type of problem in your mathematics lessons?	□1	□2	□3	□4
b)	How often have you encountered this type of problem in the tests you have taken in school?	□1	□2	□3	□4

Read the problem in the box below. Then answer the questions that follow it.

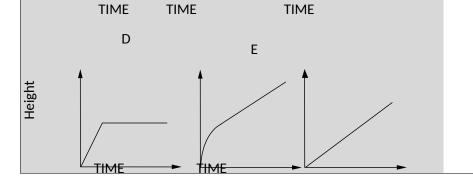
Q69

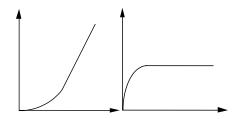
A water tank has the shape and dimensions as shown in the diagram.

At the beginning, the tank is empty. Then it is filled with water at the rate of one literoper second.



Which of the following graphs shows how the height of the water surface changes over time?





We want to know about your experience with	this type of problem in school.
Do not solve it!	

(Please check only one box in each row.)

		Frequently	Sometime s	Rarely	Never
a)	How often have you encountered this type of problem in your mathematics lessons?	□1	□2	□3	□4
b)	How often have you encountered this type of problem in the tests you have taken in school?	□1	□2	□3	□4

[The following item was not administered in 2003 but was administered in 2009.]

0	n average,	about how	many st	tudents	attend	your	English	class

_____ students

Q73

The next four questions are about your experience with different kinds of mathematics problems in school. You will see descriptions of problems and gray-colored boxes, each containing a mathematics problem.

Please read each of the problems. You do NOT need to solve them.

In the box is a series of problems. Each requires you to understand a problem written in text and perform the appropriate calculations. Usually the problem talks about practical situations, but the numbers and people and places mentioned are made up. All the information you need is given. Here are two examples:

1) Ann is two years older than Betty, and Betty is four times as old as Sam.	When Betty
is 30, how old is Sam?	

2) Mr. Smith bought a television and a bed. The television cost \$625, but he got a 10% discount. The bed cost \$200. He paid \$20 for delivery. How much money did Mr. Smith spend?

We want to know about your experience with these types of word problems in school. Do not solve it!

		Frequentl Y	Sometime s	Rarely	Never
a)	How often have you encountered these types of problems in your mathematics lessons?	□1	□2	□3	□4
b)	How often have you encountered these types of problems in the tests you have taken in school?	□1	□2	□3	□4

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T)	So	ıve	2X	+	3	=	/	

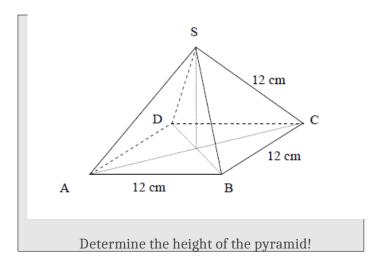
2) Find the volume of a box with sides 3m, 4m and 5m.

We want to know about your experience with these types of items in school. Do not solve it!

		Frequentl Y	Sometime s	Rarely	Never
a)	How often have you encountered these types of problems in your mathematics lessons?	□1	□2	□3	□4
b)	How often have you encountered these types of problems in the tests you have taken in school?	□1	□2	□3	$\Box 4$

Q76 In the next type of problems, you have to use mathematical knowledge and draw conclusions. There is no practical application provided. Here are two examples.

1) Here you need to use geometrical theorems:



2) Here you have to know what a prime number is:

If n is any number: can $(n+1)^2$ be a prime number?

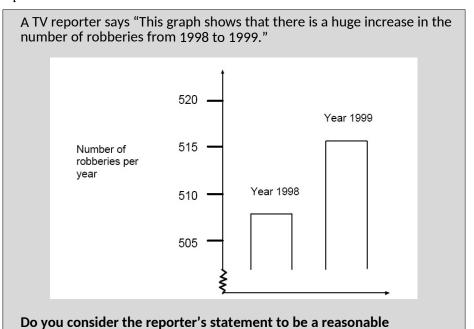
We want to know about your experience with these types of problems in school. Do not solve it!

		Frequently	Sometime s	Rarely	Never
a)	How often have you encountered these types of problems in your mathematics lessons?	□1	□2	□3	□4
b)	How often have you encountered these types of problems in the tests you	□1	□2	□3	□4

have taken in school?

In this type of problem, you have to apply suitable mathematical knowledge to find a useful answer to a problem that arises in everyday life or work. The data and information are about real situations. Here are two examples.

Example 1:



Example 2:

answer.

For years the relationship between a person's recommended maximum heart rate and the person's age was described by the following formula:

interpretation of the graph? Give an explanation to support your

Recommended maximum heart rate = 220 - age

Recent research showed that this formula should be modified slightly. The new formula is as follows:

We want to know about your experience with these types of problems in school. Do not solve it!

(Please check only one box in each row.)

		Frequently	Sometimes	Rarely	Never
How often have you a) these types of prob mathematics less	lems in your	□1	□2	□3	□4
How often have you b) these types of prob tests you have tak	lems in the	□1	□2	□3	□4

How often do these things happen with your mathematics homework?

Q79

	Always or almost always	Often	Sometime s	Never
a) My mathematics teacher discusses mistakes with us to help us learn from our mistakes.	□1	□2	□3	□4
b) My mathematics teacher gives feedback on how we solve our homework problems.	□1	□2	□3	□4
c) My mathematics teacher rewards finding "new" approaches to solving problems – approaches that we have to find on our own and that have not been explicitly taught.	ve	□2	□3	□4
d) My mathematics teacher gives homework problems that require to go beyond what has been explicitly taught in class.	□1 as	□2	□3	□4
e) My mathematics teacher rewards the effort that we put into our	□1	□2	□3	□4

homework regardless of whether we get the right answer.

Thinking about the mathematics teacher that taught your last mathematics class: How often do these things happen?

		Always or almost always	Often	Sometime s	Nevei
a)	The teacher sets clear goals for our learning.	□1	□2	□3	□4
b)	The teacher asks me or my classmates to present our thinking or reasoning at some length.	□1	□2	□3	□4
c)	The teacher gives different work to classmates that have difficulties learning and/or to those who can advance faster.	□1	□2	□3	□4
d)	The teacher assigns projects that require at least one week to complete.	□1	□2	□3	□4
e)	The teacher tells me about how well I am doing in my mathematics class.	□1	□2	□3	□4
f)	The teacher asks questions to check whether we have understood what was taught.	□1	□2	□3	□4
g)	The teacher has us work in small groups to come up with joint solutions to a problem or task.	□1	□2	□3	□4
h)	At the beginning of a lesson, the teacher presents a short summary of the previous lesson.	□1	□2	□3	□4
i)	The teacher reviews the homework that we prepare.	□1	□2	□3	□4

j)	The teacher asks us to help plan classroom activities or topics.	□1	□2	□3	□4
k)	The teacher gives me feedback on my strengths and weaknesses in mathematics.	□1	□2	□3	□4
1)	The teacher tells us what is expected of us when we get a test, quiz, or assignment.	□1	□2	□3	□4
m)	The teacher checks our workbooks.	□1	□2	□3	□4
n)	The teacher has us argue about different approaches to solving a mathematics problem.	□1	□2	□3	□4
o)	The teacher tells us what we have to learn.	□1	□2	□3	□4
p)	The teacher gives a test or quiz to assess student learning.	□1	□2	□3	□4
q)	The teacher tells me what I need to do to become better in mathematics.	□1	□2	□3	□4
r)	The teacher has us solve realistic problems from daily life.	□1	□2	□3	$\Box 4$

Thinking about the mathematics teacher that taught your last mathematics class: To what extent do you agree with the following statements?

		Strongly agree	Agree	Disagree	Strongly disagree
a)	The teacher asks questions that make us reflect on the problem.	□1	□2	□3	$\Box 4$
b)	The teacher gives tasks that only involve calculations.	□1	□2	□3	□4
c)	The teacher gives problems with definite solutions.	□1	□2	□3	$\Box 4$
d)	The teacher gives problems that require us to think about them for an extended time.	□1	□2	□3	□4
e)	The teacher asks us to decide on our own procedures for solving complex problems.	□1	□2	□3	□4
f)	The teacher presents problems for which there is no immediately obvious method of solution.	□1	□2	□3	□4
g)	The teacher presents problems in different contexts so that students know whether they have understood the concepts.	□1	□2	□3	□4
h)	The teacher helps us to learn from mistakes we have made.	□1	□2	□3	$\Box 4$
i)	The teacher asks us to explain how we have solved a problem.	□1	□2	□3	$\Box 4$

	j) The teacher presents problems that require students to apply what they have learned to new contexts.	□1	□2	□3	□4
1	k) The teacher gives problems that can be solved in several different ways.	□1	□2	□3	□4
	Below you will find descriptions of thre descriptions of these teachers. Then let the final statement. (Please check only one box in each row.)				
		Strongly agree	Agree	Disagree	Strongly disagree
a)	Ms. Anderson assigns mathematics homework every other day. She always gets the answers back to students before examinations. Ms. Anderson is concerned about her students' learning.	\square_1	\square_2	\square_3	\Box_4
b)	Mr. Crawford assigns mathematics homework once a week. He always gets the answers back to students before examinations. Mr. Crawford is concerned about his students' learning.	\Box_1	\Box_2	\square_3	\Box_4
c)	Ms. Dalton assigns mathematics homework once a week. She never gets the answers back to students before examinations. Ms. Dalton is concerned about her students' learning.	\square_1	\square_2	\square_3	\square_4

Q83

Thinking about the mathematics teacher who taught your last mathematics class: To what extent do you agree with the following statements?

		Strongly agree	Agree	Disagree	Strong ly disagr ee
a)	My teacher lets students know they need to work hard.	□1	□2	□3	□4
b)	My teacher provides extra help when needed.	□1	□2	□3	□4
c)	My teacher helps students with their learning.	□1	□2	□3	□4
d)	My teacher gives students the opportunity to express opinions.	□1	□2	□3	□4

Q85 Below you will find descriptions of three mathematics teachers. Read each of the descriptions of these teachers. Then let us know to what extent you agree with the final statement.

(Please	chack	only	one	hav	in	aach	row	١
rieuse	cneck	unity	one	UUX	ш	eucn	TUW.	J

		Strongly agree	Agree	Disagree	Strongly disagree
a)	The students in Ms. Franklin's class frequently interrupt her lessons. She also always arrives to class five minutes early. Ms. Franklin is in control of her classroom.	\square_1	\square_2	\square_3	\Box_4
b)	The students in Ms. Harris' class are calm and orderly. She always arrives on time to class. Ms. Harris is in control of her classroom.	\Box_1	\square_2	\square_3	\Box_4
c)	The students in Mr. Reynolds' class frequently interrupt his lessons. As a result, he often arrives to class five minutes late. Mr. Reynolds is in control of his classroom.	\square_1	\square_2	\square_3	\Box_4
		•			

Thinking about the mathematics teacher who taught your last mathematics class: To what extent do you agree with the following statements?

		Strongly agree	Agree	Disagree	Strongly Disagree
a)	My teacher gets students to listen to him or her.	□1	□2	□3	□4
b)	My teacher keeps the class orderly.	□1	□2	□3	□4
c)	My teacher starts the class period on time.	□1	□2	□3	□4
d)	The teacher has to wait a long time for students to quiet down.	□1	□2	□3	□4

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

	Strongly agree	Agree	Disagree	Strongly disagree
a) I feel like an outsider (or left out of things) at school.	□1	□2	□3	□4
b) I make friends easily at school.	□1	□2	□3	$\Box 4$
c) I feel like I belong at school.	□1	□2	□3	□4
d) I feel awkward and out of place in my school.	□1	□2	□3	□4
e) Other students seem to like me.	□1	□2	□3	$\Box 4$
f) I feel lonely at school.	□1	□2	□3	$\Box 4$
g) I feel happy at school.	□1	□2	□3	$\Box 4$
h) Things are ideal in my school.	□1	□2	□3	$\Box 4$
i) I am satisfied with my school.	□1	□2	□3	□4

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

(Please check only one box in each row.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) It is good for me to pass my classes.	□1	□2	□3	□4
b) Trying hard in school will help me get a good job.	□1	□2	□3	□4
c) Trying hard in school will help me get into a good college.	□1	□2	□3	□4
d) I enjoy receiving good grades.	□1	□2	□3	□4
e) Trying hard in school is important.	□1	□2	□3	□4
f) Trying hard in school will not do any good.	□1	□2	□3	□4

Thinking about how others view your school: To what extent do you agree Q91 with the following statements?

		Strongly agree	Agree	Disagree	Strongly disagree
a)	My parents believe that it is beneficial for me to try as hard as I can to do well in school this year.	□1	□2	□3	□4
b)	My parents believe that it is good for me to pass my classes.	□1	□2	□3	$\Box 4$
c)	My friends enjoy studying for	□1	□2	□3	$\Box 4$

	d)	My friends try to do better than each other in school.] 1	⊒2 □	3 □4	
	e)	My friends think that trying hard in school will not do any good.] 1	⊒2 □	3 □4	
	f)	My parents think I will get better grades if I try harder in school.] 1	⊒2 □	3 □4	
Q92	!	Thinking about your school: To what statements?	at extent d	lo you agree	with the follo	owing
		(Please check only one box in each row	.)			
			Strongl agree	y Agree	Disagree	Strongl disagre
	a	If I invest enough effort I can succeed in school.	□1	□2	□3	□4
	b) It is completely my choice whether or not I do well in school.	□1	□2	□3	□4
	c	Family demands or other problems) prevent me from putting a lot of time into my school work.	□1	□2	□3	□4
	d) If I had different teachers, I would try harder in school.	□1	□2	□3	□4
	e) If I wanted to I could perform well in school.	□1	□2	□3	□4
	f	I perform poorly in school whether or not I study for my exams.	□1	□2	□3	□4

their classes.

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

		Strongly agree	Agree	Disagree	Strongly disagree
a)	I intend to study every night for the remainder of the school year.	□1	□2	□3	□4
b)	I will turn in all of my homework on time for the remainder of the school year.	□1	□2	□3	□4
c)	I intend to set timelines to get projects done.	□1	□2	□3	□4
d)	I plan on studying harder in school this year than I did last year.	□1	□2	□3	□4
e)	I will arrive on time to my classes.	□1	□2	□3	□4
f)	I intend to work hard on every project to make sure everything is done right.	□1	□2	□3	$\Box 4$

Thinking about yourself: How much like you are each of the statements below?

Q94

		Very much like me	Mostly like me	Somewha t like me	Not much like me	Not at all like me
a)	When confronted with a problem I give up easily.	□1	□2	□3	□4	□5
b)	I put little time and effort into solving problems.	□1	□2	□3	□4	□5
c)	I put off difficult problems.	□1	□2	□3	□4	□5
d)	I remain interested in the tasks that I start.	□1	□2	□3	□4	□5
e)	I stick with what I decide to do.	□1	□2	$\Box 3$	□4	□5
f)	I continue working on tasks until everything is perfect.	□1	□2	□3	□4	□5
g)	When confronted with a problem I do more than what is expected of me.	□1	□2	□3	□4	□5
h)	My interests change quickly.	□1	□2	□3	□4	□5
i)	When confronted with a problem I am easily distracted.	□1	□2	□3	□4	□5
j)	I remain calm under pressure.	□1	□2	□3	$\Box 4$	□5
k)	Before I act, I plan.	$\Box 1$	□2	□3	$\Box 4$	□5

Thinking about yourself: How much like you are each of the statements below?

(Please check only one box in each row.)

Q95

		Very much like me	Mostly like me	Somewhat like me	Not much like me	Not at all like me
a)	I am happy when I learn something new.	□1	□2	□3	$\Box 4$	□5
b)	I tend to analyze things.	□1	□2	□3	$\Box 4$	□5
c)	I dislike learning.	□1	□2	□3	$\Box 4$	□5
	I reason logically.	$\Box 1$	□2	□3	$\Box 4$	□5
e)	I can handle a lot of information.	□1	□2	□3	$\Box 4$	□5
f)	I am quick to understand things.	□1	□2	□3	$\Box 4$	□5
g)	I never challenge things.	□1	□2	□3	$\Box 4$	□5
h)	I rarely look for a deeper meaning in things.	□1	□2	□3	$\Box 4$	□5
i)	I seek explanations for things.	□1	□2	□3	□4	□5
j)	I can easily link facts together.	□1	□2	□3	□4	□5
k)	I have difficulty imagining things.	□1	□2	□3	$\Box 4$	□5
1)	I look forward to the opportunity to learn and grow.	□1	□2	□3	□4	□5
m)	I like to speculate about things.	□1	□2	□3	$\Box 4$	□5
n)	I like to solve complex problems.	□1	□2	□3	□4	□5
o)	I come up with alternatives.	□1	□2	□3	$\Box 4$	□5

You have just bought a new cell phone. It works differently from your old one. You want to find out how to use it.

What would you do? For each suggestion, check the option that best applies to you.

	I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a) I try to figure out how to use the functions that I really need. Anything else doesn't matter.	□1	□2	□3	□4
b) I look for the games first.	$\Box 1$	□2	□3	□4
c) I open up every menu and try out all the options.	□1	□2	□3	□4
d) I check how many buttons work the same way as my old phone.	□1	□2	□3	□4
e) I read the manual.	□1	□2	□3	□4
f) I search the Internet.	□1	□2	□3	$\Box 4$
g) I ask a friend for help.	□1	□2	□3	$\Box 4$
h) I push a few buttons to see if there are familiar menus.	□1	□2	□3	□4

Suppose that you have been sending text messages from your mobile phone for several weeks. Today, however, you can't send text messages. You want to try to solve the problem.

What would you do? For each suggestion, check the option that best applies to you.

(Please check only one box in each row.)

	I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a) I press every button possible to find out what is wrong.	□1	□2	□3	□4
b) I think about what might have happened and what I can do to solve the problem.	□1	□2	□3	□4
c) I read the manual.	□1	□2	□3	$\Box 4$
d) I search the Internet.	□1	□2	□3	$\Box 4$
e) I ask a friend for help.	$\Box 1$	□2	□3	$\Box 4$

After 15 minutes, you haven't found a solution to the problem. What would you do quest?

What would you do? For each suggestion, check the option that best applies to you.

	I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a) I keep on trying hard to solve the problem by myself.	□1	□2	□3	□4

	b)	I call the technical support line.	$\Box 1$	□2	$\Box 3$	$\Box 4$
	c)	I ask my friends for help.	□1	□2	□3	□4
	d)	I search the Internet.	□1	□2	□3	□4
	e)	I get it repaired in a shop.	□1	□2	□3	$\Box 4$
	f)	I buy another cell phone.	□1	□2	□3	$\Box 4$
	g)	I read the manual.	□1	□2	□3	□4
	h)	I put it away and decide to try again later.	□1	□2	□3	□4
Q99		You want to buy a cable to connect which cable to buy. What would you do? For each suggest	•	•		
		(Please check only one box in each row	<i>i.</i>)			
			I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
	a)	I go to the nearest electronics store and ask the sales assistant.	□1	□2	□3	$\Box 4$
	b)	I search the Internet for how to connect computers to TVs.	□1	□2	□3	□4
	c)	I read the manual for my computer or my TV.	□1	□2	□3	□4
	d)	I ask a friend for help.	□1	□2	□3	□4
	e)	I go to the nearest electronics store and buy the one that I think is right.	□1	□2	□3	□4

f)	I look at the sockets on my computer and my TV to figure out what to buy.	□1	□2	□3	□4
Q100	Suppose you know the right cable to co to find an electronics store that sells c	•	-	to your TV.	You want
	What would you do? For each suggestio	n, check the	option that	best applies	to you.
	(Please check only one box in each row.)				
		I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a)	I go to several stores and compare the advertised prices of the cables.	□1	□2	□3	□4
b)	I search the Internet for the locations of discount electronics stores.	□1	□2	□3	□4
c)	I go to the nearest electronics store and ask the sales assistant for a good price.	□1	□2	□3	□4
d)	I ask friends for their advice on how much I should pay.	□1	□2	□3	□4
e)	I phone several electronics stores to ask how much they charge for the cable.	□1	□2	□3	□4

You try three discount electronics stores but none of them has the cable in stock.

Q101

What would you do? For each suggestion, check the option that best applies to you.

		I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a)	I try to find more discount electronic stores.	□1	□2	□3	□4
b)	I try to think of other ways I could get a cable, or if I could use a different type of connection.	□1	□2	□3	□4
c)	I go to a very expensive store that has the cable in stock.	□1	□2	□3	□4
d)	I decide to try again another day.	□1	□2	□3	□4
e)	I ask friends for their advice.	$\Box 1$	□2	□3	□4
f)	I order a cable from a discount store, with an estimated two weeks delivery time.	□1	□2	□3	□4
g)	I decide not to connect my computer and my TV.	□1	□2	□3	□4
h)	I phone several electronics stores to ask how much they charge for the cable.	□1	□2	□3	□4

You are planning a trip to the zoo with your brother. You don't know which route to take to get there.

What would you do? For each suggestion, check the option that best applies to you.

		I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
,	read the zoo brochure to see if it says how to get there.	□1	□2	□3	□4
	study a map and figure out the best coute.	□1	□2	□3	□4
	leave it to my brother to worry about how to get there.	□1	□2	□3	□4
,	ask a friend who has been there pefore for advice.	□1	□2	□3	□4
	know roughly where it is, so I suggest we just start driving.	□1	□2	□3	□4
	search the Internet to get directions rom home to the zoo.	□1	□2	□3	□4
_	use a GPS car navigation system to ind the quickest route.	□1	□2	□3	□4

Suppose that your brother is driving and you are using a map to navigate to the zoo. When you think you are nearly there, you realize that you are lost.

What would you do? For each suggestion, check the option that best applies to you.

	I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a) I ask my brother for help.	□1	□2	□3	□4
b) I think about where we might have made a wrong turn and how to get back on course.	□1	□2	□3	□4
c) I study the map to try to figure out where we are.	□1	□2	□3	□4
d) I tell my brother to turn around and drive back until we find a road I know.	□1	□2	□3	□4
e) The zoo should be close by, so I suggest that we keep going to see if we can find it.	□1	□2	□3	□4
f) We stop and ask a pedestrian for help.	□1	□2	□3	□4

After 15 minutes, you have worked out where you are. You are a long way from the zoo and there doesn't seem to be an easy way to get there.

What would you do? For each suggestion, check the option that best applies to you.

	I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a) I call my friend who has been there before to ask for help.	□1	□2	□3	□4
b) I keep on trying hard to figure out the best way to get there.	□1	□2	□3	□4
c) I ask my brother what to do.	□1	□2	□3	□4
d) I suggest we find a gas station.	□1	□2	□3	$\Box 4$
e) I give up and ask my brother to drive us back home.	□1	□2	□3	□4
f) I look for another place we can visit that is easy to get to from where we are now.	□1	□2	□3	□4

You arrive at the train station. There is a ticket machine that you have never used before. You want to buy a ticket.

What would you do? For each suggestion, check the option that best applies to you.

	I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a) I check how similar it is to other ticket machines I have used.	□1	□2	□3	□4
b) I watch how somebody else buys a ticket.	□1	□2	□3	□4
c) I carefully read the instructions on the machine.	□1	□2	□3	□4
d) I try out all the buttons to see what happens.	□1	□2	□3	□4
e) I ask someone for help.	□1	□2	□3	□4
f) I try to find a ticket office at the station to buy a ticket.	□1	□2	□3	□4

Suppose that you have been buying train tickets from the ticket machine for several weeks. Today, however, the ticket machine doesn't seem to work. You need to buy a ticket.

What would you do? For each suggestion, check the option that best applies to you.

	I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a) I press every button possible to find out what is wrong.	□1	□2	□3	□4
b) I think about what might cause this problem and what I can do to solve it.	□1	□2	□3	□4
c) I carefully read the display and the instructions on the machine.	□1	□2	□3	□4
d) I try to find another ticket machine.	□1	□2	□3	$\Box 4$
e) I try to find a ticket office at the station to buy a ticket.	□1	□2	□3	□4
f) I ask someone for help.	□1	□2	□3	□4
g) I phone the customer service line.	□1	□2	□3	$\Box 4$
h) I hit the machine to try to get it to work.	□1	□2	□3	$\Box 4$

Q107 After 15 minutes, you haven't been able to buy a ticket and the train is due to arrive soon.

What would you do? For each suggestion, check the option that best applies to you.

	I would definitely do this	I would probably do this	I would probably not do this	I would definitely not do this
a) I try to find a ticket office at the station to buy a ticket.	□1	□2	□3	□4
b) I keep on trying hard to get the machine to work.	□1	□2	□3	□4
c) I ask someone for help.	$\Box 1$	□2	□3	□4
d) I carefully read the display and the instructions on the machine.	□1	□2	□3	□4
e) I get on the train without a ticket.	□1	□2	□3	□4
f) I hit the machine to try to get it to work.	□1	□2	□3	□4
g) I travel some other way.	□1	□2	□3	□4
h) I give up and go home.	□1	□2	□3	$\Box 4$
i) I try to find another ticket machine.	$\Box 1$	□2	□3	$\Box 4$

The questions that follow have to do with how you make decisions. You are given two to three choices. Your task is to decide between the choices. Choose the box that matches your preference.

Q108	Tou are given two choices to make	money. Which do you prefer:
	(Please check only one box.)	
	Accept \$200	\square_1
	Flip a coin. If it comes up heads you get \$500, if it comes up tails you get nothing.	\square_2
Q109	You are given two choices to make	money: Which do you prefer?
	(Please check only one box.)	
	Accept \$200	\square_1
	Flip a coin. If it comes up heads you get \$400, if it comes up tails you get nothing.	\square_2
Q110	You are given two choices to mak	e money: Which do you prefer?
	(Please check only one box.)	
	Accept \$200	\square_1
	Flip a coin. If it comes up heads you get \$350, if it comes up tails you get nothing.	\square_2

Q111	You are given two choices to make money: Which do you prefer?		
	(Please check only one box.)		
	Accept \$200	\square_1	
	Flip a coin. If it comes up heads yo get \$450, if it comes up tails you get nothing.	ou \square_2	
Q112	You are given three choices t	to make money: Which do you prefer?	
	(Please check only one box.)		
	To get \$200 now	\square_1	
	To get \$250 in 3 months	\square_2	
	To get \$300 in 6 months	\square_3	
Q113	You are given three choices t	to make money: Which do you prefer?	
	(Please check only one box.)		
	To get \$200 now	\Box_1	
	To get \$250 in 1 month	\square_2	
	To get \$300 in 3 months	\square_3	

Q114		
	(Please check only one box.)	
	To get \$200 now	\Box_1
	To get \$300 in 1 month	\square_2
	To get \$600 in 3 months	\square_3
Q115	You are given three choices	s to make money: Which do you prefer
Q113	(Please check only one box.)	
	To get \$200 now	\Box_1
	To get \$300 in 3 months	\square_2
	To get \$600 in 6 months	\square_3

You are given three choices to make money: Which do you prefer?

4. Items in 2003 Student Questionnaire that have been eliminated:

Item #	Stem
Q43	What kind of job do you expect to have when you are about 30 years
	old?
Q44	Is there a computer available for you to use at any of these places?
Q45	Have you ever used a computer?
Q46	How long have you been using computers?
Q47	How often do you use a computer at these places?
Q48	How often do you use:
Q49	How well can you do each of these tasks on a computer?
Q50	Thinking about your experience with computers: To what extent do you
	agree with the following statements?