APPENDIX C: PISA INSTRUMENTS

PISA 2012 Student and School Questionnaires

The student and school questionnaires to be used in the PISA field test in 2011 will largely replicate the questionnaires administered in 2003, the last time that mathematics was the major domain assessed. The PISA 2012 student and school questionnaires are expected to be very much like the 2003 versions because mathematics was also the major domain in PISA 2003 and thus the content questions focus on mathematics, as they will in PISA 2012. The 2003 questionnaires are included in this appendix. The PISA Questionnaire Expert Group has identified items in the 2003 instruments to retain and items to eliminate.

The following items have been proposed for *deletion* from the questionnaires.

Student questionnaire	
Education career	20, 21, 22, 37, 38, 39, 40, 42
Attitudes towards school	24
Strategies (memorization)	32c, 32f, 32g, 32i, and 32m
Learning preferences (cooperative vs. competitive)	35
Information communication technology	44-50 (all of section H)
School questionnaire	
Percent second-language learners	17
Grades covered	5
Teacher behaviors	28a, 28f, 28i, and 28k
Teacher participation	38c, e, m
Student behaviors	28b, 28d, 28g, 28h, 28j, 28l

One purpose of the field trial is to try out alternative items formats to improve the quality and cross-national comparability of the data so items used in 2003 may be presented in different formats (e.g., variations of existing Likert response scales) or 2003 constructs may be measured using new item formats (e.g., forced choice, situational judgment, vignettes) in order to find an optimal way of gathering the information. At the time of this submission (May 2010) the proposed items are not available from the international consortium. They will be submitted to OMB for review at a later date, once they become available.

PISA 2012 may also include new measures to extend the measurement of constructs included in the 2003 instruments. *Additional measures, as proposed by the Questionnaire Expert Group, to be developed* and included in the field trial questionnaires are shown below. At the time of this submission (May 2010) the proposed items are not yet available from the international consortium.

Construct (addressed in 2003 instrument)	Proposed measure to extend existing construct
Strategies and metacognition (student questionnaire)	• Metacognitive knowledge with regard to problem-solving
Beliefs about mathematics (student questionnaire)	• Epistemological beliefs about mathematics
Motivation and intention (student questionnaire)	• Long-term intentions or "future orientations" regarding mathematics
Self-related beliefs and planned behavior (student questionnaire)	• Attitudes, subjective norms, and perceived behavioral control
Learning environment and opportunity-to-learn (OTL) (student questionnaire)	• Content coverage • Instructional quality: challenge and cognitive activation
School and system level support for teaching and learning of mathematical literacy (school questionnaire)	• Mathematics course offerings • Qualification of mathematics teaching staff • Collaboration among mathematics teaching staff

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

OECD Programme for International Student Assessment

United States of America
English

PISA 2003
SCHOOL QUESTIONNAIRE

OMB LABEL

Project Consortium:

Australian Council for Educational Research (ACER)

Netherlands National Institute for Educational Measurement (CITO group)

Educational Testing Service (ETS, USA)

National Institute for Educational Policy Research (NIER, Japan)

Westat (USA)

Learning for Living

This questionnaire asks for information about:

- The characteristics of the school;

- The student body;

- Teachers in the school;

- Some of the pedagogical practices of the school, sometimes with particular regard to mathematics;

- The school's resources;

- Some of the administrative structures within the school.

This information may, for example, help to establish the impact of resource distribution on student achievements — both within and between countries. It may also help to establish the impact of different teaching strategies and practices on student achievement.

The questionnaire should be completed by the principal or designate.

It should take about 30 minutes to complete.

If you do not know an answer precisely, your best estimate will be adequate for the purposes of the study.

Your answers will be kept confidential. They will be combined with answers from other principals to calculate totals and averages in which no one school can be identified.

Q1 **Which of the following best describes the community in which your school is located?**

(Please check only one box.)

A village, hamlet or rural area (fewer than 3,000 people) .... ☐₁

A small town (3,000 to about 15,000 people) .... ☐₂

A town (15,000 to about 100,000 people) .... ☐₃

A city (100,000 to about 1,000,000 people) .... ☐₄

A large city with over 1,000,000 people .... ☐₅

Q2 **As of March 1, 2003, what was the total school enrollment (number of students)?**

(Please write a number in each row. Write 0 (zero) if there are none.)

a) Number of boys: _____

b) Number of girls: _____

Q3 **Is your school a public or a private school?**

(Please check only one box.)

A public school .... ☐₁

A private school .... ☐₂

Q4 **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, regional, state and national) .... _____

b) Student fees or school charges paid by parents (e.g. fees paid for books, locker fees, field trips, etc.) .... _____

c) Benefactors, donations, bequests, sponsorships, parent fund raising .... _____

d) Other .... _____

	Total	100%

Q5   Are the following grade levels found in your school?

(Please check one box on each row.)

		Yes	No
a)	Kindergarten	☐₁	☐₂
b)	Grade 1	☐₁	☐₂
c)	Grade 2	☐₁	☐₂
d)	Grade 3	☐₁	☐₂
e)	Grade 4	☐₁	☐₂
f)	Grade 5	☐₁	☐₂
g)	Grade 6	☐₁	☐₂
h)	Grade 7	☐₁	☐₂
i)	Grade 8	☐₁	☐₂
j)	Grade 9	☐₁	☐₂
k)	Grade 10	☐₁	☐₂
l)	Grade 11	☐₁	☐₂
m)	Grade 12	☐₁	☐₂
n)	Grade 13	☐₁	☐₂
o)	Ungraded school	☐₁	☐₂

Q6 **About what percentage of students in your school repeated a grade, at the middle/junior high school level (grades 7-9) and the high school level (grades 10-12), last academic year?**

(Please write a number in each row. Write 0 (zero) if nobody repeated a grade. Check the not applicable box if the grade level does not appear in your school.)

	%	*Not applicable*
The approximate percentage of students repeating a grade at the middle or junior high school level (grades 7-9) in this school last year was:	_____	☐ 997
The approximate percentage of students repeating a grade at the high school level (grades 10-12) in this school last year was:	_____	☐ 997

Q7 **As of March 1, 2003, what percentage of students at this school were eligible for free or reduced price school lunches through the National School Lunch Program?**

(Please write a number in each row. Write 0 (zero) if there are none.)

Percentage of students : _____

Q8 **How many instructional days are in the school year?**

Number of instructional days : _____

Q9 **On the average, how many <u>hours</u> *in total* are there in the school day? (include lunch breaks, study hall time, and after school activities)**

Number of total hours in a school days : _____

Q10 **On the average, how many <u>hours</u> for *instruction* are there in the school day? (exclude lunch breaks and after school activities)**

Number of total hours in a school day : _____

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.)

	Not at all	Very little	To some extent	A lot
a) Availability of qualified mathematics teachers	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) Availability of qualified science teachers	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) Availability of qualified English teachers	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) Availability of qualified foreign language teachers	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e) Availability of experienced teachers	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f) Availability of substitute/replacement teachers	$\square_1$	$\square_2$	$\square_3$	$\square_4$
g) Availability of instructional support personnel (including technical or lab support)	$\square_1$	$\square_2$	$\square_3$	$\square_4$
h) Instructional materials (e.g. textbooks)	$\square_1$	$\square_2$	$\square_3$	$\square_4$
i) Budget for supplies (e.g. paper, pencils)	$\square_1$	$\square_2$	$\square_3$	$\square_4$
j) School buildings and grounds	$\square_1$	$\square_2$	$\square_3$	$\square_4$
k) Heating/cooling and lighting systems	$\square_1$	$\square_2$	$\square_3$	$\square_4$
l) Instructional space (e.g. classrooms)	$\square_1$	$\square_2$	$\square_3$	$\square_4$
m) Special equipment for disabled students	$\square_1$	$\square_2$	$\square_3$	$\square_4$
n) Computers for instruction	$\square_1$	$\square_2$	$\square_3$	$\square_4$
o) Computer software for instruction	$\square_1$	$\square_2$	$\square_3$	$\square_4$

		Not at all	*Very little*	*To some extent*	*A lot*
p)	Calculators for instruction	☐₁	☐₂	☐₃	☐₄
q)	Library materials	☐₁	☐₂	☐₃	☐₄
r)	Audio-visual resources	☐₁	☐₂	☐₃	☐₄
s)	Science laboratory equipment and materials	☐₁	☐₂	☐₃	☐₄

Q12   In your school, about how many computers are:

(Please write a number in each row. Write 0 (zero) if there are none.)

Number

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)? .... _____

Q13   How much consideration is given to the following factors when students are admitted to your school?

(Please check one box in each row.)

	Prerequisite	High priority	Considered	Not considered
a) Residence in a particular area ...	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) Student's academic record (including placement tests)	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) Recommendation of feeder schools	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) Parents' endorsement of the instructional or religious philosophy of the school	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e) Student need or desire for a special program	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f) Attendance of other family members at the school (past or present)	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q14 Think about the students in your school. How much do you agree with the following statements?

(Please check one box in each row.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) Students enjoy being in school.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) Students work with enthusiasm.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) Students take pride in this school.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) Students value academic achievement.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e) Students are cooperative and respectful.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f) Students value the education they can receive in this school.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
g) Students do their best to learn as much as possible.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q15 Generally, in your school, how often are 15-year-old students assessed using:

(Please check only one box in each row.)

	Never	1 – 2 times a year	3 – 5 times a year	Monthly	More than once a month
a) Standardized tests?	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
b) Teacher-developed tests?	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
c) Teachers' evaluations of students? ..	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
d) Student portfolios?	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
e) Student assignments/ projects/homework?	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$

Q16 **In your school, are assessments of 15-year-old students used for any of the following purposes?**

(Please check only one box in each row.)

	Yes	*No*
a) To inform parents about their child's progress.	$\square_1$	$\square_2$
b) To make decisions about students' retention or promotion.	$\square_1$	$\square_2$
c) To group students for instructional purposes.	$\square_1$	$\square_2$
d) To compare the school to national, state or district performance.	$\square_1$	$\square_2$
e) To monitor the school's progress from year to year.	$\square_1$	$\square_2$
f) To make judgements about teachers' effectiveness.	$\square_1$	$\square_2$
g) To identify aspects of instruction or the curriculum that could be improved.	$\square_1$	$\square_2$
h) To compare the school with other schools.	$\square_1$	$\square_2$

Q17 **About how many 15-year-old students in your school have a first language that is not English?**

(Please check only one box.)

a) 40% or more .... $\square_1$

b) 20% or more but less than 40% .... $\square_2$

c) 10% or more but less than 20% .... $\square_3$

d) Less than 10% .... $\square_4$

Q18 *Schools with students whose first language is not English sometimes offer specific language options to these students.* **Does your school offer any of the following options to 15-year-old students whose first language is not English?**

(Please check one box in each row.)

	No, not for any languages	*Yes for one language*	*Yes for 2 or more languages*	*Not applicable*
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).	☐₁	☐₂	☐₃	☐₄
b) Instruction in their native language is offered as a separate subject for students who wish to learn the language (e.g. Spanish language/literature for students who want to learn or improve Spanish).	☐₁	☐₂	☐₃	☐₄
c) Instruction in other parts of the curriculum is offered in their language (e.g. mathematics course taught in Spanish).	☐₁	☐₂	☐₃	☐₄

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 15-year-old students in mathematics?**

(Please check one box in each row.)

	For all classes	For some classes	For no classes
a) Mathematics classes study similar content, but at different levels of difficulty.	☐₁	☐₂	☐₃
b) Different classes study different content or sets of mathematics topics that have different levels of difficulty.	☐₁	☐₂	☐₃
c) Students are grouped by ability within their mathematics classes.	☐₁	☐₂	☐₃
d) Students are not grouped by ability in mathematics.	☐₁	☐₂	☐₃

Q20 **In your school, do any of the following activities to promote engagement with mathematics occur?**

(Please check one box in each row)

	Yes	No
a) Enrichment mathematics	☐₁	☐₂
b) Remedial mathematics	☐₁	☐₂
c) Mathematics competitions	☐₁	☐₂
d) Mathematics clubs	☐₁	☐₂
e) Computer clubs (specifically related to mathematics)	☐₁	☐₂

Q21   How many of the following 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 is none.)

	Full time	*Part Time*
a) Teachers in TOTAL	_____	_____
b) Teachers with a regular or standard state certificate or advanced professional certificate..	_____	_____
c) Teachers with a probationary certificate (the initial certificate issued after satisfying all requirements except the completion of a probationary period.)	_____	_____
d) Teachers with provisional or other type of certification given to persons who are still participating in what the state calls an "alternative certification program."..................	_____	_____
e) Teachers with a temporary certificate (requires some additional college coursework and/or student teaching before regular certification can be obtained.).	_____	_____
f) Teachers with an emergency certificate or waiver (issued to persons with insufficient teacher preparation who must complete a regular certification program in order to continue teaching.)	_____	_____

Q22   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.)

	Full time	*Part Time*
a) Teachers of mathematics in TOTAL	_____	_____
b) 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 associate's degree but not a bachelor's or master's degree	_____	_____

Q23   During the last year, have any of the following been used to monitor the practice of mathematics teachers at your school?

(Please check one box in each row.)

	Yes	*No*
a) Tests or assessments of student achievement	☐₁	☐₂
b) Teacher peer review (of lesson plans, assessment instruments, lessons)	☐₁	☐₂
c) Principal or senior staff observations of lessons	☐₁	☐₂
d) Observation of classes by inspectors or other persons external to the school	☐₁	☐₂

Q24   How much do you agree with these statements about <u>innovation</u> in your school?

(Please check one box in each row.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) Mathematics teachers are interested in trying new methods and teaching practices.	☐1	☐2	☐3	☐4
b) There is a preference among mathematics teachers to stay with well-known methods and practices.	☐1	☐2	☐3	☐4
c) There are frequent disagreements between 'innovative' and 'traditional' mathematics teachers.	☐1	☐2	☐3	☐4

Q25   How much do you agree with these statements about <u>teachers' expectations</u> in your school?

(Please check one box in each row.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) There is consensus among mathematics teachers that academic achievement must be kept as high as possible.	☐1	☐2	☐3	☐4
b) There is consensus among mathematics teachers that it is best to adapt academic standards to the students' level and needs. ..	☐1	☐2	☐3	☐4
c) There are frequent disagreements between mathematics teachers who consider each other to be 'too demanding' or 'too lax'.	☐1	☐2	☐3	☐4

Q26 **How much do you agree with these statements about <u>teaching goals</u> in your school?**

(Please check one box in each row.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) There is consensus among mathematics teachers that the social and emotional development of the student is as important as their acquisition of mathematical skills and knowledge in mathematics classes.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) There is consensus among mathematics teachers that the development of mathematical skills and knowledge in students is the most important objective in mathematics classes.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) 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 the student.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q27 **Think about the teachers in your school. How much do you agree with the following statements?**

(Please check one box in each row.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) The morale of teachers in this school is high.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) Teachers work with enthusiasm.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) Teachers take pride in this school.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) Teachers value academic achievement.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q28 **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?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) student absenteeism?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) poor student-teacher relations?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) disruption of classes by students?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e) teachers not meeting individual students' needs?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f) teacher absenteeism?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
g) students skipping classes?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
h) students lacking respect for teachers?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
i) staff resisting change?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
j) student use of alcohol or illegal drugs?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
k) teachers being too strict with students?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
l) students intimidating or bullying other students?	$\square_1$	$\square_2$	$\square_3$	$\square_4$
m) students not being encouraged to achieve their full potential?	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q29 In your school, who has the main responsibility for:

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

Q30 **In your school, which of the following bodies exert a direct influence on decision making about staffing, budgeting, instructional content and assessment practices?**

(Please check as many boxes as apply.)

Area of influence:

	Staffing	*Budgeting*	*Instructional content*	*Assessment practices*
a) Local, state or national education authorities (e.g. Department of Education).......	□₁	□₁	□₁	□₁
b) Appointed or elected school board.	□₁	□₁	□₁	□₁
c) Employers	□₁	□₁	□₁	□₁
d) Parent groups	□₁	□₁	□₁	□₁
e) Teacher groups (e.g. Staff Association, curriculum committees, union)	□₁	□₁	□₁	□₁
f) Student groups (e.g. Student Association, youth organization)	□₁	□₁	□₁	□₁
g) External examination boards	□₁	□₁	□₁	□₁

Thank you for completing this questionnaire.

OECD Program for
International Student Assessment 2003

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

PISA 2003

STUDENT QUESTIONNAIRE

STOP

**PLEASE DO NOT TURN THE PAGE
UNTIL INSTRUCTED TO DO SO.**

Learning
for Living

In this booklet you will find questions about:

- You and your family (Sections A and B).

- Your education (Section C).

- Your school (Section D).

- Learning mathematics (Section E).

- Your mathematics classes (Section F).

- Your experience at school (Section G).

- Information communication technology (Section H).

Please read each question carefully and answer as accurately as you can. In the test you usually circled your answers. For this questionnaire, you will normally answer by checking a box. For a few questions you will need to write a short answer.

If you make a mistake when checking a box, cross out your error and mark the correct box. If you make an error when writing an answer, simply cross it out and write the correct answer next to it.

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

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

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

SECTION A: ABOUT YOU

Q1   What grade are you in?

_____

grade

Q2   On what date were you born?

(Please write the day, month and year you were born.)

_____   _____   *198* ___

Month   Day   Year

Q3a   Are you female or male?

Female   Male

□₁   □₂

Q3b   Which best describes you?

(Please check one box only.)

a) I am Hispanic or Latino.................................. □₁

b) I am **not** Hispanic or Latino........................... □₂

Q3c   Which of these categories best indicate your race?

(Check all that apply.)

a) White .... ☐ 1

b) Black or African American .... ☐ 1

c) Asian .... ☐ 1

d) American Indian or Alaska Native .... ☐ 1

e) Native Hawaiian or other Pacific Islander ..... ☐ 1

SECTION B: YOU AND YOUR FAMILY

In this section you will be asked some questions about your family and your home.

Some of the following questions are about your mother and father or those person(s) who are like a mother or father to you — for example, guardians, step-parents, foster parents, etc.

If you share your time with more than one set of parents or guardians, please answer the following questions for those parents/guardians you spend the most time with.

Q4   Who usually lives at home with you?

(Please check as many boxes as apply.)

a) Mother .... ☐₁

b) Other female guardian (e.g., stepmother or foster mother) .... ☐₁

c) Father .... ☐₁

d) Other male guardian (e.g., stepfather or foster father) .... ☐₁

e) Others (e.g. brother, sister, cousin, grandparents) ...... ☐₁

Q5 **What is your mother currently doing?**

(Please check only one box.)

a) Working full-time for pay .... □₁

b) Working part-time for pay .... □₂

c) Not working, but looking for a job .... □₃

d) Other (e.g. home duties, retired) .... □₄

Q6 **What is your father currently doing?**

(Please check only one box.)

a) Working full-time for pay .... □₁

b) Working part-time for pay .... □₂

c) Not working, but looking for a job .... □₃

d) Other (e.g. home duties, retired) .... □₄

Q7 **What is your mother's main job? (e.g., school teacher, nurse, sales manager)**

(If she is not working now, please tell us her last main job.)

Please write in the job title. _____

Q8 **What does your mother do in her main job? (e.g., teaches high school students, cares for patients, manages a sales team)**

Please use a sentence to describe the kind of work she does or did in that job.

_____

Q9 **What is your father's main job? (e.g., school teacher, carpenter, sales manager)**

(If he is not working now, please tell us his last main job.)

Please write in the job title. _____

Q10 **What does your father do in his main job? (e.g., teaches high school students, builds houses, manages a sales team)**

Please use a sentence to describe the kind of work he does or did in that job.

_____

Q11 **Which of the following did your mother complete at school?**

(Please check as many boxes as apply.)

a) High school diploma..................................... $\square_1$

b) High school equivalency or GED .... $\square_1$

c) Middle or junior high school .... $\square_1$

d) Elementary school .... $\square_1$

e) None of the above .... $\square_1$

Q12 **Does your mother have any of the following qualifications?**

(Please check as many boxes as apply.)

Yes

a) Bachelor's, master's, doctorate or professional degree such as law or medicine .... $\square_1$

b) Associate's degree .... $\square_1$

c) Vocational or technical certificate/diploma after high school .... $\square_1$

Q13   Which of the following did your father complete at school?

(Please check as many boxes as apply.)

a) High school diploma .... ☐₁

b) High school equivalency or GED .... ☐₁

c) Middle or junior high school .... ☐₁

d) Elementary school ☐₁

e) None of the above .... ☐₁

Q14   Does your father have any of the following qualifications?

(Please check as many boxes as apply.)

Yes

a) Bachelor's, master's, doctorate or professional degree such as law or medicine .... ☐₁

b) Associate's degree .... ☐₁

c) Vocational or technical certificate/diploma after high school .... ☐₁

Q15a In what country were you and your parents born?

(Please check one answer per column.)

	You	Mother	Father
United States*	$\square_{01}$	$\square_{01}$	$\square_{01}$
Other country	$\square_{02}$	$\square_{02}$	$\square_{02}$

Q15b 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).)

―――――― *Years*

*NOTE: 'United States' includes the 50 states and U.S. military bases abroad.

Q16   What language do you speak at home most of the time?

(Please check only one box.)

English.. $\square_{01}$

Spanish .... $\square_{02}$

Other language .... $\square_{03}$

Q17 Which of the following do you have in your home?

(Please check as many boxes as apply.)

Yes

a) A desk to study at .... ☐₁

b) A room of your own .... ☐₁

c) A quiet place to study .... ☐₁

d) A computer you can use for school work ..... ☐₁

e) Educational software .... ☐₁

f) A link to the Internet .... ☐₁

g) Your own calculator .... ☐₁

h) Classic literature (e.g., Shakespeare, Jane
Austen, Mark Twain) .... ☐₁

i) Books of poetry .... ☐₁

j) Works of art (e.g., paintings) .... ☐₁

k) Books to help with your school work .... ☐₁

l) A dictionary .... ☐₁

m) A dishwasher .... ☐₁

Q18   How many of these do you have at your home?

(Please check only one box in each row.)

		None	One	Two	Three or more
a)	Cellular phone	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b)	Television	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c)	Computer	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d)	Car	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e)	Bathroom	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q19   How many books are there in your home?

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

(Please check only one box.)

0-10 books .... $\square_1$

11-25 books .... $\square_2$

26-100 books .... $\square_3$

101-200 books .... $\square_4$

201-500 books .... $\square_5$

More than 500 books .... $\square_6$

SECTION C: YOUR EDUCATION

Q20   Did you attend kindergarten?

No .... $\square_1$

Yes, for one year or less .... $\square_2$

Yes, for more than one year .... $\square_3$

Q21   How old were you when you started elementary school?

_____ *Years*

Q22   Have you ever repeated a grade?

(Please check only one box on each row.)

	No, never	*Yes, once*	*Yes, twice or more*
a) In elementary school	$\square_1$	$\square_2$	$\square_3$
b) In middle or junior high school................................	$\square_1$	$\square_2$	$\square_3$
c) In high school	$\square_1$	$\square_2$	$\square_3$

Q23 **Which of the following do you <u>expect</u> to complete?**

(Please check as many as apply.)

a) Middle or junior high school .... $\square_1$

b) High school.. $\square_1$

c) Vocational or technical certificate after high school (such as cosmetology or auto mechanics) .... $\square_1$

d) Associate's degree....................................... $\square_1$

e) Bachelor's degree or higher........................... $\square_1$

Q24 *Thinking about what you have learned in school:* **To what extent do you agree with the following statements?**

(Please check only one box on each row.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) School has done little to prepare me for adult life when I leave school.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) School has been a waste of time.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) School has helped give me confidence to make decisions.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) School has taught me things which could be useful in a job.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

SECTION D: YOUR SCHOOL

Q25 *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.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) Students get along well with most teachers.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) Most teachers are interested in students' well-being.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) Most of my teachers really listen to what I have to say.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) If I need extra help, I will receive it from my teachers.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e) Most of my teachers treat me fairly.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q26 **In the last two full weeks you were in school, how many times did you arrive late for school?**

(Please check only one box)

None .... $\square_1$

One or two times .... $\square_2$

Three or four times .... $\square_3$

Five or more times .... $\square_4$

*The following question asks about the time you spend studying and doing different kinds of homework outside of your regular classes. This should include **all of your studying and homework**.*

Q27   On average, how many hours do you spend *each week* on the following?

When answering include time on the weekend too.

a) Homework or other study assigned by your teachers .... _____ hours per week

b) Remedial classes at school .... _____ hours per week

c) Enrichment classes at school .... _____ hours per week

d) Working with a tutor .... _____ hours per week

e) Attending out-of-school classes .... _____ hours per week

f) Other study .... _____ hours per week

SECTION E: LEARNING MATHEMATICS

Q28   *Thinking about your views on mathematics:* **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 enjoy reading about mathematics.	☐₁	☐₂	☐₃	☐₄
b) Making an effort in mathematics is worth it because it will help me in the work that I want to do later on.	☐₁	☐₂	☐₃	☐₄
c) I look forward to my mathematics lessons.	☐₁	☐₂	☐₃	☐₄
d) I do mathematics because I enjoy it.	☐₁	☐₂	☐₃	☐₄
e) Learning mathematics is worthwhile for me because it will improve my career prospects.	☐₁	☐₂	☐₃	☐₄
f) I am interested in the things I learn in mathematics.	☐₁	☐₂	☐₃	☐₄
g) Mathematics is an important subject for me because I need it for what I want to study later on.	☐₁	☐₂	☐₃	☐₄
h) I will learn many things in mathematics that will help me get a job.	☐₁	☐₂	☐₃	☐₄

Q29 **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	Not at all confident
a) Using a train timetable to work out how long it would take to get from one place to another.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) Calculating how much cheaper a TV would be after a 30% discount.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) Calculating how many square feet of tile you need to cover a floor.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) Understanding graphs presented in newspapers.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e) Solving an equation like $3x+5= 17$.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f) Finding the actual distance between two places on a map with a 1:100 scale.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
g) Solving an equation like $2(x+3)=(x + 3)(x - 3)$.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
h) Calculating the gas mileage of a car.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q30 *Thinking about studying mathematics:* **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 often worry that it will be difficult for me in mathematics classes.	☐1	☐2	☐3	☐4
b) I am just not good at mathematics.	☐1	☐2	☐3	☐4
c) I get very tense when I have to do mathematics homework.	☐1	☐2	☐3	☐4
d) I get good grades in mathematics.	☐1	☐2	☐3	☐4
e) I get very nervous doing mathematics problems.	☐1	☐2	☐3	☐4
f) I learn mathematics quickly.	☐1	☐2	☐3	☐4
g) I have always believed that mathematics is one of my best subjects.	☐1	☐2	☐3	☐4
h) I feel helpless when doing a mathematics problem.	☐1	☐2	☐3	☐4
i) In my mathematics class, I understand even the most difficult work.	☐1	☐2	☐3	☐4
j) I worry that I will get poor grades in mathematics.	☐1	☐2	☐3	☐4

The following question asks about the time you spend studying and doing __mathematics__ homework outside of your regular Mathematics classes.

Q31   On average, how much time do you spend _each week_ on the following?

When answering include time at the weekend too.

a) Homework or other study assigned by your
    mathematics teacher .... _____ hours per week

b) Remedial classes in mathematics at school .... _____ hours per week

c) Enrichment classes in mathematics at school .... _____ hours per week

d) Working with a mathematics tutor .... _____ hours per week

e) Attending out-of-school mathematics classes .... _____ hours per week

f) Other mathematics activities (e.g. mathematics
    competitions, mathematics club) .... _____ hours per week

Q32 *There are different ways of studying mathematics.* **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) When I study for a mathematics test, I try to figure out the most important parts to learn.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) When I am solving mathematics problems, I often think of new ways to get the answer.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) When I study mathematics, I make myself check to see if I remember the work I have already done.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
d) When I study mathematics, I try to figure out which concepts I still have not understood properly.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e) I think about how the mathematics I have learned can be used in everyday life.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f) I go over some problems in mathematics so often that I feel as if I could solve them in my sleep.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
g) When I study for mathematics, I learn as much as I can by heart.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
h) I try to understand new concepts in mathematics by relating them to things I already know.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
i) In order to remember the method for solving a mathematics problem, I go through examples again and again.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
j) When I cannot understand something in mathematics, I always search for more information to clarify the problem.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
k) When I am solving a mathematics problem, I often think about how the solution might be applied to other interesting questions.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

		Strongly agree	Agree	Disagree	Strongly disagree
l)	When I study mathematics, I start by figuring out exactly what I need to learn.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
m)	To learn mathematics, I try to remember every step in a procedure.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
n)	When learning mathematics, I try to relate the work to things I have learned in other subjects.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

SECTION F: YOUR MATHEMATICS CLASSES

The following question is about your mathematics classes: The class period is the length of time each lesson runs for on a normal day. Some classes may run for 'double periods', but the class period refers to the basic unit of time used to break up your day at school.

Q33a How many minutes, on average, are there in a class period?

Minutes in a class period: _____   minutes

Q33b In the last full week you were in school, how many class periods did you spend in mathematics?

Number of **mathematics** class periods: _____   class periods

Q33c In the last full week you were in school, how many class periods did you have in total?

Number of **ALL** class periods (*including your mathematics classes*):   _____   class periods

Q34   On average, about how many students are in your mathematics class?

_____ students

Q35 *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.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
b) In mathematics I enjoy working with other students in groups.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
c) I try very hard in mathematics because I want to do better on the exams than the others.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
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.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
e) I make a real effort in mathematics because I want to be one of the best.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
f) I do my best work in mathematics when I work with other students.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
g) In mathematics I always try to do better than the other students in my class.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
h) In mathematics, I enjoy helping others to work well in a group.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
i) In mathematics I learn most when I work with other students in my class.	$\square_1$	$\square_2$	$\square_3$	$\square_4$
j) I do my best work in mathematics when I try to do better than others.	$\square_1$	$\square_2$	$\square_3$	$\square_4$

Q36 How often do these things happen in your mathematics classes?

(Please check only one box in each row.)

	Every lesson	*Most lessons*	*Some lessons*	*Never or hardly ever*
a) The teacher shows an interest in every student's learning.	□1	□2	□3	□4
b) Students don't listen to what the teacher says.	□1	□2	□3	□4
c) The teacher gives extra help when students need it.	□1	□2	□3	□4
d) Students work from books and other printed material.	□1	□2	□3	□4
e) The teacher helps students with their learning.	□1	□2	□3	□4
f) There is noise and disorder.	□1	□2	□3	□4
g) The teacher continues teaching until the students understand.	□1	□2	□3	□4
h) The teacher has to wait a long time for students to quiet down.	□1	□2	□3	□4
i) Students cannot work well.	□1	□2	□3	□4
j) The teacher gives students an opportunity to express opinions.	□1	□2	□3	□4
k) Students don't start working for a long time after the class begins.	□1	□2	□3	□4

SECTION G: YOUR EXPERIENCE AT SCHOOL

Q37   Did you ever miss two or more consecutive months of elementary school?

(Please check only one box.)

No, never .... $\square_1$

Yes, once .... $\square_2$

Yes, twice or more .... $\square_3$

Q38   Did you ever miss two or more consecutive months of middle or junior high school?

(Please check only one box.)

No, never .... $\square_1$

Yes, once .... $\square_2$

Yes, twice or more .... $\square_3$

Q39   Did you change schools when you were attending elementary school?

(Please check only one box.)

No, I attended all of elementary school at the same school. .... $\square_1$

Yes, I changed schools once. .... $\square_2$

Yes, I changed schools twice or more. .... $\square_3$

Q40 **Did you change schools when you were attending middle or junior high school?**

(Please check only one box.)

No, I attended all of middle/junior high school at the same school. .... □₁

Yes, I changed schools once. .... □₂

Yes, I changed schools twice or more. .... □₃

Q41 **What type of mathematics class are you taking?**

(Please check only one box.)

Pre-algebra or general mathematics .... □₁

Algebra I .... □₂

Geometry............................ □₃

Algebra II........................... □₄

Precalculus or calculus....... □₅

Other .... □₆

Q42 **In your last school report, how did your grade in mathematics compare with the passing grade?**

(Please check only one box.)

At or above the passing grade .... □₁

Below the passing grade .... □₂

Q43 **What kind of job do you expect to have when you are about 30 years old?**

Write the job title. _____

SECTION H: INFORMATION COMMUNICATION TECHNOLOGY

*The following questions ask about computers: This does **not** include calculators or game consoles like a Sony PlayStation™.*

Q44 **Is there a computer available for you to use at any of these places?**

(Please check one box on each row.)

	Yes	*No*
a) At home	$\square_1$	$\square_2$
b) At school	$\square_1$	$\square_2$
c) At other places	$\square_1$	$\square_2$

Q45 **Have you ever used a computer?**

Yes	*No*
$\square_1$	$\square_2$

If you use a computer in any setting, please continue.

If you do not, **PLEASE STOP HERE**.

Q46 **How long have you been using computers?**

(Please check only one box.)

Less than one year. .... $\square_1$

One to three years. .... $\square_2$

Three to five years. .... $\square_3$

More than five years. .... $\square_4$

Q47   How <u>often</u> do you use a computer at these places?

(Please check one box on each row.)

	Almost every day	*A few times each week*	*Between once a week and once a month*	*Less than once a month*	*Never*
a) At home	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
b) At school	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
c) At other places	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Q48 How <u>often</u> do you use:

(Please check one box on each row.)

	Almost every day	A few times each week	Between once a week and once a month	Less than once a month	Never
a) the Internet to look up information about people, things, or ideas?	☐₁	☐₂	☐₃	☐₄	☐₅
b) games on a computer?	☐₁	☐₂	☐₃	☐₄	☐₅
c) Word processing (e.g. Word ® or WordPerfect®)?	☐₁	☐₂	☐₃	☐₄	☐₅
d) the Internet to collaborate with a group or team?	☐₁	☐₂	☐₃	☐₄	☐₅
e) spreadsheets (e.g. Lotus 1 2 3 ® or Microsoft Excel®)?	☐₁	☐₂	☐₃	☐₄	☐₅
f) the Internet to download software (including games)?	☐₁	☐₂	☐₃	☐₄	☐₅
g) drawing, painting or graphics programs on a computer?	☐₁	☐₂	☐₃	☐₄	☐₅
h) educational software such as Mathematics programs?	☐₁	☐₂	☐₃	☐₄	☐₅
i) the computer to help you learn school material?	☐₁	☐₂	☐₃	☐₄	☐₅
j) the Internet to download music?	☐₁	☐₂	☐₃	☐₄	☐₅
k) the computer for programming?	☐₁	☐₂	☐₃	☐₄	☐₅
l) a computer for electronic communication (e.g. e-mail or "chat rooms")?	☐₁	☐₂	☐₃	☐₄	☐₅

Q49   How well can you do each of these tasks on a computer?

(Please check one box on each row.)

	I can do this very well by myself.	I can do this with help from someone.	I know what this means but I cannot do it.	I don't know what this means.
a) Start a computer game.	□₁	□₂	□₃	□₄
b) Use software to find and get rid of computer viruses.	□₁	□₂	□₃	□₄
c) Open a file.	□₁	□₂	□₃	□₄
d) Create/edit a document.	□₁	□₂	□₃	□₄
e) Scroll a document up and down a screen.	□₁	□₂	□₃	□₄
f) Use a database to produce a list of addresses.	□₁	□₂	□₃	□₄
g) Copy a file from a floppy disk.	□₁	□₂	□₃	□₄
h) Save a computer document or file.	□₁	□₂	□₃	□₄
i) Print a computer document or file.	□₁	□₂	□₃	□₄
j) Delete a computer document or file.	□₁	□₂	□₃	□₄
k) Move files from one place to another on a computer.	□₁	□₂	□₃	□₄
l) Get on to the Internet.	□₁	□₂	□₃	□₄
m) Copy or download files from the Internet.	□₁	□₂	□₃	□₄
n) Attach a file to an e-mail message.	□₁	□₂	□₃	□₄
o) Create a computer program (e.g. in Logo, Pascal, Basic).	□₁	□₂	□₃	□₄
p) Use a spreadsheet to plot a graph.	□₁	□₂	□₃	□₄
q) Create a presentation (e.g. using PowerPoint).	□₁	□₂	□₃	□₄

	I can do this very well by myself.	*I can do this with help from someone.*	*I know what this means but I cannot do it.*	*I don't know what this means.*
r) Play computer games.	☐₁	☐₂	☐₃	☐₄
s) Download music from the Internet.	☐₁	☐₂	☐₃	☐₄
t) Create a multi-media presentation (with sound, pictures, video).	☐₁	☐₂	☐₃	☐₄
u) Draw pictures using a mouse.	☐₁	☐₂	☐₃	☐₄
v) Write and send e-mails.	☐₁	☐₂	☐₃	☐₄
w) Construct a web page.	☐₁	☐₂	☐₃	☐₄

Q50 *Thinking about your experience with computers:* **To what extent do you agree with the following statements?**

(Please check one box on each row.)

	Strongly agree	*Agree*	*Disagree*	*Strongly disagree*
a) It is very important to me to work with a computer.	☐₁	☐₂	☐₃	☐₄
b) I think playing or working with a computer is really fun.	☐₁	☐₂	☐₃	☐₄
c) I use a computer because I am very interested in computers.	☐₁	☐₂	☐₃	☐₄
d) I lose track of time when I am working with the computer.	☐₁	☐₂	☐₃	☐₄

Q51 **Who taught you <u>most</u> about how to use COMPUTERS?**

(Please check only one box.)

My school. .... $\square_1$

My friends. .... $\square_2$

My family. .... $\square_3$

I taught myself. .... $\square_4$

Others. .... $\square_5$

Q52 **Who taught you <u>most</u> about how to use the INTERNET?**

(Please check only one box.)

I don't know how to use the Internet. .... $\square_1$

My school. .... $\square_2$

My friends. .... $\square_3$

My family. .... $\square_4$

I taught myself. .... $\square_5$

Others. .... $\square_6$

Thank you for completing this questionnaire.