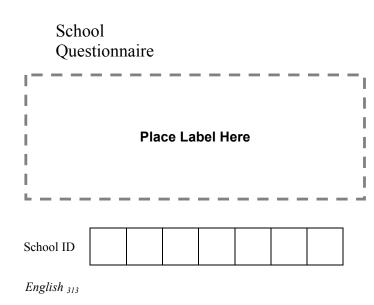
### APPENDIX C: PISA FIELD TEST QUESTIONNAIRES

- 1. School Questionnaire
- 2. Student Questionnaire Form A
- 3. Student Questionnaire Form B
- 4. Student Questionnaire Form C
- 5. Student Questionnaire Form D
- 6. Financial Literacy Background Questions Set 1
- 7. Financial Literacy Background Questions Set 2

### **OECD** Program for **International Student Assessment 2012**

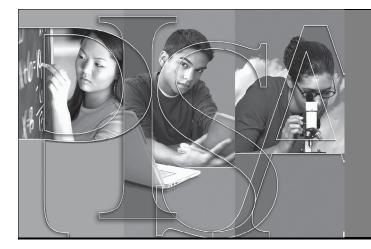


	USA					
	Date of Test (Field Trial PISA 2012)					
_	Day	Month	2011			



U.S. participation in this study is sponsored by the National Center for Education Statistics (NCES), U.S. Department of Education. Your responses are protected by federal statute (20 U.S.C., § 9573). Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law. By law, everyone working on this NCES survey is subject to a jail term of up to 5 years, a fine of up to \$250,000, or both if he or she willfully discloses ANY identifiable information about you.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is 1850-0755. The time required to complete this information collection is estimated to average 40 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving the form, please write to: U.S. Department of Education, Washington, D.C. 20202-4537. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Program for International Student Assessment (PISA), National Center for Education Statistics, U.S. Department of Education, 1990 K Street, N.W., Washington, D.C. 20006. O.M.B. No. 1850-0755, Approval Expires 11/30/2013



#### Project Consortium

- Australian Council for Educational Research (ACER)
- cApStAn Linguistic Quality Control (Belgium)
  Deutsches Institut f
  ür Internationale P

  ädagogische Forschung (DIPF, Germany)

- Educational Testing Service (ETS, USA)
  Institutt for Lærerutdanning og Skoleutvikling (ILS, Norway)
  Leibniz Institute for Science and Mathematics Education
- Leibhiz Institute for Ocience and Mathematics Extension (IPN, Germany)
   National Institute for Educational Policy Research (NIER, Japan)
   The Tao Initiative: CRP Henri Tudor and Université de Luxembourg EMACS (Luxembourg)
- Unité d'analyse des systèmes et des pratiques d'enseignement (aSPe, Belgium)
   Westat (USA)

This questionnaire asks for information including:

- The structure and organization of the school;
- The student body and teachers;
- The school's resources;
- The school's instruction, curriculum and assessment;
- The school climate;
- The school's policies and practices;
- Financial education at school.

This information helps illustrate the similarities and differences between groups of schools in order to better establish the context for students' test results. For example, the information provided may help to establish what effect the availability of resources may have on student achievement – both within and between countries.

The questionnaire should be completed by the principal or designee. It should take about 40 minutes to complete.

For some questions, specific expertise may be needed. You may consult experts to help you answer these questions.

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

Some questions ask about 10th grade or 10th graders. If you do not have a 10th grade in your school, then answer these questions for the grade in your school that contains the most 15-year-olds.

All information (or responses) you provide may only be used for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law [Education Sciences Reform Act of 2002 (ESRA 2002), 20 U.S. Code, Section 9573].

#### SECTION A: THE STRUCTURE AND ORGANIZATION OF THE SCHOOL

SC01

### Is your school a public or a private school? (*Please check only one box.*) A public school $\square$ A private school $\square$ SC02 About what percentage of your total funding for a typical Q2 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		
	Total	100%

#### Q1

### Q3 Which of the following definitions 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) $\Box_1$ A small town (3,000 to about 15,000 people) $\Box_2$ A town (15,000 to about 100,000 people) $\Box_3$ A city (100,000 to about 1,000,000 people) $\Box_4$ A large city (with over 1,000,000 people) $\Box_5$ 

SC04

**Q4** We are interested in the options parents have when choosing a school for their children.

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

(Please check only one box.)

There are two or more other school	s in this area that compete for our students.	
There is one other school in this are	ea that competes for our students.	
There are no other schools in this a	rea that compete for our students.	

## Q5 What is the average size of English classes in the 10th grade in your school?

(Please check only one box.)

15 students or fewer	<sub>01</sub>
16-20 students	
21-25 students	
26-30 students	
31-35 students	
36-40 students	
41-45 students	07
46-50 students	
More than 50 students	

## Q6 The following questions are about the amount of instructional time in your school.

a) How many instructional weeks are in the school year? \_\_\_\_\_ *out of 52 weeks* 

	<30 hours	30-32 hours	33-35 hours	36-40 hours	41-45 hours	>45 hours
b) On the average, how many <u>hours</u> <i>in</i> <i>total</i> are there in the school week? (include lunch breaks, study hall time, and after school activities)			<b></b> 3	4		<sub>6</sub>
	<22 hours	22-2 hour			32-36 hours	>36 hours
c) How many <u>hours</u> for <i>instruction in</i> <i>all subjects</i> are there in the school week? (exclude lunch breaks and after school activities)				]_3	□_ <sub>4</sub>	<sub>5</sub>
	0 hours	l-2 hour	5		5-6 hours	>6 hours
d) How many <u>hours</u> for <i>instruction in</i> <i>mathematics</i> are there in the school week? (exclude lunch breaks and after-school activities)				]_3	4	

#### **SECTION B: THE STUDENT BODY AND TEACHERS**

SC07

### Q7 As of February 1, 2011, what was the total school enrollment (number of students)?

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

a) Number of boys:

b) Number of girls:

# Q8 Approximately what percentage of students at this school last year were eligible for free- or reduced-price lunches through the National School Lunch Program?

(Please write a number on the line. Write 0 (zero) if there are none.)

Percentage of students eligible:

SC08

### Q9 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 grade does not exist in your school.)

		%	Grade not available in this school
a)	The approximate percentage of students repeating a grade at middle/junior high school level (grades 7-9) in this school last year was:		. 996
b)	The approximate percentage of students repeating a grade at high school level (grades 10-12) in this school last year		
	was:		996

SC09

### Q10 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.*)

	Full-time	Part-time
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		

### Q11 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 <b>but not a major</b> 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		

#### SECTION C: THE SCHOOL'S RESOURCES

The goal of the following set of three questions is to gather information about the studentcomputer ratio for students in the 10th grade at your school.

		SC11
		Number
Q12a	At your school, what is the total number of students in the 10th grade?	
Q12b	Approximately how many computers are available for these students for educational purposes?	
Q12c	Approximately how many of these computers are connected to the Internet?	

### Q13 Which of the following statements describe the 10th grade students' access to computers in your school?

#### (Please check one box per row.)

		Yes	No
a)	The school provides one or more specially equipped computer rooms/labs for students' use.		
b)	The school provides a pool of laptops (i.e., at least one set for an average class size) for students' use.		
c)	The school provides each student with a laptop.		
d)	Each student provides his or her own laptop.		
e)	Each student has one laptop, partly funded by the school and partly funded by the students or their parents.		
f)	Students have access to computers or laptops during classes only.	$\Box_1$	
g)	Students have access to computers or laptops outside classes (e.g., during breaks or free lessons).		

SC13

# Q14 In all subjects taken together, for how much of their work does the school expect the 10th grade students to access the Internet?

	<10%	10-25%	26-50%	51-75%	>75%
a) Work during class					
b) Homework					
c) Assignments or projects					

## Q15 Is your school's capacity to provide instruction hindered by any of the following issues?

		Not at all	Very little	To some extent	A lot
a)	A lack of qualified science teachers				
b)	A lack of qualified mathematics teachers				
c)	A lack of qualified English teachers				
d)	A lack of qualified teachers of other subjects				
e)	Shortage or inadequacy of science laboratory equipment				4
f)	Shortage or inadequacy of instructional materials (e.g., textbooks)				
g)	Shortage or inadequacy of computers for instruction				
h)	Lack or inadequacy of Internet connectivity				
i)	Shortage or inadequacy of computer software for instruction				
j)	Shortage or inadequacy of library materials				
k)	Shortage or inadequacy of school buildings and grounds				
1)	Shortage or inadequacy of heating/cooling and lighting systems				
m)	Shortage or inadequacy of instructional space (e.g., classrooms)				

## SECTION D: SCHOOL INSTRUCTION, CURRICULUM, AND ASSESSMENT

SC15

#### Q16 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?

	For all classes	For some classes	Not for any classes
a) Mathematics classes study similar content, but at different levels of difficulty.			
b) Different classes study different con or sets of mathematics topics that ha different levels of difficulty.			
c) Students are grouped by ability with their mathematics classes.	in <sub>1</sub>		
d) In mathematics classes, teachers use pedagogy suitable for students with heterogeneous abilities (i.e., students not grouped by ability).			

## Q17 In this academic year, which of the following activities does your school offer to students in the 10th grade?

		Yes	No
a)	Band, orchestra or choir	$\square_1$	
b)	School play or school musical		
c)	School yearbook, newspaper or magazine		
d)	Volunteering or service activities		
e)	Mathematics club		
f)	Mathematics competitions		
g)	Chess club		
h)	Club with a focus on computers/ Information and Communication Technology		
i)	Art club or art activities		
j)	Sports team or sports activities		

### Q18 Does your school offer any of the following options to students in the 10th grade whose first language is not English?

		Yes	No
a)	These students attend regular classes and receive additional periods of instruction aimed at developing English skills (e.g., reading literacy, grammar, vocabulary, communication).		
b)	Before transferring to regular classes, these students attend a preparatory program aimed at developing English skills (e.g., reading literacy, grammar, vocabulary, communication).		
c)	Before transferring to regular classes, these students receive some instruction in school subjects through their first language.		
d)	These students receive significant amounts of instruction in their first language aimed at developing proficiency in both languages.		
e)	Class size is reduced to cater to the special needs of these students.		

### Q19 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
a)	To inform parents about their child's progress		
b)	To make decisions about students' retention or promotion		
c)	To group students for instructional purposes		
d)	To compare the school to district, state, or national performance		
e)	To monitor the school's progress from year to year		
f)	To make judgments about teachers' effectiveness		
g)	To identify aspects of instruction or the curriculum that could be improved		
h)	To compare the school with other schools		
			SC19

### Q20 In your school, are achievement data used in any of the following accountability procedures?

Achievement data include **aggregated** school or grade-level test scores or grades, or graduation rates.

	Yes	No
a) Achievement data are posted publicly (e.g., in the media)		
b) Achievement data are tracked over time by an administrative authority, such as a district, state, or national education agency		

#### Q21 Does your school offer mathematics lessons or classes in addition to the mathematics classes offered during the usual school hours?

(Please check only one box.) go to the next Yes question  $\Box$ , go to Q22 No

SC21

#### Q22 What is the purpose of these additional mathematics lessons?

	(Please check one box in each row.)		
		Yes	No
a)	Enrichment mathematics only		
b)	Remedial mathematics only		
c)	Both enrichment mathematics and remedial mathematics		
d)	Without differentiation depending on the prior achievement level of the students		

1 1 1 1 1

#### SECTION E: SCHOOL CLIMATE

## Q23 In your school, to what extent is the learning of students hindered by the following phenomena?

(Please check one box in each row.)

	Not at all	Very little	To some extent	A lot
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				

SC22

		Not at all	Very little	To some extent	A lot
k)	Teachers having to teach students of heterogeneous ability levels within the same class.	$\Box_1$			4
1)	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				
0)	Teacher absenteeism			$\square_{3}$	
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				

# Q24 During the last academic year, what proportion of students left 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.

SC24

 $\square_1$ 

 $\square$ 

%

### Q25 Which statement below best characterizes parental expectations towards your school?

(Please check only one box.)

There is *constant pressure* from many parents, who expect our school to set very high academic standards and to have our students achieve them.

Pressure on the school to achieve higher academic standards among students comes from a *minority of parents*.

Pressure from parents on the school to achieve higher academic standards among students is *largely absent*.

(Please write a number in each row. Write 0 (zero) if n participated in the activity. Write 100 (one hundred) if a participated in the activity)	-
	%
a) Discussed their child's behavior with a teacher on their own initiative	
<ul> <li>b) Discussed their child's behavior on the initiative of one of their child's teachers</li> </ul>	
c) Discussed their child's academic progress with a teacher on their own initiative	
<ul> <li>d) Discussed their child's academic progress on the initiative of one of their child's teachers</li> </ul>	
e) Volunteered for physical activities, e.g., building maintenance, carpentry, gardening or yard work	
<ul> <li>f) Volunteered for extra-curricular activities, e.g., book club, school play, sports, field trip</li> </ul>	
g) Volunteered in the school library or media center	
h) Assisted a teacher in the school	
i) Appeared as a guest speaker	
<ul> <li>j) Participated in local school government, e.g., PTA, parent advisory council</li> </ul>	
k) Fundraising for the school	

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

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

#### Q28 How much do you agree with these statements about innovation 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.	$\Box_1$			
b)	There is a preference among mathematics teachers to stay with well-known methods and practices.				4
c)	There are frequent disagreements between 'innovative' and 'traditional' mathematics teachers.			$\square_{3}$	

SC28

### Q29 How much do you agree with these statements about teachers' expectations in your school?

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

### Q30 How much do you agree with these statements about <u>teaching goals</u> in your school?

(Please check one box in each row.)

students.

Strongly Strongly agree Agree Disagree disagrée a) There is consensus among mathematics teachers that the social and emotional development of  $\Box_1$  $\Box$ , students is as important as their acquisition of mathematical skills and knowledge in mathematics classes. b) There is consensus among mathematics teachers that the development of mathematical skills  $\Box$  $\square_3$ and knowledge in students is the most important objective in mathematics classes. c) There are frequent disagreements between mathematics teachers who consider each other as 'too focused  $\Box$ ,  $\Box_1$ on skill acquisition' or 'too focused on the affective development' of

# Q31 During the last year, have any of the following methods been used to monitor the practice of <u>mathematics</u> teachers at your school?

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

## Q32 Concerning appraisal of and/or feedback to teachers, to what extent have they directly led to any of the following?

	No change	A small change	A moderate change	A large change
a) A change in salary.				4
b) A financial bonus or another kind of monetary reward.				
c) Opportunities for professional development activities.				
d) A change in the likelihood of career advancement.				
e) Public recognition from you.				
f) Changes in work responsibilities that make the job more attractive.				
g) Role in school development initiatives (e.g., curriculum development group, development of school objectives).				

#### SECTION F: SCHOOL POLICIES AND PRACTICES

SC32

## Q33 How often are the following factors considered when students are admitted to your school?

		Never	Sometimes	Always
a)	Student's record of academic performance in general (including placement tests)			
b)	Student's record of performance specifically in mathematics (including placement test)	$\Box_1$		
c)	Recommendation of feeder schools			
d)	Parents' endorsement of the instructional or religious philosophy of the school			3
e)	Whether the student requires or is interested in a special program			
f)	Preference given to family members of current or former students			
g)	Residence in a particular area			
h)	Other			

## Q34 Regarding your school, who has a considerable responsibility for the following tasks?

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

		Principals	Teachers	School- level governing board	Local education agency	State education agency	U.S. Department 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						

#### Q35 Below are statements about your management of this school. Please indicate the frequency of the following activities and behaviors in your school during <u>the last academic year</u>.

		Less than once a year	Once a year	3-4 times a year	Once a month	Once a week	More than once a week
a)	I work to enhance the school's reputation in the community.					<b></b> 5	6
b)	I use student performance results to develop the school's educational goals.					<sub>5</sub>	
c)	I make sure that the professional development activities of teachers are in accordance with the teaching goals of the school.						
d)	I ensure that teachers work according to the school's educational goals.					<sub>5</sub>	
e)	I promote teaching practices based on recent educational research.					<sub>5</sub>	6
f)	I praise teachers whose students are actively participating in learning.					<b>_</b> <sub>5</sub>	
g)	When a teacher has problems in his/her classroom, I take the initiative to discuss matters.						
h)	I draw teachers' attention to the importance of students' development of critical and social capacities.						
i)	I pay attention to disruptive behavior in classrooms.						6
j)	I provide staff with opportunities to participate in school decision-making.						6

		Less than once a year	Once a year	3-4 times a year	Once a month	Once a week	More than once a week
k)	I engage teachers to help build a school culture of continuous improvement.						6
1)	I ask teachers to participate in reviewing management practices				4		6
m)	When a teacher brings up a classroom problem, we solve the problem together.				4		
n)	I discuss the school's academic goals with teachers at faculty meetings.					<sub>5</sub>	6
0)	I refer to the school's academic goals when making curricular decisions with teachers.						
p)	I discuss academic performance results with the faculty to identify curricular strengths and weaknesses.					<b>_</b> <sub>5</sub>	
q)	I lead or attend in-service activities concerned with instruction.						6
r)	I set aside time at faculty meetings for teachers to share ideas or information from in-service activities.						<sub>6</sub>
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).						<sub>6</sub>
t)	I review student work products when evaluating classroom instruction.						6
u)	I ensure that the classroom priorities of teachers are consistent with the goals and direction of the school.						

#### Q36 During the last three months, what percentage of teaching staff in your school has attended a program of professional development with a focus on mathematics?

A program of professional development here is a formal program designed to enhance teaching skills or pedagogical practices. It may or may not lead to a recognized qualification. The total length of the program must last for at least one day and have a focus on the teaching and education of mathematics.

	a) All staff at your school	%
	b) Staff who teach mathematics at your school	%
		SC36
Q37	Who has the main responsibility for career guidance of students in the 10th grade at your school?	
	(Please check only one box.)	
	Not applicable; career guidance is not available in this school.	
	All teachers share the responsibility for career guidance.	
	Specific teachers have the main responsibility for career guidance.	
	We have one or more specific career guidance counselors <b>employed</b> at school.	
	We have one or more specific career guidance counselors who regularly <b>visit</b> the school.	<sub>5</sub>

# Q38 If career guidance is available at your school, which of the statements below best 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.* 

Career guidance is sought voluntarily by students.	
--	--

Career guidance is formally scheduled into students' time at school.  $\Box_2$ 

SC38

 $\Box_1$ 

\_\_\_\_

# Q39 To what extent do you feel that teachers in your school concentrate on developing in students the skills and knowledge that will help them <u>in tertiary (post-secondary)</u> education?

(Please check only one box.)

These skills and knowledge are not a major part of teachers' pedagogical activities

These skills and knowledge are integrated into teachers' pedagogical activities, but they are not emphasized

These skills and knowledge are a focus of teachers' pedagogical activities

## Q40 Which of the following measures aimed at quality assurance and improvement do you have in your school?

		Yes	No
a) A written specification of the school's and educational goals	curricular profile		
b) Written specification of student perfor	mance standards		
c) Systematic recording of data, includin student attendance and graduation rate professional development of teachers	-		
d) Analysis of professional development development of a professional develop teachers and school leadership			
e) Internal evaluation/self-evaluation			
f) External evaluation			
g) Seeking written feedback from studen classes, teachers or resources)	ts (e.g., regarding		
h) Teacher mentoring			
i) Regular consultation aimed at school one or more experts over a period of a			
<ul> <li>j) Implementation of a standardized poli (e.g., school curriculum with shared in materials accompanied by staff develo training.)</li> </ul>	nstructional		
k) The school has written induction infor teachers	mation for new		
<ol> <li>The school takes new teachers through information</li> </ol>	h the induction		

#### Q41 Which of the following statements apply in your school?

A policy refers to written rules known to those concerned by the policy.

(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).		
b)	All the 10th grade mathematics classes in the school use the same textbook.		
c)	Mathematics teachers in the school follow a standardized curriculum that specifies content at least on a monthly basis.		

SC41

### Q42 How is the attendance of students at your school monitored?

	Yes	No
a) Student attendance is recorded every morning.		
b) Student attendance is recorded in every class.		
c) Students (or their parents) report their absences to the school.		
d) Principal or other member of the school leadership personally monitors students' attendance.		

### Q43 At your school, how is student truancy followed-up?

(Please check all that apply.)

		Truancy once or twice	Repeated or ongoing truancy
a)	Oral warning to student		$\Box_1$
b)	Extra duties for student, e.g., picking up litter, additional assignments, giving up breaks or staying after school	$\Box_1$	
c)	Written warning to student		
d)	Agreement/contract about attendance with student		
e)	Parents contacted by phone		
f)	Written warning to parents		
g)	Parents invited to school		
h)	Home visit		
i)	Consultation with student by specialized staff, e.g., social worker or guidance counselor	$\Box_1$	
j)	Suspension		
k)	Expulsion		$\Box_1$

### Q44 Which of the following statements apply in your school?

A policy refers to written rules known to those 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 reacting to student truancy three years ago.			
b) The leadership of the school regarded student truancy as a problem three years ago.			
c) The school currently has a policy for monitoring and reacting to student truancy.			

SC44

# Q45 In your school, how likely is it that a student in the 10th grade would be transferred to another school because of the following reasons?

	Not likely	Likely	Very likely
a) Low academic achievement			
b) High academic achievement			
c) Behavioral problems			
d) Special learning needs			
e) Parents' or guardians' request			
f) Other			

### **SECTION G: FINANCIAL EDUCATION AT SCHOOL**

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).

SC45

### Q46 Is financial education compulsory in your school?

(Please check only one box.)	
Yes	
No	

## Q47 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	l-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.					
b)	It is taught as a cross-curricular subject.				4	<sub>5</sub>
c)	It is taught as part of business or economics courses.					
d)	It is taught as part of other social sciences and humanities subjects (e.g., history, geography, home economics, civics).				4	
e)	It is taught as part of mathematics.					
f)	It is available as an extracurricular activity.					

#### For the following two statements please respond with yes or no.

		Yes	No
g)	It is provided by people from outside your school, from private sector finance institutions (e.g., commercial bank, insurance company).		
h)	It is provided by people from outside your school, NOT from private sector finance institutions (e.g., Department of Commerce, Reserve Bank).		

# Q48 Which of the statements below best describes the situation for students in the 10th grade regarding the availability of financial education in your school?

(Please check only one box.)	
Financial education is not available.	
Financial education has been available for less than two years.	
Financial education has been available for two years or more.	

SC48

# Q49 Which of the statements below best describe the situation for teachers at your school regarding professional development in financial education?

(Please check one box in each row.) Yes No Not applicable a) Financial education is required as part of  $\Box$ pre-service education for teachers who  $\square$ \_\_\_\_, teach financial education. b) Financial education is offered as part of pre-service education for teachers who  $\Box_1$  $\Box$ , teach financial education. c) Professional development in financial education is available to teachers who  $\Box_1$ teach financial education. d) Teachers have attended professional development in financial education in the  $\Box_1$  $\square$  $\square$ past 12 months.

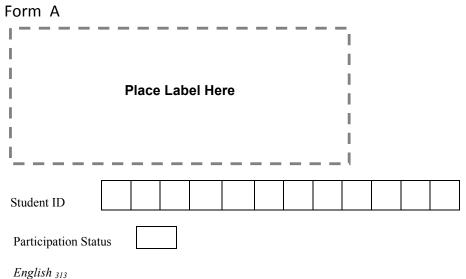
# Thank you very much for your cooperation in completing this questionnaire!

## **OECD** Program for **International Student Assessment 2012**



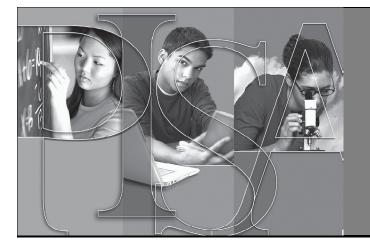
	USA	
Date of Test (Field Trial PISA 2012)		
Day	Month	2011

#### Student Questionnaire -



U.S. participation in this study is sponsored by the National Center for Education Statistics (NCES), U.S. Department of Education. Your responses are protected by federal statute (20 U.S.C., § 9573). Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law. By law, everyone working on this NCES survey is subject to a jail term of up to 5 years, a fine of up to \$250,000, or both if he or she willfully discloses ANY identifiable information about you.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is 1850-0755. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving the form, please write to: U.S. Department of Education, Washington, D.C. 20202-4537. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Program for International Student Assessment (PISA), National Center for Education Statistics, U.S. Department of Education, 1990 K Street, N.W., Washington, D.C. 20006. O.M.B. No. 1850-0755, Approval Expires 11/30/2013



#### Project Consortium

- Australian Council for Educational Research (ACER)
- (DIPF, Germany)

- Educational Testing Service (ETS, USA)
  Institutt for Lærerutdanning og Skoleutvikling (ILS, Norway)
  Leibniz Institute for Science and Mathematics Education (IPN, Germany)
- National Institute for Educational Policy Research (NIER, Japan)
  The Tao Initiative: CRP Henri Tudor and Université de Luxembourg EMACS (Luxembourg)
- Unité d'analyse des systèmes et des pratiques d'enseignement (aSPe, Belgium)
   Westat (USA)

In this booklet you will find questions about:

- You (Section A)
- Your Family and Home (Section B)
- Learning Mathematics (Section C)
- Your Mathematics Experiences (Section D)
- Your Problem Solving Experiences (Section E)

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 check 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.

All information (or responses) you provide may only be used for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law [Education Sciences Reform Act of 2002 (ESRA 2002), 20 U.S. Code, Section 9573].

## **SECTION A: ABOUT YOU**

ST01

### Q1 What grade are you in?

grade

ST03

### Q2 When were you born?

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

Month Day Year

**ST04** 

## Q3 Are you female or male?

FemaleMale $\Box_1$  $\Box_2$ 

### Q4 Which best describes you?

(Please check only one box.)I am Hispanic or Latino.I am not Hispanic or Latino. $\Box_2$ 

### Q5 Which of these categories best describes your race?

(Please check one or more boxes.)

White	
Black or African American	
Asian	
American Indian or Alaska Native	
Native Hawaiian or Other Pacific Islander	

Q6 Did you attend kindergarten?

No	
Yes	

ST07

#### Q7 Have you ever repeated a grade?

(Please check only one box in each row.)

No, never	Yes, once	Yes, twice or more
		$\Box_{3}$
	<i>No, never</i>	No, neverYes, once $\Box_1$ $\Box_2$ $\Box_1$ $\Box_2$ $\Box_1$ $\Box_2$ $\Box_1$ $\Box_2$ $\Box_1$ $\Box_2$

**ST08** 

#### **Q8** 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	
One or two times	
Three or four times	
Five or more times	

# Q9 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	6
Doctoral or professional degree such as medicine or law	7

## SECTION B: ABOUT YOUR FAMILY AND HOME

ST25

### Q10 What language do you speak at home most of the time?

(Please check only one box.)

English	<sub>313</sub>
Spanish	
Other language	859

### Q11 Which of the following are in your home?

		Yes	No
a)	A desk to study at		
b)	A room of your own		
c)	A quiet place to study		
d)	A computer you can use for school work		
e)	Educational software		
f)	A link to the Internet		
g)	Classic literature (e.g., Shakespeare)		
h)	Books of poetry		
i)	Works of art (e.g., paintings)		
j)	Books to help with your school work		
k)	Technical reference books or manuals		
1)	A dictionary		
m)	A dishwasher		
n)	A DVD player		
o)	A guest room		
p)	A high-speed Internet connection		
q)	A musical instrument		

#### Q12 <u>How many</u> of these are there at your home?

(Please check only one box in each row.)

	None	One	Two	Three or more
a) Cell phones				
b) Televisions				
c) Computers				
d) Cars				
e) Bathrooms with a bathtub or shower				

**ST28** 

#### Q13 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.)

0-10 books	
11-25 books	
26-100 books	<b></b> 3
101-200 books	
201-500 books	$\Box_{5}$
More than 500 books	□ <sub>6</sub>

### **SECTION C: ABOUT LEARNING MATHEMATICS**

ST38

## Q14 If you had to choose between the following options, which would you prefer?

(Please show how close your opinion is to the statements below by checking one of the boxes numbered 1 to 7 in each row.)

a)	I am interested in mathematics lessons more than in any other lessons.	01		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		<sub>03</sub>	04	05		07	I would be sad to drop mathematics if I had to.
c)	I enjoy reading about mathematics.	<sub>01</sub>	02		<sub>04</sub>	05		07	I avoid reading about mathematics.
d)	I plan to do as much mathematics as possible during my education.	01	02	03	04	<sub>05</sub>		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	<sub>03</sub>	04	05	06	07	I enjoy doing mathematics problems and puzzles outside mathematics lessons.
f)	I look forward to my mathematics lessons.	01	02	03	04	05	06	07	I do not look forward to my mathematics lessons.

# Q15 How confident do you feel about having to do the following mathematics tasks?

		Very confident	Confident	Not very confident	Not at all confident
	chedule to figure out ould take to get from other.				<b>_</b> 4
	w much cheaper a after a 30% discount.				
	w many square feet d to cover a floor.				
d) Understanding newspapers.	graphs presented in				
e) Solving an equ	nation like $3x+5=17$ .			3	
f) Finding the act two places on a 1:10,000 scale					<b>_</b> 4
g) Solving an equ 2(x+3) = (x + 3)					4
h) Calculating the car.	e gas mileage of a			3	4

#### Q16 You are a student in the following situation:

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.			3	<b></b> 4
b)	I made a special effort to study this material in the mathematics textbook.			3	
c)	The teacher explained it well this time.				
d)	This week I made good guesses.				
e)	I realized the course material was easy after all.			3	
f)	I actually studied enough during the past week.			3	
g)	The teacher got me interested in the material.			3	<b>_</b> 4
h)	Sometimes I am lucky.				

## Q17 How often do you do the following things inside and outside school?

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

# Q18 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 extra time studying outside of normal school hours. The lessons may be given at your school, at your home, or somewhere else.

	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				4	5
b) Mathematics				4	
c) Science					<sub>5</sub>
d) Other subjects					5

# Q19 For those subjects in which you attend out-of-school-time lessons, please indicate whether these lessons are either remedial or enriching in nature.

Remedial lessons are providing help for students who have problems in learning the respective subject, while enrichment lessons are providing additional, mostly demanding content for students with high achievement in the subject.

	Remedial lessons	Enrichment lessons	Not applicable
a) English			3
b) Mathematics			
c) Science			
d) Other school subjects			
e) Study skills			3

## Q20 Thinking about all school subjects: 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 \_\_\_\_\_ hours per week teachers 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 \_\_\_\_\_ hours per week ("guided homework"), either at school or elsewhere? 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 \_hours per week e) Study with a parent or other family member f) Practice content from school lessons by working on a computer (e.g., learn vocabulary with training \_\_\_\_ hours per week software)

## Q21 What grade did you receive in the following subjects both on your last report card and the last school you attended?

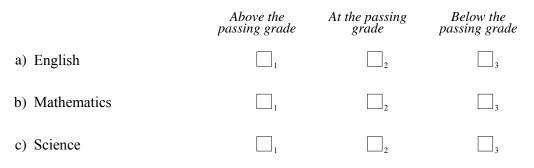
For each subject consider the specific course in that subject you were taking. If taking more than one course in a subject, include only your highest grade.

	Last report card	Last school you attended
a) English		
b) Mathematics		
c) Science		

**ST60** 

## Q22 On your last report card, how did your grade compare with the passing grade in each subject area?

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.



# Q23 Have you been taught to do the following types of mathematics tasks during your time in school?

		Frequently	Sometimes	Rarely	Never
a)	Using a train schedule, figuring out how long it would take to get from one place to another.				4
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.				4
d)	Understanding scientific tables presented in an article.			<b></b> 3	
e)	Solving an equation like $6x^2 + 5 = 29$			<b>_</b> 3	4
f)	Finding the actual distance between two places on a map with a 1:10,000 scale.	$\Box_1$		3	4
g)	Solving an equation like 2(x+3) = (x + 3)(x - 3)			<b>_</b> 3	4
h)	Calculating the power consumption of an electronic appliance per week.			$\square_{3}$	4

# Q24 Thinking about mathematical concepts: How familiar are you with the following terms?

		Never heard of it	Heard of it once or twice	Heard of it a few times	Heard of it often	Know it well, understand the concept
a)	Exponential Function				4	<b>_</b> <sub>5</sub>
b)	Divisor				4	<b>_</b> <sub>5</sub>
c)	Quadratic Function				4	<b>_</b> <sub>5</sub>
d)	Proper Number				4	<b>_</b> <sub>5</sub>
e)	Pythagorean Theorem				4	<b>_</b> <sub>5</sub>
f)	Linear Equation				4	<b>_</b> <sub>5</sub>
g)	Vectors				4	<b>_</b> <sub>5</sub>
h)	Complex Number				4	<b>_</b> <sub>5</sub>
i)	Rational Number				4	<b>_</b> <sub>5</sub>
j)	Radicals				4	<b>_</b> <sub>5</sub>
k)	Subjunctive Scaling				4	<b>_</b> <sub>5</sub>
1)	Polygon				4	<b>_</b> <sub>5</sub>
m)	Declarative Fraction				4	<b>_</b> <sub>5</sub>
n)	Prime Number				4	<b>_</b> <sub>5</sub>
0)	Congruent Figure					<b>_</b> <sub>5</sub>
p)	Cosine				4	<b>_</b> <sub>5</sub>
q)	Arithmetic Mean					<b>_</b> <sub>5</sub>
r)	Area of a Circle			3	4	<b>_</b> <sub>5</sub>
s)	Probability			3		

## Q25 To what extent do you agree with the following statements?

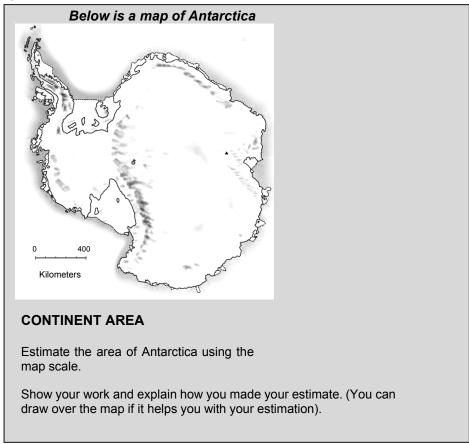
	Strongly agree			Neither agree nor disagree			Strongly disagree
a) I am interested in mathematics lessons more than in any other lessons.	01	02	03	04	05	06	<sub>07</sub>
b) I would be happy to drop mathematics if I could.	01	02	03	<sub>04</sub>	05	06	07
c) I enjoy reading about mathematics.	01	02	<sub>03</sub>	04	<sub>05</sub>	06	07
d) I plan to do as much mathematics as possible during my education.	01	02	03	<sub>04</sub>	05	06	07
e) I avoid doing mathematics problems and puzzles outside mathematics lessons.	01	02	03	04	<sub>05</sub>	06	07
f) I look forward to my mathematics lessons.	01	02	03	04		06	07

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.

**ST63** 

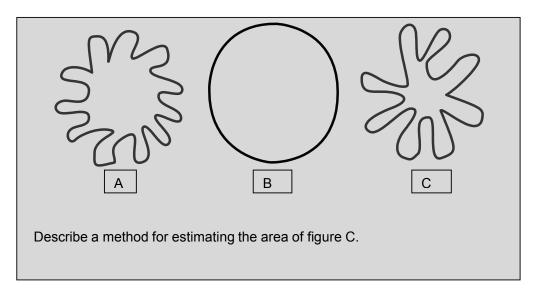
## Q26 Read the problem in the box below. Then, answer the questions that follow it.



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

		Frequently	Sometimes	Rarely	Never
a)	How often have you encountered this type of problem in your <b>mathematics lessons</b> ?			$\square_3$	<b>_</b> 4
b)	How often have you encountered this type of problem in the <b>tests you have</b> <b>taken in school?</b>	$\Box_1$		3	4

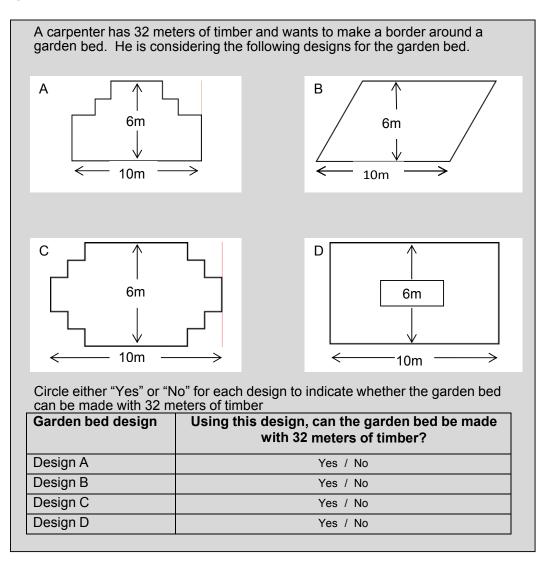
## Q27 Read the problem in the box below. Then, answer the questions that follow it.



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

	Frequently	Sometimes	Rarely	Never
a) How often have you encountered this type of problem in your <b>mathem</b> <b>lessons</b> ?	atics			
b) How often have you encountered this type of problem in the <b>tests you</b> <b>taken in school?</b>	have			4

## Q28 Read the problem in the box below. Then, answer the questions that follow it.



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

		Frequently	Sometimes	Rarely	Never
a)	How often have you encountered this type of problem in your <b>mathematics lessons</b> ?			<b>_</b> 3	
b)	How often have you encountered this type of problem in the <b>tests</b> <b>you have taken in school?</b>			<b></b> 3	4

## Q29 Read the problem in the box below. Then, answer the questions that follow it.

A woman in the hospital receives an injection of penicillin. Her body gradually breaks the penicillin down so that one hour after the injection only 60% of the penicillin will remain active. This pattern continues: at the end of each hour only 60% of the penicillin that was present at the end of the previous hour remains active. Suppose the woman is given a dose of 300 milligrams of penicillin at 8 o'clock in the morning. Complete this table showing the amount of penicillin that will remain active in the woman's blood at intervals of one hour from 8:00 until 11:00. Time 8:00 9:00 10:00 11:00 Penicillin (mg) 300

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

	Frequently	Sometimes	Rarely	Never
a) How often have you encountered this type of problem in your <b>mathematics</b> <b>lessons</b> ?				4
b) How often have you encountered this type of problem in the <b>tests you have</b> <b>taken in school?</b>				

## Q30 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.

Was it to Mei-Ling's advantage that the exchange rate now was 4.0 ZAR instead of 4.2 ZAR when she changed her South African rand back to Singapore dollars? Give an explanation to support your answer.

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

	Frequently	Sometimes	Rarely	Never
a) How often have you encountered this type of problem in your <b>mather</b> <b>lessons</b> ?			<b></b> 3	
b) How often have you encountered this type of problem in the <b>tests you</b> taken in school?				

## Q31 Read the problem in the box below. Then, answer the questions that follow it.

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 liter per second. 1.0m 1.5m 1.5m Which of the following graphs shows how the height of the water surface changes over time? A В С Height TIME TIME TIME Е D Height TIME TIME

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

		Frequently	Sometimes	Rarely	Never
a) How often have encountered this problem in your <b>lessons</b> ?	s type of				
b) How often have encountered this problem in the taken in school	s type of ests you have			3	4

## Q32 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	

ST70

## Q33 How many class periods per week do you typically have for the following subjects?

a)	Number of class periods per week in English:	 class periods
b)	Number of class periods per week in mathematics:	 class periods
c)	Number of class periods per week in science:	 class periods

ST71

## Q34 In a normal, full week at school, how many class periods do you have in total?

Number of ALL class periods	class
Number of ALL class periods	perio

class periods

ST72

## Q35 On average, about how many students attend your English class?

\_\_\_\_\_ students

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

	Every class	Most classes	Some classes	Never or hardly ever
a) Students don't listen to what the teacher says.			3	4
b) There is noise and disorder.		2	3	4
c) The teacher has to wait a long time for students to quiet down.			3	4
d) Students cannot work well.			$\square_3$	4
e) Students don't start working for a long time after the lesson begins.		2	3	4

# SECTION E: ABOUT YOUR PROBLEM SOLVING EXPERIENCES

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.

ST107

## Q37 You are given two choices to make money: Which do you prefer?

(Please check only one box.)	
Accept \$400	
Flip a coin. If it comes up heads you get \$900; if it comes up tails you get nothing.	

ST111

## Q38 You are given three choices to make money: Which do you prefer?

\_\_\_\_ı

2

3

(Please check only one box.)

To get \$400 now

To get \$500 in 3 months

To get \$600 in 6 months

# Thank you very much for your cooperation in completing this questionnaire!

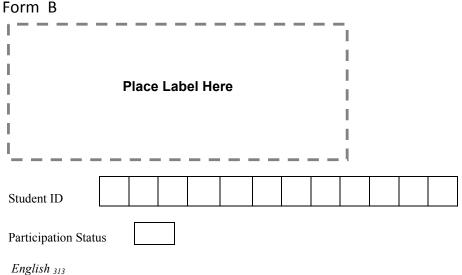
This page intentionally left blank.

### **OECD** Program for **International Student Assessment 2012**



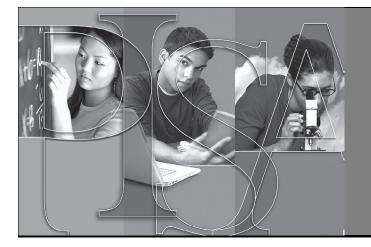
	USA	
Date of T	Fest (Field Trial Pl	SA 2012)
Day	Month	2011

#### Student Questionnaire -



U.S. participation in this study is sponsored by the National Center for Education Statistics (NCES), U.S. Department of Education. Your responses are protected by federal statute (20 U.S.C., § 9573). Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law. By law, everyone working on this NCES survey is subject to a jail term of up to 5 years, a fine of up to \$250,000, or both if he or she willfully discloses ANY identifiable information about you.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is 1850-0755. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving the form, please write to: U.S. Department of Education, Washington, D.C. 20202-4537. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Program for International Student Assessment (PISA), National Center for Education Statistics, U.S. Department of Education, 1990 K Street, N.W., Washington, D.C. 20006. O.M.B. No. 1850-0755, Approval Expires 11/30/2013



#### Project Consortium

- Australian Council for Educational Research (ACER)
- cApStAn Linguistic Quality Control (Belgium)
   Deutsches Institut für Internationale Pädagogische Forschung (DIPF, Germany)

- Educational Testing Service (ETS, USA)
  Institutt for Lærerutdanning og Skoleutvikling (ILS, Norway)
  Leibniz Institute for Science and Mathematics Education (IPN, Germany)
- National Institute for Educational Policy Research (NIER, Japan)
  The Tao Initiative: CRP Henri Tudor and Université de Luxembourg EMACS (Luxembourg)
- Unité d'analyse des systèmes et des pratiques d'enseignement (aSPe, Belgium)
   Westat (USA)

In this booklet you will find questions about:

- You (Section A)
- Your Family and Home (Section B)
- Learning Mathematics (Section C)
- Your Problem Solving Experiences (Section D)

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 check 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.

All information (or responses) you provide may only be used for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law [Education Sciences Reform Act of 2002 (ESRA 2002), 20 U.S. Code, Section 9573].

#### **SECTION A: ABOUT YOU**

#### Q1 What grade are you in?

grade

**ST03** 

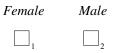
#### Q2 When were you born?

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

		19
Month	Day	Year

**ST04** 

#### Q3 Are you female or male?



Q4

#### Which best describes you?

(Please check only one box.)	
I am Hispanic or Latino.	
I am <u>not</u> Hispanic or Latino.	

#### Q5 Which of these categories best describes your race?

(Please check one or more boxes.)

White	
Black or African American	
Asian	
American Indian or Alaska Native	
Native Hawaiian or Other Pacific Islander	

#### Q6 Did you attend kindergarten?

No	
Yes	

ST07

#### Q7 Have you ever repeated a grade?

(Please check only one box in each row.)

	No, never	Yes, once	Yes, twice or more	
a) In kindergarten				
b) In grades 1-6				
c) In grades 7-9				
d) In grades 10-12				

**ST08** 

### Q8 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	
One or two times	
Three or four times	
Five or more times	

# Q9 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)	4
Bachelor's degree (4-year college degree)	
Master's degree	
Doctoral or professional degree such as medicine or law	

#### SECTION B: ABOUT YOUR FAMILY AND HOME

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 persons 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.

ST11

#### Q10 Who usually lives at home with you?

		Yes	No
a)	Mother (including stepmother or foster mother)		
b)	Father (including stepfather or foster father)		
c)	Brother(s) (including stepbrothers)		
d)	Sister(s) (including stepsisters)		
e)	Grandparent(s)		
f)	Others (e.g., cousin)		

#### Q11 What is your mother's main job? (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.

#### Q12 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.

ST13

### Q13 What is the highest level of schooling (not including college) completed by your mother?

If you are not sure which box to choose, please ask the test administrator for help.

(Please check only one box.)

She completed grade 12 (high school diploma or GED)	
She completed grade 9	
She completed grade 6	
She did not complete grade 6	

### Q14 Does your mother have any of the following degrees, certificates, or diplomas?

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

(Please check one box in each row.)

		Yes	No
a) Master's, doc such as medic	toral, or professional degre- cine or law	e	
b) Bachelor's de	egree (4-year college degree	(a)	
c) Associate's de community co	egree (2-year degree from a ollege)	<b>ì</b>	
	technical certificate/diplon ool (such as cosmetology o cs)		

ST15

#### Q15 What is your mother currently doing?

(Please check only one box.)	
Working full-time for pay	
Working part-time for pay	
Not working, but looking for a job	
Other (e.g., home duties, retired)	

#### Q16 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.

# Q17 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.

ST17

### Q18 What is the highest level of schooling (not including college) completed by your father?

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

(Please check only one box.)

He completed grade 12 (high school diploma or GED)	
He completed grade 9	
He completed grade 6	
He did not complete grade 6	

### Q19 Does your father have any of the following degrees, certificates or diplomas?

If you are not sure which box to choose, please ask the test administrator for help.

(Please check one box in each row.)

	Yes	No
a) Master's, doctoral, or professional degre such as medicine or law	e .	
b) Bachelor's degree (4-year college degree	e)	
c) Associate's degree (2-year degree from a community college)	a	
<ul> <li>d) Vocational or technical certificate/diplor after high school (such as cosmetology or auto mechanics)</li> </ul>		

ST19

#### Q20 What is your father currently doing?

(Please check only one box.)	
Working full-time for pay	
Working part-time for pay	
Not working, but looking for a job	
Other (e.g., home duties, retired)	

### Q21 What language do you speak at home most of the time?

(Please check only one box.)

English	313
Spanish	
Other language	859

#### **SECTION C: ABOUT LEARNING MATHEMATICS**

**ST37** 

### Q22 How confident do you feel about having to do the following mathematics tasks?

		Very confident	Confident	Not very confident	Not at all confident
a)	Using a train schedule to figure out how long it would take to get from one place to another.				4
b)	Calculating how much cheaper a TV would be after a 30% discount.				4
c)	Calculating how many square feet of tile you need to cover a floor.			<b></b> 3	
d)	Understanding graphs presented in newspapers.			$\square_{3}$	
e)	Solving an equation like $3x+5=17$ .				4
f)	Finding the actual distance between two places on a map with a 1:10,000 scale.			3	4
g)	Solving an equation like $2(x+3) = (x + 3) (x - 3).$			<b></b> 3	
h)	Calculating the gas mileage of a car.			$\square_{3}$	4

#### ST44

. .

#### Q23 You are a student in the following situation:

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

#### For each pair of items, please choose the one that best

#### describes you.

Q24

a)	I do my best work in mathematics when I try to do better than others.	I do my best work in mathematics when I work with other students.	
b)	I would like to be the best in my class in mathematics.	In mathematics, I enjoy working with other students in groups.	
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.	I try very hard in mathematics because I want to do better on the exams than the others.	
d)	In mathematics, I enjoy helping others to work well in a group.	I make a real effort in mathematics because I want to be one of the best.	
e)	In mathematics, I always try to do better than the other students in my class.	In mathematics, I learn most when I work with other students in my class.	

### Q25 For each group of three items, please choose the item that best describes your approach to mathematics.

When I study for a When I study for a) When I study for a a mathematics mathematics test, I mathematics test, I test. I learn as try to understand try to work out \_\_\_1 3 new concepts by much as I can by what are the most relating them to heart. important parts to things I already learn. know. b) When I study When I study When I study mathematics, I try mathematics, I think mathematics, I to figure out which of new ways to get make myself 3 \_\_\_\_2 check to see if I concepts I still the answer. have not remember the understood work I have already done. properly. c) When I study When I study When I study mathematics, I try mathematics, I start mathematics, I go to relate the work by working out over some \_\_1 3 to things I have exactly what I need problems so often learned in other to learn. that I feel as if I could solve them subjects. in my sleep. d) In order to I think about how When I cannot remember the the mathematics I understand method for solving have learned can be something in a mathematics used in everyday mathematics, I  $\begin{bmatrix} \\ \\ \end{bmatrix}_1$ 3 2 life. always search for problem, I go through examples more information again and again. to clarify the problem.

### Q26 What grade did you receive in the following subjects both on your last report card and the last school you attended?

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.

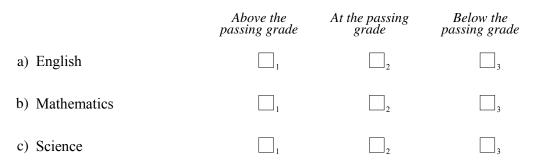
	Last report card	Last school you attended
a) English		
b) Mathematics		
c) Science		

ST60

**ST59** 

### Q27 On your last report card, how did your grade compare with the passing grade in each subject area?

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.



### Q28 Thinking about mathematical concepts: How familiar are you with the following terms?

		Never heard of it	Heard of it once or twice	Heard of it a few times	Heard of it often	Know it well, understand the concept
a)	Exponential Function			3		5
b)	Divisor			3	4	<b>_</b> <sub>5</sub>
c)	Quadratic Function			$\square_{3}$		<b>_</b> <sub>5</sub>
d)	Proper Number			$\square_{3}$		<b>_</b> <sub>5</sub>
e)	Pythagorean Theorem			3		5
f)	Linear Equation			3		5
g)	Vectors			3		<b>_</b> <sub>5</sub>
h)	Complex Number					5
i)	Rational Number					5
j)	Radicals					5
k)	Subjunctive Scaling			3	4	5
1)	Polygon			3	4	5
m)	Declarative Fraction			3	4	5
n)	Prime Number			3		5
o)	Congruent Figure			3		5
p)	Cosine			3		5
q)	Arithmetic Mean			3		<b>_</b> 5
r)	Area of a Circle			3		5
s)	Probability			3		<b>_</b> <sub>5</sub>

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.

**Q29** 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!

		Frequently	Sometimes	Rarely	Never
a) How often have yo encountered these t problems in your <b>n</b> <b>lessons</b> ?	types of				
b) How often have yo encountered these t problems in the <b>tes</b> <b>taken in school</b> ?	types of		$\Box_2$	<b></b> 3	

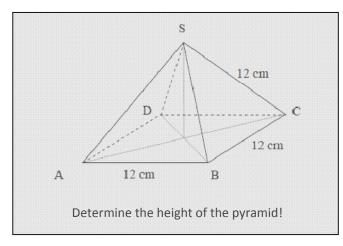
#### **Q30** Below are examples of another set of mathematical skills.

Solve 2x + 3 = 7.
 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!

		Frequently	Sometimes	Rarely	Never
problems in	d these types of			<b>_</b> 3	
problems in	have you d these types of n the <b>tests you</b> n in school?			3	4

**Q31** 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:

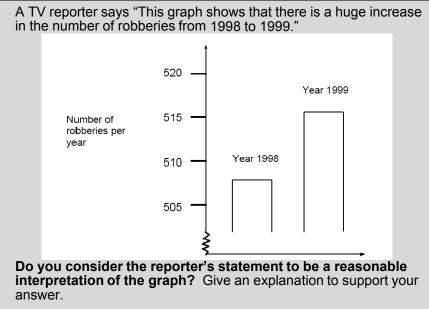
If n is any number: can (n+1)<sup>2</sup> be a prime number?

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

	Frequently	Sometimes	Rarely	Never
a) How often have you encountered these types of problems in your <b>mathematics lessons</b> ?				
b) How often have you encountered these types of problems in the <b>tests you</b> <b>have taken in school?</b>				4

**Q32** 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 2:

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

Recommended maximum heart rate = 220 - age

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

Recommended maximum heart rate =  $208 - (0.7 \times age)$ 

From which age onwards does the recommended maximum heart rate increase as a result of the introduction of the new formula? Show your work.

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

	Frequently	Sometimes	Rarely	Never
a) How often have you encountered these types of problems in your <b>mathematics lessons</b> ?				4
b) How often have you encountered these types of problems in the <b>tests you have taken in school?</b>			<b></b> 3	

**ST93** 

### Q33 Thinking about yourself: How much like you are each of the statements below?

		Very much like me	Mostly like me	Somewhat like me	Not much like me	Not at all like me
a)	When confronted with a problem I give up easily.			<b></b> 3	4	<sub>5</sub>
b)	I put little time and effort into solving problems.		$\square_2$	<b>_</b> 3	4	5
c)	I put off difficult problems.					
d)	I remain interested in the tasks that I start.			<b></b> 3	4	5
e)	I stick with what I decide to do.			<b></b> 3	4	<b>_</b> <sub>5</sub>
f)	I continue working on tasks until everything is perfect.			<b></b> 3	4	<b>_</b> <sub>5</sub>
g)	When confronted with a problem I do more than what is expected of me.			3		
h)	My interests change quickly.				4	5
i)	When confronted with a problem I am easily distracted.			3		5
j)	I remain calm under pressure.				4	<sub>5</sub>
k)	Before I act, I plan.				4	5

### Q34 Thinking about yourself: How much like you are each of the statements below?

		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.			3	4	
b)	I tend to analyze things.					<sub>5</sub>
c)	I dislike learning.			3	4	<b>_</b> 5
d)	I reason logically.			3	4	<b>_</b> 5
e)	I can handle a lot of information.			$\square_{3}$		<b>_</b> 5
f)	I am quick to understand things.			$\square_{3}$		5
g)	I never challenge things.			3	4	5
h)	I rarely look for a deeper meaning in things.			<b></b> 3		
i)	I seek explanations for things.					<b>_</b> 5
j)	I can easily link facts together.				4	
k)	I have difficulty imagining things.			3	4	
1)	I look forward to the opportunity to learn and grow.				4	
m)	I like to speculate about things.					
n)	I like to solve complex problems.		$\square_2$	$\square_{3}$	4	5
0)	I come up with alternatives.				4	<sub>5</sub>

**Q35** 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.			3	
b) I look for the games first.				4
c) I open up every menu and try out all the options.			3	4
d) I check how many buttons work the same way as my old phone.			<b></b> 3	
e) I read the manual.				4
f) I search the Internet.				
g) I ask a friend for help.			$\square_{3}$	4
h) I push a few buttons to see if there are familiar menus.			3	4

**Q36** 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.

	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.			<sub>3</sub>	4
b) I think about what might have happened and what I can do to solve the problem.		2	3	4
c) I read the manual.			3	4
d) I search the Internet.			3	4
e) I ask a friend for help.			3	4

**Q37** After 15 minutes, you haven't found a solution to the problem. What would you do next?

### 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.			<b></b> 3	
b) I call the technical support line.			3	
c) I ask my friends for help.				
d) I search the Internet.				
e) I get it repaired in a shop.				4
f) I buy another cell phone.				4
g) I read the manual.				
h) I put it away and decide to try again later.				

**Q38** You want to buy a cable to connect your computer to your TV. You don't know which cable to buy.

### 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
	go to the nearest electronics tore and ask the sales assistant.				
	search the Internet for how to connect computers to TVs.			3	4
	read the manual for my computer or my TV.			<b></b> 3	4
d) I	ask a friend for help.				4
S	go to the nearest electronics tore and buy the one that I think s right.				4
с	look at the sockets on my computer and my TV to figure out what to buy.				

**Q39** Suppose you know the right cable to connect your computer to your TV. You want to find an electronics store that sells cheap cables.

### 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 go to several stores and compare the advertised prices of the cables.			<b></b> 3	
b) I search the Internet for the locations of discount electronics stores.			<b></b> 3	
c) I go to the nearest electronics store and ask the sales assistant for a good price.			3	4
d) I ask friends for their advice on how much I should pay.		2	3	4
e) I phone several electronics stores to ask how much they charge for the cable.			<b></b> 3	4

**Q40** You try three discount electronics stores but none of them has the cable in stock.

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

**Q41** 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
a) I read the zoo brochure to see if it says how to get there.				
b) I study a map and figure out the bes route.	st			
c) I leave it to my brother to worry about how to get there.				4
d) I ask a friend who has been there before for advice.				
e) I know roughly where it is, so I suggest we just start driving.				4
f) I search the Internet to get direction from home to the zoo.	IS			4
g) I use a GPS car navigation system t find the quickest route.	0	2	3	

**Q42** 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.			3	4
	I think about where we might have made a wrong turn and how to get back on course.			<b></b> 3	4
	I study the map to try to figure out where we are.			<b></b> 3	4
	I tell my brother to turn around and drive back until we find a road I know.			3	4
	The zoo should be close by, so I suggest that we keep going to see if we can find it.			3	4
	We stop and ask a pedestrian for help.				

**Q43** 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.			3	4
b) I keep on trying hard to figure out the best way to get there.				4
c) I ask my brother what to do.			3	
d) I suggest we find a gas station.			3	
e) I give up and ask my brother to drive us back home.				4
f) I look for another place we can visit that is easy to get to from where we are now.				4

**Q44** 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.				
b) I watch how somebody else buys a ticket.	S1			4
c) I carefully read the instructions on the machine.			3	4
d) I try out all the buttons to see what happens.			$\square_3$	
e) I ask someone for help.			<b></b> 3	
f) I try to find a ticket office at the station to buy a ticket.			<b></b> 3	4

**Q45** 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
	I press every button possible to find out what is wrong.			<b></b> 3	4
	I think about what might cause this problem and what I can do to solve it.				4
	I carefully read the display and the instructions on the machine.			<b></b> 3	4
d)	I try to find another ticket machine.			3	
	I try to find a ticket office at the station to buy a ticket.			<b></b> 3	4
f)	I ask someone for help.			$\square_{3}$	
g)	I phone the customer service line.				
	I hit the machine to try to get it to work.			3	4

**Q46** 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.			3	
b) I keep on trying hard to get the machine to work.			3	4
c) I ask someone for help.			3	
d) I carefully read the display and the instructions on the machine.			3	4
e) I get on the train without a ticket.			3	
f) I hit the machine to try to get it to work.			$\square_3$	
g) I travel some other way.				
h) I give up and go home.				
i) I try to find another ticket machine.		$\square_2$		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.

ST108

## Q47 You are given two choices to make money: Which do you prefer?

 $\Box$ 

(Please check only one box.)

Accept \$400

Flip a coin. If it comes up heads you get \$900; if it comes up tails  $\Box_2$  you get nothing.

ST112

### Q48 You are given three choices to make money: Which do you prefer?

(Please check only one box.)

To get \$400 now  $\Box_1$ To get \$500 in 1 month  $\Box_2$ 

To get \$600 in 3 months

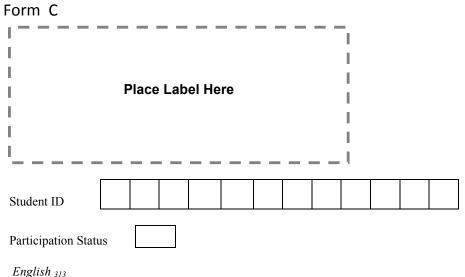
## Thank you very much for your cooperation in completing this questionnaire!

### **OECD** Program for **International Student Assessment 2012**



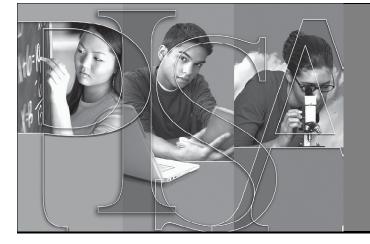
		USA	
Date of Test (Field Trial PISA 2012)			SA 2012)
	Day	Month	2011

#### Student Questionnaire -



U.S. participation in this study is sponsored by the National Center for Education Statistics (NCES), U.S. Department of Education. Your responses are protected by federal statute (20 U.S.C., § 9573). Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law. By law, everyone working on this NCES survey is subject to a jail term of up to 5 years, a fine of up to \$250,000, or both if he or she willfully discloses ANY identifiable information about you.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is 1850-0755. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving the form, please write to: U.S. Department of Education, Washington, D.C. 20202-4537. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Program for International Student Assessment (PISA), National Center for Education Statistics, U.S. Department of Education, 1990 K Street, N.W., Washington, D.C. 20006. O.M.B. No. 1850-0755, Approval Expires 11/30/2013



#### Project Consortium

- Australian Council for Educational Research (ACER)
- cApStAn Linguistic Quality Control (Belgium)
  Deutsches Institut f
  ür Internationale P

  ädagogische Forschung (DIPF, Germany)

- Educational Testing Service (ETS, USA)
  Institutt for Lærerutdanning og Skoleutvikling (ILS, Norway)
  Leibniz Institute for Science and Mathematics Education
- (IPN, Germany)
   National Institute for Educational Policy Research (NIER, Japan)
   The Tao Initiative: CRP Henri Tudor and Université de Luxembourg EMACS (Luxembourg)
- Unité d'analyse des systèmes et des pratiques d'enseignement (aSPe, Belgium)
   Westat (USA)

In this booklet you will find questions about:

- You (Section A)
- Your Family and Home (Section B)
- Learning Mathematics (Section C)
- Your Mathematics Experiences (Section D)
- Your School (Section E)
- Your Problem Solving Experiences (Section F)

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 check 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.

All information (or responses) you provide may only be used for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law [Education Sciences Reform Act of 2002 (ESRA 2002), 20 U.S. Code, Section 9573].

### **SECTION A: ABOUT YOU**

ST01

### Q1 What grade are you in?

grade

**ST03** 

### Q2 When were you born?

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

Month Day Year

**ST04** 

### Q3 Are you female or male?

Female Male  $\Box_1$   $\Box_2$ 

Q4

### Which best describes you?

(Please check only one box.)	
I am Hispanic or Latino.	
I am <u>not</u> Hispanic or Latino.	

### Q5 Which of these categories best describes your race?

(Please check one or more boxes.)

White	
Black or African American	
Asian	
American Indian or Alaska Native	
Native Hawaiian or Other Pacific Islander	

<b>Q</b> 6	Did you attend kindergarten?		
	No		
	Yes		

**ST07** 

### Q7 Have you ever repeated a grade?

(Please check only one box in each row.)

	No, never	Yes, once	Yes, twice or more
a) In kindergarten			
b) In grades 1-6			
c) In grades 7-9			
d) In grades 10-12			

ST08

## Q8 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	
One or two times	
Three or four times	
Five or more times	

## Q9 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)	<b></b> 3
Associate's degree (2-year degree from a community college)	□_ <sub>4</sub>
Bachelor's degree (4-year college degree)	
Master's degree	6
Doctoral or professional degree such as medicine or law	7

### SECTION B: ABOUT YOUR FAMILY AND HOME

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 persons 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.

ST20

### Q10 In what country were you and your parents born?

(Please check one box in each column.)

	You	Mother	Father
United States*	<sub>01</sub>	01	<sub>01</sub>
Other country			

\*NOTE: the "United States" refers to the 50 states, District of Columbia, and U.S. military bases abroad.

ST21

### Q11 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 12.

Years

(Please check only one box.)

English	
Spanish	
Other language	859

### **SECTION C: ABOUT LEARNING MATHEMATICS**

ST38

### Q13 If you had to choose between the following options, which would you prefer?

(Please show how close your opinion is to the statements below by checking one of the boxes numbered 1 to 7 in each row.)

a)	I am interested in mathematics lessons more than in any other lessons.	01		<sub>03</sub>	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			04	05	06	07	I would be sad to drop mathematics if I had to.
c)	I enjoy reading about mathematics.	01		03	<sub>04</sub>	<sub>05</sub>		07	I avoid reading about mathematics.
d)	I plan to do as much mathematics as possible during my education.	01			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.	<sub>01</sub>		<sub>03</sub>	<sub>04</sub>	<sub>05</sub>	<sub>06</sub>	07	I enjoy doing mathematics problems and puzzles outside mathematics lessons.
f)	I look forward to my mathematics lessons.	01	02	03	04	05	06	07	I do not look forward to my mathematics lessons.

## Q14 Thinking about your views on mathematics: To what extent do you agree with the following statements?

		Strongly agree	Agree	Disagree	Strongly disagree
	njoy reading about athematics.				4
is	aking an effort in mathematics worth it because it will help me the work that I want to do later				
	book forward to my mathematics soons.				
d) I d it.	o mathematics because I enjoy				
W	earning mathematics is orthwhile for me because it will prove my career prospects.				
	m interested in the things I arn in mathematics.				
su	athematics is an important bject for me because I need it r what I want to study later on.				
ma	vill learn many things in athematics that will help me get ob.				4

**ST30** 

## Q15 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 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?

	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.				4
b) I just think that studying mathematics is fun.			3	4
c) I will not go out because my parents expect me to do well on my mathematics quiz.				4
d) I think that it is more important for me to get better grades in mathematics than to go out with my friends.			3	

# Q16 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 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.			<b></b> 3	
b) Reading about the history of mathematics in my free time will help me obtain the job I want.			<b></b> 3	4
c) Reading about the history of mathematics in my free time is enjoyable.			<b></b> 3	4
d) My parents want me to read about the history of mathematics as muc as I can.			3	4

Your school has a mathematics club. In this club, students compete to solve mathematics problems against other schools. You have decided to join the club.

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

(Please check only one box in each row.)

	likely	Likely	Unlikely	unlikely
a) My parents encouraged me to join the club.				4
b) I want to get the highest grade in a of my mathematics classes.	11		3	
c) I am interested in solving mathematics problems.				4
d) It will give me practice mastering the mathematics skills that I will need in my future career.			3	4

17......

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?

	Very likely	Likely	Unlikely	Very unlikely
a) Paying attention in mathematics will be useful when I have a car				4
b) Paying attention in mathematics will help me do better on exams than the other students in my cla	$\Box_1$			4
c) I pay attention in mathematics c because I enjoy it.	elass $\square_1$			
d) I pay attention in mathematics because my parents will be disappointed if I do not do well mathematics.	in 🗆 1			4

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.	,		<b></b> 3	4
b) I study more for mathematics class because I want to get high grades than anyone else.	ner		<b></b> 3	
c) I study more for mathematics class because mathematics is for	un.		3	
<ul> <li>d) I study more for mathematics class because my parents make me.</li> </ul>	;			

# Q20 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.			3	4
b)	Most of my friends work hard at mathematics.				4
c)	My friends enjoy taking mathematics tests.			3	4
d)	My parents believe it's important for me to study mathematics.				4
e)	My parents believe that mathematics is important for my career.			<b></b> 3	4
f)	My parents like mathematics.			3	4
g)	My teachers believe it is important for me to study mathematics.			3	4
h)	My teachers think it is important for me to do well in mathematics.	$\Box_1$		$\square_3$	
i)	The people in my life whose opinions I value are good at mathematics.			3	4
j)	People whose opinions I value think that mathematics is an important subject.			3	4

## Q21 Thinking about your friends: To what extent do you agree with the following statements?

		Strongly agree	Agree	Disagree	Strongly disagree
a) My frier mathema	nds enjoy reading about atics.		2		4
•	nds look forward to their atics lessons.			<b></b> 3	4
c) My frier they enjo	nds do mathematics because oy it.				
d) My frier mathema	nds are interested in learning atics.			<b></b> 3	
mathema	nds think making an effort in atics is worth it because it o them later on.				
help the	nds think mathematics will m with the subjects that they study further on in school.	$\square_1$			
	nds believe mathematics is an nt subject for them to study.			<b></b> 3	
•	nds think that studying atics will help them get a job.				4

## Q22 How confident do you feel about having to do the following mathematics tasks?

	Very confident	Confident	Not very confident	Not at all confident
a) Using a train schedule to figure out how long it would take to get from one place to another.				<b></b> 4
b) Calculating how much cheaper a TV would be after a 30% discount.			<b></b> 3	4
c) Calculating how many square feet of tile you need to cover a floor.			<b></b> 3	4
d) Understanding graphs presented in newspapers.			<b></b> 3	4
e) Solving an equation like $3x+5=17$ .			<b></b> 3	
<ul><li>f) Finding the actual distance between two places on a map with a 1:10,000 scale.</li></ul>			<b></b> 3	
g) Solving an equation like $2(x+3) = (x + 3) (x - 3)$ .			3	4
h) Calculating the gas mileage of a car.			3	

## Q23 Thinking about your mathematics lessons: To what extent do you agree with the following statements?

Strongly agree Strongly disagree Agree Disagree a) If I invest enough effort, I can  $\square_3$ **\_**1  $\square_2$ 4 succeed in mathematics. b) Whether or not I do well in  $\square_2$ 4 mathematics is completely up to me. c) Family demands or other problems  $\square_2$  $\square_1$  $\square_4$ prevent me from putting a lot of time into my mathematics work. d) If I had different teachers, I would try  $\Box_2$ \_\_\_\_\_ harder in mathematics. e) If I wanted to, I could perform well in  $\Box_1$ 2 4 mathematics. f) I perform poorly in mathematics  $\square_2$ whether or not I study for my exams.

## Q24 Thinking about the mathematics you do for school: To what extent do you agree with the following statements?

		Strongly agree	Agree	Disagree	Strongly disagree
	have my homework finished in me for mathematics class.			3	
	work hard on my mathematics omework.			$\square_3$	
	am prepared for my mathematics xams.			<b></b> 3	
d) I	study hard for mathematics quizzes.				
	keep studying until I understand nathematics material.				
f) I	pay attention in mathematics class.				4
g) I	listen in mathematics class.				4
	avoid distractions when I am tudying mathematics.			3	4
	keep my mathematics work well rganized.				

## Q25 Thinking about your views on mathematics: To what extent do you agree with the following statements?

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

		Always or almost always	Often	Sometimes	Never or rarely
a)	I talk about mathematics problems with my friends.			<b></b> 3	
b)	I help my friends with mathematics.				
c)	I do mathematics as an extracurricular activity.			3	4
d)	I take part in mathematics competitions.			<b></b> 3	4
e)	I do mathematics more than 2 hours a day outside of school.			3	
f)	I play chess.			$\square_3$	4
g)	I program computers.		$\square_2$	3	4
h)	I do mathematics even though I do not like it.			3	
i)	I participate in a mathematics club.				

### Q27 What grade did you receive in the following subjects both on your last report card and the last school you attended?

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.

	Last report card	Last school you attended
a) English		
b) Mathematics		
c) Science		

ST60

## Q28 On your last report card, how did your grade compare with the passing grade in each subject area?

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.

	Above the passing grade	At the passing grade	Below the passing grade
a) English			<b></b> 3
b) Mathematics			<b></b> 3
c) Science			

### Q29 To what extent do you agree with the following statements?

	Strongly agree			Neither agree nor disagree			Strongly disagree
a) I am interested in mathematics lessons less than in any othe lessons.	□_ <sub>01</sub>	02	03	04	05	06	07
b) I would be sad to drop mathematics if I had to.	01		<sub>03</sub>	<sub>04</sub>		06	07
c) I avoid reading abou mathematics.	t	02	03	04	<sub>05</sub>	06	07
d) I plan to do as little mathematics as possible during my education.		02	03	<sub>04</sub>	05	06	07
e) I enjoy doing mathematics problems and puzzles outside mathematics lessons		02	<sub>03</sub>	04			07
f) I do not look forward to my mathematics lessons			<sub>03</sub>	<sub>04</sub>	<sub>05</sub>	06	07

## Q30 How often do these things happen in your mathematics classes?

	Every class	Most classes	Some classes	Never or hardly ever
a) The teacher shows an interest in every student's learning.			<b></b> 3	4
b) The teacher gives extra help when students need it.	n 🗌 1			
c) Students work from books and other printed material.				
d) The teacher helps students with their learning.	$\Box_1$			
e) The teacher continues teaching until the students understand.			<b></b> 3	
<ul> <li>f) The teacher gives students an opportunity to express opinions.</li> </ul>				4

## Q31 How often do these things happen with your mathematics homework?

		Always or almost always	Often	Sometimes	Never
a)	My mathematics teacher discusses mistakes with us to help us learn from our mistakes.			<b></b> 3	4
b)	My mathematics teacher gives feedback on how we solve our homework problems.			<b></b> 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.			<b></b> 3	4
d)	My mathematics teacher gives homework problems that require us to go beyond what has been explicitly taught in class.			<b></b> 3	4
e)	My mathematics teacher rewards the effort that we put into our homework regardless of whether we get the right answer.			<b></b> 3	

# Q32 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.				4
b)	The teacher gives tasks that only involve calculations.		2		4
c)	The teacher gives problems with definite solutions.		2		4
d)	The teacher gives problems that require us to think about them for an extended time.				4
e)	The teacher asks us to decide on our own procedures for solving complex problems.				<b>_</b> 4
f)	The teacher presents problems for which there is no immediately obvious method of solution.				4
g)	The teacher presents problems in different contexts so that students know whether they have understood the concepts.			<b></b> 3	4
h)	The teacher helps us to learn from mistakes we have made.		2	3	4
i)	The teacher asks us to explain how we have solved a problem.			<b></b> 3	4
j)	The teacher presents problems that require students to apply what they have learned to new contexts.			<b></b> 3	4
k)	The teacher gives problems that can be solved in several different ways.				

Q33 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.

	Strongly agree	Agree	Disagree	Strongly disagree
a) Ms. Anderson assigns mathematics homework every other day. She alway gets the answers back to students before examinations. Ms. Anderson is concerned about her students' learning.	•		<b></b> 3	4
<ul> <li>b) Mr. Crawford assigns mathematics homework once a week. He always ge the answers back to students before examinations. Mr. Crawford is concerned about his students' learning.</li> </ul>	ets		$\Box_{3}$	4
c) Ms. Dalton assigns mathematics homework once a week. She never ge the answers back to students before examinations. <b>Ms. Dalton is concern</b> <b>about her students' learning.</b>				4

# Q34 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 lets students know they need to work hard.			<b></b> 3	
b) My teacher provides extra help when needed.				4
c) My teacher helps students with their learning.			3	4
d) My teacher gives students the opportunity to express opinions.		2	3	4

### **SECTION E: ABOUT YOUR SCHOOL**

#### ST86

## Q35 Thinking about the teachers at your school: To what extent do you agree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
a) Students get along well with most teachers.			<b></b> 3	4
b) Most teachers are interested in students' well-being.			<b></b> 3	4
c) Most of my teachers really listen to what I have to say.				4
d) If I need extra help, I will receive it from my teachers.	$\Box_1$			
e) Most of my teachers treat me fairly.			3	4

(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></b> 3	4
b)	School has been a waste of time.			<b></b> 3	4
c)	School helped give me confidence to make decisions.			3	4
d)	School has taught me things which could be useful in a job.			3	4
					ST92

### Q37 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.				4
b) I will turn in all of my homework on time for the remainder of the school year.			<b></b> 3	4
c) I intend to set timelines to get projects done.			3	
d) I plan on studying harder in school this year than I did last year.			3	4
e) I will arrive on time to my classes.			<b></b> 3	4
f) I intend to work hard on every project to make sure everything is done right.			3	4

# SECTION F: ABOUT YOUR PROBLEM SOLVING EXPERIENCES

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.

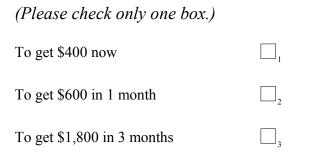
ST109

### Q38 You are given two choices to make money: Which do you prefer?

(Please check only one box.)Accept \$400 $\Box_1$ Flip a coin. If it comes up heads<br/>you get \$600; if it comes up tails<br/>you get nothing. $\Box_2$ 

ST113

### Q39 You are given three choices to make money: Which do you prefer?



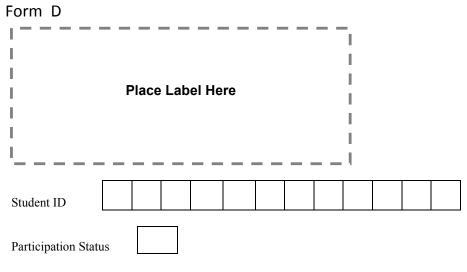
# Thank you very much for your cooperation in completing this questionnaire!

### **OECD** Program for **International Student Assessment 2012**



		USA		
	Date of Test (Field Trial PISA 2012)			
Ĩ	Day	Month	2011	

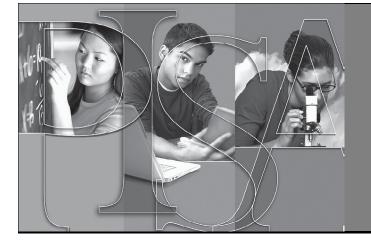
#### Student Questionnaire -



English 313

U.S. participation in this study is sponsored by the National Center for Education Statistics (NCES), U.S. Department of Education. Your responses are protected by federal statute (20 U.S.C., § 9573). Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law. By law, everyone working on this NCES survey is subject to a jail term of up to 5 years, a fine of up to \$250,000, or both if he or she willfully discloses ANY identifiable information about you.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is 1850-0755. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving the form, please write to: U.S. Department of Education, Washington, D.C. 20202-4537. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Program for International Student Assessment (PISA), National Center for Education Statistics, U.S. Department of Education, 1990 K Street, N.W., Washington, D.C. 20006. O.M.B. No. 1850-0755, Approval Expires 11/30/2013



#### Project Consortium

- Australian Council for Educational Research (ACER)
- cApStAn Linguistic Quality Control (Belgium)
   ocutsches Institut für Internationale Pädagogische Forschung (DIPF, Germany)

- Educational Testing Service (ETS, USA)
  Institutt for Lærerutdanning og Skoleutvikling (ILS, Norway)
  Leibniz Institute for Science and Mathematics Education
- (IPN, Germany)
   National Institute for Educational Policy Research (NIER, Japan)
   The Tao Initiative: CRP Henri Tudor and Université de Luxembourg EMACS (Luxembourg)
- Unité d'analyse des systèmes et des pratiques d'enseignement (aSPe, Belgium)
   Westat (USA)

In this booklet you will find questions about:

- You (Section A)
- Your Family and Home (Section B)
- Learning Mathematics (Section C)
- Your Mathematics Experiences (Section D)
- Your School (Section E)
- Your Problem Solving Experiences (Section F)

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 check 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.

All information (or responses) you provide may only be used for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law [Education Sciences Reform Act of 2002 (ESRA 2002), 20 U.S. Code, Section 9573].

### SECTION A: ABOUT YOU

ST01

#### Q1 What grade are you in?

grade

ST03

#### Q2 When were you born?

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

Year

19\_\_\_\_ Day Month

**ST04** 

#### Q3 Are you female or male?

Female Male

 $\Box_1$ 

#### Q4 Which best describes you?

(Please check only one box.)I am Hispanic or Latino.I am not Hispanic or Latino.

#### Q5 Which of these categories best describes your race?

(Please check one or more boxes.)

White	
Black or African American	
Asian	
American Indian or Alaska Native	
Native Hawaiian or Other Pacific Islander	

#### Q6 Did you attend pre-school?

No	
Yes, for one year or less	
Yes, for more than one year	

#### Q7 Did you attend kindergarten?

No	
Yes	

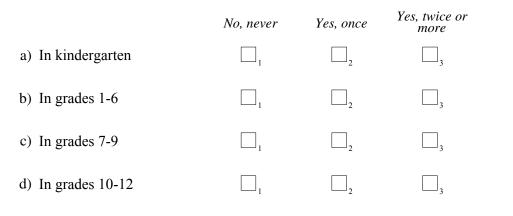
**ST06** 

#### Q8 How old were you when you started first grade?

Years

**ST07** 

#### Q9 Have you ever repeated a grade?



#### Q10 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	
One or two times	
Three or four times	
Five or more times	

ST09

#### Q11 In the last two full weeks of school, how many times did you skip school?

(Please check only one box.)	
None	
One or two times	
Three or four times	
Five or more times	

ST10

#### Q12 In the last two full weeks of school, how many times did you miss school because of illness or other circumstances?

(Please check only one box.)	
None	
One or two times	
Three or four times	
Five or more times	

## Q13 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)	4
Bachelor's degree (4-year college degree)	
Master's degree	6
Doctoral or professional degree such as medicine or law	7

#### SECTION B: ABOUT YOUR FAMILY AND HOME

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 persons 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.

-			_
S	т	0	n
0		~	v

#### Q14 In what country were you and your parents born?

(Please check one box in each column.)

	You	Mother	Father
United States*		01	<sub>01</sub>
Other country			

\*NOTE: the "United States" refers to the 50 states, District of Columbia, and U.S. military bases abroad.

c	-		-1
0		∠	
_			

## Q15 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 Q16.

Years

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

(Please check only one box.)

English	
Spanish	
Other language	

### **SECTION C: ABOUT LEARNING MATHEMATICS**

## Q17 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
h	Using a train schedule to figure out now long it would take to get from one place to another.			3	4
	Calculating how much cheaper a TV would be after a 30% discount.			<b></b> 3	4
	Calculating how many square feet of tile you need to cover a floor.			$\square_{3}$	4
	Understanding graphs presented in newspapers.			<b></b> 3	4
e) S	Solving an equation like $3x+5=17$ .			3	
t	Finding the actual distance between wo places on a map with a :10,000 scale.			$\square_{3}$	<b></b> 4
-	Solving an equation like 2(x+3) = (x + 3) (x - 3).			<b></b> 3	4
	Calculating the gas mileage of a car.			3	

ST37

# Q18 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.

		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 in mathematics lessons more than in any other lessons.			3	4	<b>_</b> 5	6
b)	This student would be happy to drop mathematics if he or she could.			<b>_</b> 3	4	5	6
c)	This student enjoys reading about mathematics.			<b></b> 3	4	5	6
d)	This student plans to do as much mathematics as possible during his or her education.			<b>_</b> 3		<b>_</b> <sub>5</sub>	6
e)	This student avoids doing mathematics problems and puzzles outside mathematics lessons.			3	4	5	6
f)	This student looks forward to his or her mathematics lessons.			3	4	<b>_</b> 5	6

## Q19 Thinking about studying mathematics: To what extent do you agree with the following statements?

		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.			<b></b> 3	4
c)	I get very tense when I have to do mathematics homework.			3	
d)	I get good grades in mathematics.			<b></b> 3	4
e)	I get very nervous doing mathematics problems.			3	
f)	I learn mathematics quickly.			<b></b> 3	4
g)	I have always believed that mathematics is one of my best subjects.			3	4
h)	I feel helpless when doing a mathematics problem.			3	
i)	In my mathematics class, I understand even the most difficult work.			3	4
j)	I worry that I will get poor grades in mathematics.				4

# Q20 For each pair of statements, please choose the item that best describes you.

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

## Q21 Thinking about your mathematics classes: To what extent do you agree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
a) I would like to be the best in my class in mathematics.	$S$ $\square_1$		3	
b) In mathematics, I enjoy working with other students in groups.			3	
c) I try very hard in mathematics becaus I want to do better on the exams than the others.			<b>_</b> 3	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.				4
e) I make a real effort in mathematics because I want to be one of the best.				4
f) I do my best work in mathematics when I work with other students.			3	
g) In mathematics, I always try to do better than the other students in my class.				4
h) In mathematics, I enjoy helping other to work well in a group.	S		3	4
i) In mathematics, I learn most when I work with other students in my class.			3	
<ul> <li>j) I do my best work in mathematics when I try to do better than others.</li> </ul>			3	4

### Q22 There are different ways of studying mathematics: To what extent do you agree with the following statements?

		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.	$\Box_1$			<b></b> 4
b)	When I am solving mathematics problems, I often think of new ways to get the answer.	$\Box_1$		<b></b> 3	
c)	When I study mathematics, I make myself check to see if I remember the work I have already done.			<b></b> 3	
d)	When I study mathematics, I try to figure out which concepts I still have not understood properly.			3	
e)	I think about how the mathematics I have learned can be used in everyday				4
f)	I go over some problems in mathematics so often that I feel as if I could solve them in my sleep.			3	4
g)	When I study for mathematics, I learn as much as I can by heart.				4
h)	I try to understand new concepts in mathematics by relating them to things I already know.			3	4
i)	In order to remember the method for solving a mathematics problem, I go through examples again and again.				
j)	When I cannot understand something in mathematics, I always search for more information to clarify the problem.				4

		Strongly agree	Agree	Disagree	Strongly disagree
k)	When I am solving a mathematics problem, I often think about how the solution might be applied to other interesting questions.	$\Box_1$		<b></b> 3	4
1)	When I study mathematics, I start by working out exactly what I need to learn.			<b></b> 3	4
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.				

## Q23 Thinking about your views on mathematics: To what extent do you agree with the following statements?

		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.			<b></b> 3	4
b)	After I solve a mathematics test question, I ask myself if there was an easier way to do it.	$\Box_1$		<b></b> 3	4
c)	I pace myself in order to have enough time on mathematics tests.			3	4
d)	I consciously focus my attention on important information in the questions on mathematics tests.			<b></b> 3	4
e)	I read the instructions carefully before I begin a mathematics test.			3	
f)	I think of several ways to solve a mathematics problem and choose the best one when taking a mathematics test.			3	4
g)	When I get confused during a mathematics test, I stop and reread the question.			3	4
h)	I know what kind of information is most important in solving a mathematics test question.	$\Box_1$		3	4
i)	I use helpful strategies automatically during a mathematics test.			<b></b> 3	4

## Q24 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 content from school lessons by working on a computer (e.g., practice mathematics using online software)	hours per week

### Q25 What grade did you receive in the following subjects both on your last report card and the last school you attended?

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.

	Last report card	Last school you attended
a) English		
b) Mathematics		
c) Science		

ST60

### Q26 On your last report card, how did your grade compare with the passing grade in each subject area?

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.

	Above the passing grade	At the passing grade	Below the passing grade
a) English			<b></b> 3
b) Mathematics			3
c) Science			

# Q27 Thinking about the mathematics teacher that taught your last mathematics class: How often do these things happen?

		Always or almost always	Often	Sometimes	Never
a)	The teacher sets clear goals for our learning.				4
b)	The teacher asks me or my classmates to present our thinking or reasoning at some length.			<b></b> 3	4
c)	The teacher gives different work to classmates that have difficulties learning and/or to those who can advance faster.			3	4
d)	The teacher assigns projects that require at least one week to complete.			3	4
e)	The teacher tells me about how well I am doing in my mathematics class.			<b></b> 3	
f)	The teacher asks questions to check whether we have understood what was taught.			3	4
g)	The teacher has us work in small groups to come up with joint solutions to a problem or task.				4
h)	At the beginning of a lesson, the teacher presents a short summary of the previous lesson.			3	

		Always or almost always	Often	Sometimes	Never
i)	The teacher reviews the homework that we prepare.				4
j)	The teacher asks us to help plan classroom activities or topics.			3	<b>_</b> 4
k)	The teacher gives me feedback on my strengths and weaknesses in mathematics.			<b>_</b> 3	4
1)	The teacher tells us what is expected of us when we get a test, quiz, or assignment.			<b></b> 3	4
m)	The teacher checks our workbooks.			3	4
n)	The teacher has us argue about different approaches to solving a mathematics problem.				4
0)	The teacher tells us what we have to learn.			3	4
p)	The teacher gives a test or quiz to assess student learning.		2	3	4
q)	The teacher tells me what I need to do to become better in mathematics.				
r)	The teacher has us solve realistic problems from daily life.			<b></b> 3	4

Q28 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 check only one box in each row.)

		Strongly agree	Agree	Disagree	Strongly disagree
frequently interr always in her cla	Ms. Franklin's class upt her lessons. She is assroom five minutes starts. <b>Ms. Franklin is</b> r classroom.			<b></b> 3	4
calm and orderly classroom at the	Ms. Harris' class are 7. She is always in her start of class. <b>Ms.</b> <b>trol of her classroom.</b>			<b>_</b> 3	4
result, he often a	Mr. Reynolds' class upt his lessons. As a urrives five minutes late Mr. Reynolds is in				

control of his classroom.

# Q29 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.			3	4
b) My teacher keeps the class orderly.				4
c) My teacher starts the class period on time.			<b></b> 3	
d) The teacher has to wait a long time for students to quiet down.			3	

### SECTION E: ABOUT YOUR SCHOOL

## Q30 Thinking about 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) I feel like an outsider (or left out of things) at school.			<b></b> 3	
b) I make friends easily at school.			3	4
c) I feel like I belong at school.			3	
d) I feel awkward and out of place in my school.			3	4
e) Other students seem to like me.				
f) I feel lonely at school.			<b></b> 3	4
g) I feel happy at school.				
h) Things are ideal in my school.				
i) I am satisfied with my school.			3	

**ST87** 

## Q31 Thinking about your school: To what extent do you agree with the following statements?

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

## Q32 Thinking about how others view your school: To what extent do you agree 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.				4
b) My parents believe that it is good for me to pass my classes.				4
c) My friends enjoy studying for their classes.				4
d) My friends try to do better than each other in school.				4
e) My friends think that trying hard in school will not do any good.				4
<ul> <li>f) My parents think I will get better grades if I try harder in school.</li> </ul>			<b></b> 3	4

## Q33 Thinking about your school: To what extent do you agree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
a) If I invest enough effort I can succeed in school.		2		4
b) It is completely my choice whether or not I do well in school.				4
c) Family demands or other problems prevent me from putting a lot of time into my school work.			<b></b> 3	4
d) If I had different teachers, I would try harder in school.			<b></b> 3	4
e) If I wanted to I could perform well in school.			3	4
f) I perform poorly in school whether or not I study for my exams.			3	4

## SECTION F: ABOUT YOUR PROBLEM SOLVING EXPERIENCES

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.

ST110

### Q34 You are given two choices to make money: Which do you prefer?

(Please check only one box.)Accept \$400 $\Box_1$ Flip a coin. If it comes up heads<br/>you get \$900; if it comes up tails<br/>you get nothing. $\Box_2$ 

ST114

### Q35 You are given three choices to make money: Which do you prefer?

(Please check only one box.)

To get \$400 now  $\Box_1$ 

To get \$600 in 3 months

To get \$1,800 in 6 months  $\Box_3$ 

# Thank you very much for your cooperation in completing this questionnaire!

### FINANCIAL LITERACY QUESTIONS SET 1

### Questions about your experience with financial issues

Q1	Have you ever learned how to manage money in a class?				FQ001Q01
	(Please check one box in each row.)			Yes	No
a)	At school, in a subject or course specific managing money	ally about		$\Box_1$	$\Box_2$
b)	At school as part of another subject or cl	ass		$\Box_1$	$\square_2$
c)	In an activity outside school $\Box_1$			$\square_2$	
Q2	How often do you discuss mon spending, saving, banking, inve people?				FQ001Q02
	(Please check one box in each row.)	Never or hardly ever	Once or twice a month	Once or twice a week	Almost every day
a)	Parents/guardians or other adult relations	$\Box_1$	$\square_2$	$\square_3$	$\Box_4$
b)	Brothers or sisters (including step- brothers and sisters)	$\Box_1$	$\square_2$	$\square_3$	$\Box_4$
c)	Friends	$\Box_1$	$\square_2$	$\square_3$	$\Box_4$
Q3	If you don't have enough mone really want (e.g. an item of clotl what are you most likely to do?	hing, sport	-	-	FQ001Q11
	(Please check only one box.)				
a)	Buy it with money that really should be	used for some	ething else		$\Box_1$
b)	Try to borrow money from a family mer	nber			$\square_2$
c)	Try to borrow money from a friend				$\square_3$

d)	Save up to buy it	$\Box_4$
e)	Not buy it	$\square_5$

### FINANCIAL LITERACY QUESTIONS SET 2

#### Questions about your experience with financial issues

Q1	Do you get money from any of these sources?			FQ001Q04
	(Please check one box in each row.)		Yes	No
a)	My parents/guardians, as a regular allowance or spending me	oney	$\square_1$	$\square_2$
b)	My parents/guardians, from time to time		$\square_1$	$\square_2$
c)	A regular part-time job outside school hours		$\square_1$	$\square_2$
d)	A job during school vacations or a summer job		$\square_1$	$\square_2$
e)	Working in a family business		$\square_1$	$\square_2$
f)	Occasional jobs outside home (e.g. babysitting or gardening)		$\square_1$	$\square_2$
g)	Gifts of money from friends or relatives		$\square_1$	$\square_2$
h)	Selling things (e.g. at local markets, on eBay, or Craig's Lis	t)	$\square_1$	$\square_2$
Q2	Which of these statements about saving mone to you?	y best ap	plies	FQ001Q10
	(Please check only one box.)			
a)	I save the same amount of money each week or month			$\Box_1$
b)	I save some money each week or month, but the amount var	ies		$\square_2$
c)	I save money only when I have some to spare			$\square_3$
d)	I save money only when I want to buy something			$\Box_4$
e)	I do not save any money			$\square_5$
f)	I have no money so I do not save			$\square_6$
Q3	Do you have any of the following?			FQ001Q06
	(Please check one box in each row.)	Yes	No	I don't know what it is
a)	Bank account		$\square_2$	$\square_3$
b)	Pre-paid debit card		$\square_2$	$\square_3$

c) A way of saving money at home (e.g. a piggy bank)  $\Box_1$   $\Box_2$   $\Box_3$