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TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

Student Questionnaire

Separate Science Subjects

<Grade 8>

<TIMSS National Research Center Name> <Add; ... >

TIMSS & PIRLS

Lynch School of Education

BOSTON COLLEGE

IEA, 2018

In this booklet, you will find questions about yourself. Some questions ask for facts while other questions ask for your opinion.

Each question is followed by a number of answers. Shade in the circle next to or $\ensuremath{\mathsf{n}}$

Example 3

What do you think? Tell how much you agree with these statements.

one

About you

1

Are you a girl or a boy?

one

 $Girl -- \not A$

 $Boy -- \triangle$

2

When were you born?

a) Month	b) Year
January A	2001 A
February A	2002 A
March △	2003 A
April A	2004 A
Мау Д	2005 A
June A	2006 A
July △	2007 A
August △	2008 A
September A	2009 A
October A	Other A
November A	
December A	

How often do you speak <language of test> at home?

one

Always -- A

Almost always -- A

Sometimes -- A

Never -- A

4

About how many books are there in your home? (Do not count magazines, newspapers, or your school books.)

one

None or very few (0-10 books) -- A

Enough to fill one shelf (11-25 books) -- A

Enough to fill one bookcase (26-100 books) -- A

Enough to fill two bookcases (101-200 books) -- A

Enough to fill three or more bookcases (more than 200) -- \triangle

5

Do you have any of these things at your home?

one

Nooneon 0.098

The following questions are about your <Parent/Guardian A> and <Parent/Guardian B>. <If you have only one parent/guardian, answer for Parent/Guardian A. If you have two parents/guardians, choose one for Parent/Guardian A and the other for Parent/Guardian B.>

6

What is the highest level of education completed by your cparents/guardians>?

A. <Parent/Guardian A>

one

Not applicable -- A

Some < Primary education—ISCED Level 1 or Lower secondary education—ISCED Level 2> or did not go to school -- A < Lower secondary education—ISCED Level 2> -- A < Upper secondary education—ISCED Level 3> -- A < Post-secondary, non-tertiary education—ISCED Level 4> -- A < Short-cycle tertiary education—ISCED Level 5> -- A < Bachelor's or equivalent level—ISCED Level 6> -- A < Postgraduate degree: Master's—ISCED Level 8> -- A I don't know -- A

6 (continued)

What is the highest level of education completed by your <parents/guardians>?

B. <Parent/Guardian B>

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Some <Primary education—ISCED Level 1 or Lower secondary education—ISCED Level 2> or did not go to school -- A <Lower secondary education—ISCED Level 2> -- A <Upper secondary education—ISCED Level 3> -- A <Post-secondary, non-tertiary education—ISCED Level 4> -- A <Short-cycle tertiary education—ISCED Level 5> -- A <Bachelor's or equivalent level—ISCED Level 6> -- A <Postgraduate degree: Master's—ISCED Level 8> -- A I don't know -- A
```

Not applicable -- A

7

How far in your education do you expect to go?

8

Were your country>?

A. <Parent/Guardian A>

one

one

Yes -- A

No -- A

I don't know-- A

Not applicable -- A

B. <Parent/Guardian B>

one

Yes -- A

No -- A

I don't know-- A

Not applicable -- A

9

A. Were you born in <country>?

one

Yes -- A

(If Yes, go to #10)

No -- A

If No,

B. If you were not born in <country>, how old were you when you came to <country>?

one

Older than 10 years old -- A

5 to 10 years old -- \triangle

Younger than 5 years old -- \triangle

10

About how often are you absent from school?

one

Once a week -- A

Yodinger than a4

14 _

During this school year, how often have other students from your school done any of the following things to you, including through texting or the Internet?

one

		At least once a week	Once or twice a month	A few times a year	Never
a)	Said mean things about my physical appearance (e.g., my hair, my size)	- A	-A	-A	- A
b)	Spread lies about me	- A	-A	-A	- A
c)	Shared my secrets with others	- A	-A	-A	- A
d)	Refused to talk to me	- A	-A	-A	- A
e)	Insulted a member of my family	- A	-A	-A	- A
f)	Stole something from me	- A	-A	-A	- A
g)	Made me do things I didn't want to do	- A	-A	-A	- A
h)	Sent me nasty or hurtful messages online	- A	-A	-A	— A
i)	Shared nasty or hurtful things about me online	- A	-A	-A	- A
j)	Shared embarrassing pho ³ i	D			

Mathematics in School

15 ____

In mathematics lessons, how often do you work problems on your own?

one

Every or almost every lesson -- A

About half the lessons -- A

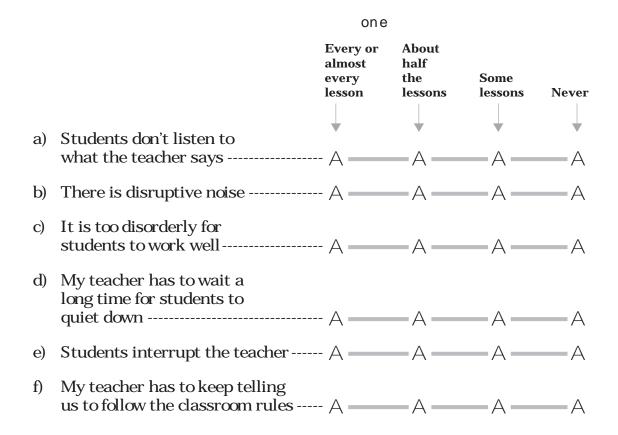
Some lessons -- A

Never -- \wedge

How much do you agree with these statements about learning mathematics?

one Agree a little Agree Disagree Disagree a little a lot a lot a) I enjoy learning mathematics ----- $A \longrightarrow A$ b) I wish I did not have to study mathematics ----- $A \longrightarrow A \longrightarrow A$ Mathematics is boring ----- $A \longrightarrow A \longrightarrow A$ d) I learn many interesting things in mathematics -—A—A—A—Ae) I like mathematics ----- $A \longrightarrow A \longrightarrow A$ I like any schoolwork that involves numbers ----- $A \longrightarrow A \longrightarrow A$ I like to solve mathematics problems ----- $A \longrightarrow A \longrightarrow A$ h) I look forward to mathematics class ----- A \longrightarrow AMathematics is one of my favorite subjects ----- A A A

How often do these things happen in your mathematics lessons?



How much do you agree with these statements about mathematics?

one Agree Agree Disagree Disagree a lot a little a lot b) I need mathematics to learn other school subjects ----- A —— A —— A I need to do well in mathematics to get into the <university> of my choice ------ A — A — A d) I need to do well in mathematics to get the job I want ----- $A \longrightarrow A \longrightarrow A$ e) I would like a job that involves using mathematics ----- $A \longrightarrow A \longrightarrow A$ It is important to learn about mathematics to get ahead in the world ----- $A \longrightarrow A \longrightarrow A$ g) Learning mathematics will give me more job opportunities h) My parents think that it is important that I do well in mathematics ----- $A \longrightarrow A \longrightarrow A$ It is important to do well in mathematics ----- $A \longrightarrow A \longrightarrow A$

Biology in School

21

Are you studying biology in school this year?

Yes -- △
No -- △
(If No, go to #26)

one

22

In biology lessons, how often does your teacher ask you to conduct biology experiments?

one

At least once a week -- A

Once or twice a month -- A

A few times a year -- A

Never -- \triangle

How much do you agree with these statements about learning biology?

one Agree a little Agree Disagree Disagree a little a lot a lot a) I enjoy learning biology ----- $A \longrightarrow A$ b) I wish I did not have to study biology ------ A — A — A Biology is boring ----- $A \longrightarrow A \longrightarrow A$ d) I learn many interesting things in biology ----- A A Ae) I like biology ----- \land \longrightarrow \land \longrightarrow \land I look forward to learning biology in school ----- A ABiology teaches me how things in the world work ------ A — A — A h) I like to conduct biology experiments ----- $A \longrightarrow A \longrightarrow A$ Biology is one of my favorite subjects ----- A — A — A

How much do you agree with these statements about your <u>biology lessons</u>?

on e Agree a little Agree Disagree Disagree a little a lot a lot a) I know what my teacher expects me to do ------ A — A — A My teacher is easy to understand -- \land —— \land —— \land —— \land My teacher has clear answers to my questions ----- $A \longrightarrow A \longrightarrow A$ My teacher is good at explaining biology ----- A A e) My teacher does a variety of things to help us learn ----- $A \longrightarrow A \longrightarrow A$ My teacher links new lessons to f) what I already know ------ A ——— A ———— A My teacher explains a topic again when we don't understand --- \land ——— \land ——— \land

How much do you agree with these statements about biology?

one

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I usually do well in biology	- A	A	Α	$=$ \bigwedge
b)	Biology is more difficult for me than for many of my classmates	- A	Α	Α	A
c)	Biology is not one of my strengths	- A	Α	Α	A
d)	I learn things quickly in biology	- A	A	A	A
e)	I am good at working out difficult biology problems	- A	Α	Α	A
f)	My teacher tells me I am good at biology	- A	Α	Α	A
g)	Biology is harder for me than any other subject	- A	Α	Α	= A

Earth Science in School

26 _____

Are you studying earth science in school this year?

one
Yes -- △
No -- △
(If No, go to #31)

27

In earth science lessons, how often does your teacher ask you to conduct earth science experiments?

one

At least once a week -- A

Once or twice a month -- A

A few times a year -- A

Never -- A

How much do you agree with these statements about your <u>earth science lessons</u>?

on e

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I know what my teacher expects me to do	Α	Α	Α	А
b)	My teacher is easy to understand	Α	Α	Α	А
c)	My teacher has clear answers to my questions	Α	Α	Α	А
d)	My teacher is good at explaining earth science	Α	Α	Α	А
e)	My teacher does a r .		p	se ng	

Chemistry in School

31

Are you studying chemistry in school this year?

one

How much do you agree with these statements about learning chemistry?

one Agree a little Agree Disagree Disagree a little a lot a lot b) I wish I did not have to study chemistry ------ A — A — A d) I learn many interesting things in chemistry ----- A A Ae) I like chemistry ----- \land \longrightarrow \land \longrightarrow \land I look forward to learning chemistry in school ----- $A \longrightarrow A \longrightarrow A$ Chemistry teaches me how things in the world work ----- $A \longrightarrow A \longrightarrow A$ h) I like to conduct chemistry experiments ----- $A \longrightarrow A \longrightarrow A$ Chemistry is one of my favorite subjects ----- A —— A —— A

34

How much do you agree with these statements about your <u>chemistry lessons</u>?

one

Agree Agree Disagree Disagree a lot a little a lot

Physics in School

36

Are you studying physics in school this year?

one

(If No, go to #41)

37

In physics lessons, how often does your teacher ask you to conduct physics experiments?

one

At least once a week -- A

Once or twice a month -- A

A few times a year -- A

Never -- A

How much do you agree with these statements about learning physics?

one Agree Agree Disagree a lot a little a little Disagree a lot a) I enjoy learning physics ----- \wedge \rightarrow \wedge \rightarrow \wedge \rightarrow \wedge \rightarrow \wedge b) I wish I did not have to study physics ----- A — A — A Physics is boring ----- $A \longrightarrow A \longrightarrow A$ d) I learn many interesting things in physics ----- A Ae) I like physics ----- A — A — A I look forward to learning Physics teaches me how things in the world work ----- A Ah) I like to conduct physics experiments ----- $A \longrightarrow A \longrightarrow A$ Physics is one of my

39 _____

How much do you agree with these statements about physics?

	one				
		Agree a lot	Agree a little	0	Disagree a lot
a)	I usually do well in physics	A		-A	-A
b)	Physics is more difficult for me than for many of my classmates	A	-A	-A	- A
c)	Physics is not one of my strengths	A	-A	-A	A
d)	I learn things quickly in physics	A	-A	-A	- A
e)	I am good at working out difficult physics problems	A	-A	-A	- A
f)	My teacher tells me I am good at physics	A	-A	-A	A
g)	Physics is harder for me than any other subject	A	-A	-A	- A
h)	Physics makes me confused	A	-A	- A	- A

Learning Science

41

How much do you agree with these statements about science (including biology, earth science, chemistry, and physics)?

	one				
		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I think learning science will help me in my daily life	- A	-A	- A	-A
b)	I need science to learn other school subjects	Α	-A	A	- A
c)	I need to do well in science to get into the <university> of my choice</university>	Α	-A	A	A
d)	I need to do well in science to get the job I want	- A	-A	A	A
e)	I would like a job that involves using science	- A	-A	A	A
f)	It is important to learn about science to get ahead in the world	- A	-A	A	- A
g)	Learning science will give me more job opportunities when I am an adult	- A	-A	A	A
h)	My parents think that it is important that I do well in science	- A	-A	Α	A
i)	It is important to do well in science	- A	-A	- A	- A

42 _

A. How often does your teacher give you homework in each of the following subjects?

A. During the last 12 months, have you attended extra lessons or tutoring not provided by the school in the following subjects?

a) Mathematics ------ A — A — A — A

B. For how many of the last 12 months have you attended extra lessons or tutoring?

Thank You!



<Grade 8>

