**Identification Label** 



TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Student Questionnaire

**Separate Science Subjects** 

<Grade 8>

<TIMSS National Research Center Name> <Address>



#### **Directions**

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 under the answer of your choice as shown in Examples 1, 2, and 3.

#### Example 1

Do you go to school?

Fill **one** circle only.

Yes -- 🔘

No --()

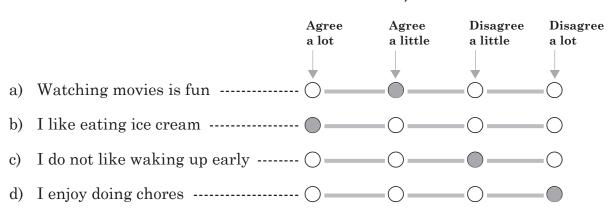
#### Example 2

How often do you do these things?

		Every day or almost every day	Once or twice a week	Once or twice a month	Never or almost never
a)	I talk with my friends	<u></u>			
b)	I play sports	O			$\bigcirc$
c)	I ride a skateboard	O	0		$\bigcirc$

#### Example 3

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



- Read each question carefully, and pick the answer you think is best.
- Fill in the circle next to or under your answer.
- If you decide to change your answer, draw an X through your first answer, like this: X. Then, fill in the circle next to or under your new answer.
- Ask for help if you do not understand something or are not sure how to answer.

#### About you

1

Are you a girl or a boy?

Fill one circle only.

 $\operatorname{Girl} - \bigcirc$ 

Boy -- 🔘

2

When were you born?

Fill the circles next to the month and year you were born.

a) Month	b) Year
January 🔘	1997 🔾
February 🔘	1998 🔘
March 🔘	1999 🔘
April 🔘	2000 🔘
May 🔘	2001 🔾
June 🔘	2002 🔾
July 🔘	2003 🔘
August 🔘	2004 🔾
September $\bigcirc$	2005 🔾
October 🔘	Other $\bigcirc$
November $\bigcirc$	
December 🔘	

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

Fill **one** circle only.

Always -- 🔾

Almost always -- 🔘

Sometimes -- ()

Never -- 🔾

4

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

Fill **one** circle only.

None or very few (0–10 books) -- (

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

Enough to fill one bookcase (26–100 books) -- 🔘

Enough to fill two bookcases (101–200 books) -- 🔘

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

5

How many digital information devices are there in your home? Count computers, tablets, smartphones, smart TVs, and e-readers. (Do not count other devices.)

	Fill <b>one</b> circle only.
None	$\circ$
1-3 devices	$\bigcirc$
4-6 devices	$\bigcirc$
7-10 devices	$\circ$
More than 10 devices	$\bigcirc$

6

Do you have any of these things at your home?

		Yes	No
a)	A computer or tablet of your own	<u></u>	
b)	A computer or tablet that is shared with other people at home	O	
c)	Study desk/table for your use	O	
d)	Your own room	O	
e)	Internet connection	$\bigcirc$	
f)	Your own mobile phone	O	
g)	A gaming system (e.g., PlayStation®, Wii®, XBox®)	O	
h)	<pre><country-specific indicator="" of="" wealth=""></country-specific></pre>	O	
i)	<pre><country-specific indicator="" of="" wealth=""></country-specific></pre>	O	
j)	<pre><country-specific indicator="" of="" wealth=""></country-specific></pre>	O	
k)	<pre><country-specific indicator="" of="" wealth=""></country-specific></pre>	O	

## A. What is the highest level of education completed by your mother (or stepmother or female guardian)?

Fill **one** circle only.

Some <primary 1="" education—isced="" level="" or<br="">Lower secondary education—ISCED Level 2&gt; or did not go to school ()</primary>	
<lower 2="" education—isced="" level="" secondary=""> ○</lower>	ndary education—ISCED Level 2> 🔘
<upper 3="" education—isced="" level="" secondary=""> ○</upper>	ndary education—ISCED Level 3> 🔘
<post-secondary, 4="" education—isced="" level="" non-tertiary=""> ()</post-secondary,>	<pre><post-secondary, 4="" education—isced="" level="" non-tertiary=""> ()</post-secondary,></pre>
hort-cycle tertiary education—ISCED Level 5> 〇	rtiary education—ISCED Level 5> 🔘
Bachelor's or equivalent level—ISCED Level 6> 🔾	equivalent level—ISCED Level 6> 🔘
<postgraduate degree:="" master's—isced<br="">Level 7 or Doctor—ISCED Level 8&gt; ○</postgraduate>	graduate degree: Master's—ISCED Level 7 or Doctor—ISCED Level 8> ()
I don't know ○	I don't know○

## B. What is the highest level of education completed by your father (or stepfather or male guardian)?

Fill **one** circle only.

Some < Primary education—ISCED Level 1 or Lower secondary education—ISCED Level 2> or did not go to school (
<pre><lower 2="" education—isced="" level="" secondary=""> </lower></pre>
<pre><upper 3="" education—isced="" level="" secondary=""> </upper></pre>
<post-secondary, non-tertiary<br="">education—ISCED Level 4&gt; (</post-secondary,>
Short-cycle tertiary education—ISCED Level 5>
<bachelor's 6="" equivalent="" level="" level—isced="" or=""> C</bachelor's>
<postgraduate degree:="" master's—isced<br="">Level 7 or Doctor—ISCED Level 8&gt; (</postgraduate>
I don't know 🤇

#### How far in your education do you expect to go?

	Fill one circle only.
Finish <lower 2="" education—isced="" level="" secondary=""></lower>	
Finish <upper 3="" education—isced="" level="" secondary=""></upper>	
Finish <post-secondary, 4="" education—isced="" level="" non-tertiary=""></post-secondary,>	
Finish <short-cycle 5="" education—isced="" level="" tertiary=""></short-cycle>	
Finish <bachelor's 6="" equivalent="" level="" level—isced="" or=""></bachelor's>	
Finish <postgraduate degree:<br="">Master's—ISCED Level 7 or Doctor—ISCED Level 8&gt; -</postgraduate>	O
Was your mother (or stepmother in <country>?</country>	or female guardian) born
in country.	T
	Fill <b>one</b> circle only.
	V
Yes	_
Yes No	$\bigcirc$
No	
No I don't know Was your father (or stepfather or	
No I don't know Was your father (or stepfather or	The male guardian born in Fill one circle only.
No I don't know Was your father (or stepfather or <country>?</country>	male guardian) born in  Fill one circle only.

A.

В.

A. Were you born in <country>?

Fill **one** circle only.

Yes -- 🔾

(If Yes, go to #11)

No -- ()

If No,

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

Fill one circle only.

Older than 10 years old -- 🔾

5 to 10 years old -- 🔾

Younger than 5 years old -- 🔾

11

#### About how often are you absent from school?

Fill **one** circle only.

Once a week or more --  $\bigcirc$ 

Once every two weeks --  $\bigcirc$ 

Once a month -- 🔘

Never or almost never --  $\bigcirc$ 

#### How often do you eat breakfast on school days?

Fill **one** circle only.

Every day --  $\bigcirc$ 

Most days -- 🔘

Sometimes -- ()

Never or almost never --  $\bigcirc$ 

13

How often do you use a computer or tablet in each of these places for schoolwork (including classroom tasks, homework, studying outside of class)?

a)	At home	Every day or almost every day	Once or twice a week	Once or twice a month	Never or almost never
a)	At nome	$\cup$	$\cup$		$\cup$
b)	At school	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$
c)	Some other place	O	O	O	$\bigcirc$

#### **14**

Do you use the Internet to do any of the following tasks for schoolwork (including classroom tasks, homework, studying outside of class)?

		Yes	No
a)	Access the textbook or other course materials		
b)	Access assignments posted online by my teacher	🔾	
c)	Collaborate with classmates on assignments or projects	\( \)	
d)	Communicate with the teacher	)	
e)	Find information, articles, or tutorials to aid in understanding mathematics	\( \)	
f)	Find information, articles, or tutorials to aid in understanding science	)	—0

#### **Your School**

#### 15

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I like being in school	Ŏ	<u> </u>	<u> </u>	
b)	I feel safe when I am at school	O			
c)	I feel like I belong at this school	O	0		
d)	I like to see my classmates at school	O			
e)	Teachers at my school are fair to me	0			
f)	I am proud to go to this school	0	0	0	
g)	I learn a lot in school	O			

#### **16**

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)?

		At least once a week	Once or twice a month	A few times a year	Never
a)	Made fun of me or called me names	- 💍			
b)	Left me out of their games or activities	- 🔾			
c)	Spread lies about me	- 0			
d)	Stole something from me	- 0	<u> </u>	<u> </u>	
e)	Hit or hurt me (e.g., shoving, hitting, kicking)	- ()			
f)	Made me do things I didn't want to do	- 🔾			
g)	Shared embarrassing information about me	- ()			
h)	Posted embarrassing things about me online	- 🔾			
i)	Threatened me	- 0			

#### **Mathematics in School**

#### 17

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

a)	I enjoy learning mathematics	Agree a lot	Agree a little	Disagree a little	Disagree a lot
b)	I wish I did not have to study mathematics				-0
c)	Mathematics is boring	- ()			
d)	I learn many interesting things in mathematics	- ()			
e)	I like mathematics	- 0	O		
f)	I like any schoolwork that involves numbers	- ()			
g)	I like to solve mathematics problems	- ()			
h)	I look forward to mathematics class	- ()			
i)	Mathematics is one of my favorite subjects	- ()			

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I know what my teacher expects me to do	- 0			
b)	My teacher is easy to understand -	- 0	O	$\circ$	
c)	I am interested in what my teacher says	- ()			
d)	My teacher gives me interesting things to do	- ()			
e)	My teacher has clear answers to my questions	- ()			
f)	My teacher is good at explaining mathematics	- ()			
g)	My teacher lets me show what I have learned	- ()			
h)	My teacher does a variety of things to help us learn	- 🔾			
i)	My teacher tells me how to do better when I make a mistake	- 🔾			
j)	My teacher listens to what I have to say	- ()			

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

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

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I think learning mathematics will help me in my daily life	•			
b)	I need mathematics to learn other school subjects				
c)	I need to do well in mathematics to get into the <university> of my choice</university>			O	
d)	I need to do well in mathematics to get the job I want			0	
e)	I would like a job that involves using mathematics				
f)	It is important to learn about mathematics to get ahead in the world				
g)	Learning mathematics will give me more job opportunities when I am an adult			O	
h)	My parents think that it is important that I do well in mathematics			O	
i)	It is important to do well in mathematics				

#### **Biology in School**

#### **21**

Are you studying biology in school this year?

Fill one circle only.

(If No, go to #25)

Yes -- ()
No -- ()

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

		Agree a lot	Agree a little	0	Disagree a lot
a)	I enjoy learning biology	- 🔾 —			
b)	I wish I did not have to study biology	- ()	0	0	
c)	Biology is boring	- 🔾			
d)	I learn many interesting things in biology	- 🔾			
e)	I like biology	- 🔾			
f)	I look forward to learning biology in school	- ()			
g)	Biology teaches me how things in the world work	- 🔾	-0	-O	
h)	I like to conduct biology experiments	- 🔾	-0	-0	
i)	Biology is one of my favorite subjects	- 0	0	0	

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I know what my teacher expects me to do	- 🔾	-0		
b)	My teacher is easy to understand -	- 🔾			
c)	I am interested in what my teacher says	- ()	O		
d)	My teacher gives me interesting things to do	- 0	-0		
e)	My teacher has clear answers to my questions	- ()	O		
f)	My teacher is good at explaining biology	- ()	0		
g)	My teacher lets me show what I have learned	- ()	-0		
h)	My teacher does a variety of things to help us learn	- ()	-O		
i)	My teacher tells me how to do better when I make a mistake	- ()	0		
j)	My teacher listens to what I have to say	- 0	-0		

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

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

#### Earth Science in School

**25** 

Are you studying earth science in school this year?

Fill one circle only.

Yes -- 🔾

No -- 🔾

(If No, go to #29)

## How much do you agree with these statements about learning earth science?

a)	I enjoy learning earth science	Agree a lot	Agree a little	Disagree a little	Disagree a lot
b)	I wish I did not have to study earth science	- ()			
c)	Earth science is boring	- 0			
d)	I learn many interesting things in earth science	- ()			
e)	I like earth science	- 0			
f)	I look forward to learning earth science in school	- ()			
g)	Earth science teaches me how things in the world work	- ()			
h)	I like to conduct earth science experiments	- ()	-0		
i)	Earth science is one of my favorite subjects	- ()			

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I know what my teacher expects me to do	- 0	-0		•
b)	My teacher is easy to understand -	- 🔾			
c)	I am interested in what my teacher says	- ()			
d)	My teacher gives me interesting things to do	- 0			
e)	My teacher has clear answers to my questions	- 🔾			
f)	My teacher is good at explaining earth science	- ()			
g)	My teacher lets me show what I have learned	- 🔾			
h)	My teacher does a variety of things to help us learn	- 🔾			
i)	My teacher tells me how to do better when I make a mistake	- 🔾			
j)	My teacher listens to what I have to say	- 🔾			

## How much do you agree with these statements about earth science?

۵)	I wavelle de well in earth seiones	Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I usually do well in earth science	. ()			
b)	Earth science is more difficult for me than for many of my classmates				
c)	Earth science is not one of my strengths	. ()		0	
d)	I learn things quickly in earth science	. ()		0	
e)	I am good at working out difficult earth science problems				
f)	My teacher tells me I am good at earth science				
g)	Earth science is harder for me than any other subject				
h)	Earth science makes me confused	. ()	0		

#### Chemistry in School

29

Are you studying chemistry in school this year?

Fill one circle only.

Yes -- 🔾

No -- 🔾

(If No, go to #33)

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I enjoy learning chemistry	. •	Ŏ	Ŏ	
b)	I wish I did not have to study chemistry	- ()			$\bigcirc$
c)	Chemistry is boring	- 0		0	
d)	I learn many interesting things in chemistry	- ()			$\bigcirc$
e)	I like chemistry	- 0		0	
f)	I look forward to learning chemistry in school	- ()			$\bigcirc$
g)	Chemistry teaches me how things in the world work	- ()		0	
h)	I like to conduct chemistry experiments	- ()	0	0	
i)	Chemistry is one of my favorite subjects	- 🔾			

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a) I know what my to expects me to do -		0		-0-	-0
b) My teacher is easy	to understand -	- 0			
c) I am interested in teacher says		- (			
d) My teacher gives r things to do	ne interesting	- 0	-0	-0	
e) My teacher has cle my questions	ear answers to	- ()			
f) My teacher is good chemistry	l at explaining	- (			
g) My teacher lets mo I have learned		- 0	-0	-0	
h) My teacher does a things to help us le		- ()			
i) My teacher tells m better when I mak		- ()			
j) My teacher listens I have to say		- 0		-0	

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I usually do well in chemistry	Ŏ	<u> </u>	<u> </u>	Ŏ
b)	Chemistry is more difficult for me than for many of my classmates	O		O	$\circ$
c)	Chemistry is not one of my strengths	O		O	$\circ$
d)	I learn things quickly in chemistry	O		O	$\circ$
e)	I am good at working out difficult chemistry problems	O		O	$\circ$
f)	My teacher tells me I am good at chemistry	O		O	$\circ$
g)	Chemistry is harder for me than any other subject	O	<u> </u>	O	$\circ$
h)	Chemistry makes me confused	O			$\bigcirc$

#### Physics in School

**33** 

Are you studying physics in school this year?

Fill one circle only.

Yes -- 🔾

No -- (If No, go to #37)

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

a)	I enjoy learning physics	Agree a lot	Agree a little	a little	Disagree a lot
b)	I wish I did not have to study physics	. ()			
c)	Physics is boring				
d)	I learn many interesting things in physics	. ()			
e)	I like physics	- 0			
f)	I look forward to learning physics in school	. ()			
g)	Physics teaches me how things in the world work	-			
h)	I like to conduct physics experiments	-			
i)	Physics is one of my favorite subjects	. ()			

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I know what my teacher expects me to do	•			
b)	My teacher is easy to understand				
c)	I am interested in what my teacher says				
d)	My teacher gives me interesting things to do				
e)	My teacher has clear answers to my questions				
f)	My teacher is good at explaining physics				
g)	My teacher lets me show what I have learned				
h)	My teacher does a variety of things to help us learn				
i)	My teacher tells me how to do better when I make a mistake				
j)	My teacher listens to what I have to say				

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

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

#### **Learning Science**

37

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

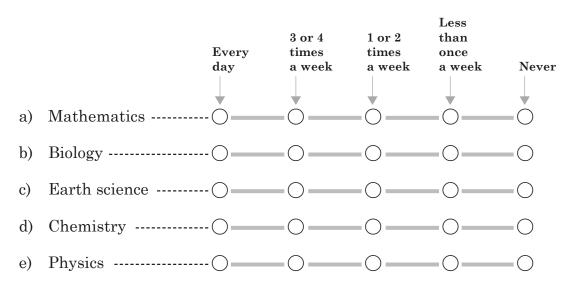
		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I think learning science will help me in my daily life	- 0			
b)	I need science to learn other school subjects	- ()			
c)	I need to do well in science to get into the <university> of my choice</university>	- ()			
d)	I need to do well in science to get the job I want	- ()			
e)	I would like a job that involves using science	- ()			
f)	It is important to learn about science to get ahead in the world	- ()			
g)	Learning science will give me more job opportunities when I am an adult	. ()			
h)	My parents think that it is important that I do well in science	. ()		0	
i)	It is important to do well in science	- ()			

#### Homework

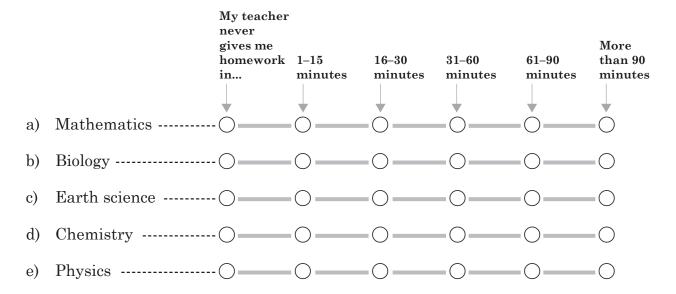
38

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

Fill one circle for each line.

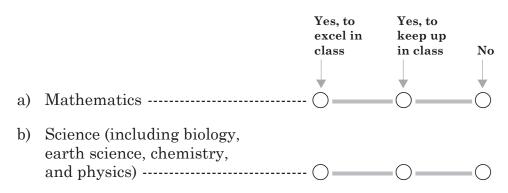


## B. When your teacher gives you homework in each of the following subjects, about how many minutes do you usually spend on your homework?

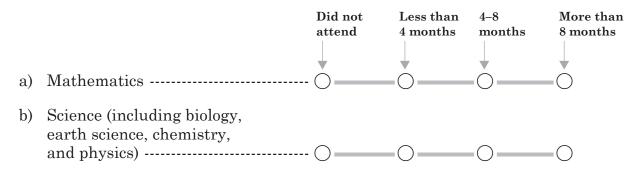


## A. During the last 12 months, have you attended extra lessons or tutoring not provided by the school in the following subjects?

Fill one circle for each line.



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



## Thank You!

Thank you for filling out the questionnaire!



# TIMSS 2015

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

# Student Questionnaire

**Separate Science Subjects** 

<Grade 8>

