Identification Label				
Student ID:				
Student Name:				

Trends in International Mathematics and Science Study





## **Student Questionnaire**

## SEPARATE SCIENCE SUBJECTS <Grade 8>

<TIMSS National Research Center Name>

<Address>



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# **General Directions**

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

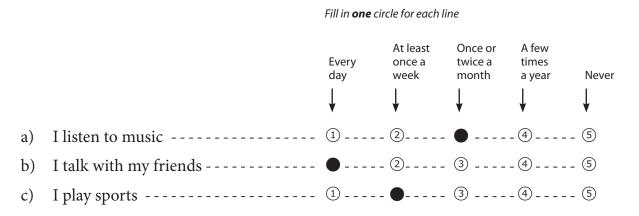
Read each question carefully and answer as accurately as possible. You may ask for help if you do not understand something or are not sure how to respond.

Each question is followed by a number of answers. Shade in the circle next to the answer of your choice as shown in Examples 1, 2, and 3.

Example 1				
Do you go to school?				
	Fill in <b>one</b> circle only			
Yes				
No				

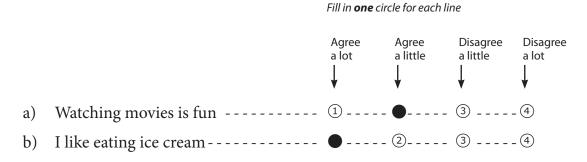
## Example 2

How often do you do these things?



## Example 3

Indicate how much you agree with each of these statements.



Read each question carefully, and pick the answer you think is best. Fill in the circle next to or below your answer. If you decide to change an answer to a question, put an "x" over your first choice, and then fill in the circle for your new choice. Ask for help if you do not understand something or are not sure how to answer.

Thank you for your time, effort, and thought in completing this questionnaire.

# **About You**

#### 1

#### When were you born?

A. Fill in the circle next to the year you were born

### Year

- 1989 🔾
- 1990 🔿
- 1991 🔿
- 1992 🔿
- 1993 🔿
- 1994 🔿
- -----
- 1995 🔿
- 1996- 🔿
- Other  $\bigcirc$

B. Fill in the circle next to the month you were born

#### Month

- January- 🔿
- February- O
  - March- $\bigcirc$
  - April- 🔿
    - May- O
    - June-  $\bigcirc$
    - July 🔿
- August  $\bigcirc$
- September  $\bigcirc$ 
  - October  $\bigcirc$
- November  $\bigcirc$
- December  $\bigcirc$

#### 2

### Are you a girl or a boy?

	Fill in <b>one</b> circle only
Girl	1
Boy	2

## <Grade 8> Student Questionnaire

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

	Fill in <b>one</b> circle only
Always	1
Almost always	2
Sometimes	3
Never	4

**4** |

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

Fill in **one** circle only

None or very few (0-10 books) ①
Enough to fill one shelf (11-25 books) ②
Enough to fill one bookcase (26-100 books) ③
Enough to fill two bookcases (101-200 books) ④
Enough to fill three or more bookcases (more than 200 books) (5)

5 I

## Do you have any of these things at your home?

		Fill in <b>one</b> circle for each line	
		Yes ↓	No ↓
a)	Calculator	1	2
b)	Computer (do not include PlayStation <sup>®</sup> , GameCube <sup>®</sup> , XBox <sup>®</sup> , or other TV/video game computers) -	1	2
c)	Study desk/table for your use	1	2
d)	Dictionary	1	2
e)	Internet connection	1	2
f)	<country-specific></country-specific>	1	2
g)	<country-specific></country-specific>	1	2
h)	<country-specific></country-specific>	1	2
i)	<country-specific></country-specific>	1	2

- 6
- A. What is the highest level of education completed by your mother (or stepmother or female guardian)?

Fill in **one** circle only

Some <isced 1="" 2="" level="" or=""> or did not go to school</isced>	1
<isced 2=""></isced>	2
<isced 3=""></isced>	3
<isced 4=""></isced>	4
<isced 5b=""></isced>	5
<isced 5a,="" degree="" first=""></isced>	6
Beyond <isced 5a,="" degree="" first=""></isced>	7
I don't know	8

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

Fill in **one** circle only

Some <isced 1="" 2="" level="" or=""> or did not go to school</isced>	1
<isced 2=""></isced>	2
<isced 3=""></isced>	3
<isced 4=""></isced>	4
<isced 5b=""></isced>	5
<isced 5a,="" degree="" first=""></isced>	6
Beyond <isced 5a,="" degree="" first=""></isced>	7
I don't know	8

## How far in school do you expect to go?

Fill in **one** circle only

Finish <isced 3=""></isced>	1
Finish <isced 4=""></isced>	2
Finish <isced 5b=""></isced>	3
Finish <isced 5a,="" degree="" first=""></isced>	4
Beyond <isced 5a,="" degree="" first=""></isced>	(5)
I don't know	6

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

		Agree a lot ↓	Agree a little ↓	Disagree a little ↓	Disagree a lot ↓
a)	I usually do well in mathematics	1	. @	3	4
b)	I would like to take more mathematics in school	1	. 2	3	_ (4)
c)	Mathematics is more difficult for me than for many of my classmates	1	. 2	3	_ (4)
d)	I enjoy learning mathematics	1	. (2)	3	4
e)	Mathematics is not one of my strengths	1	. 2	3	- (4)
f)	I learn things quickly in mathematics	1	. (2)	3	4
g)	Mathematics is boring	1	. (2)	3	4
h)	I like mathematics	1	2	3	- (4)

## 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	1	. @	3	. (4)
b)	I need mathematics to learn other school subjects	1	. 2	3	. (4)
c)	I need to do well in mathematics to get into the <university> of my choice</university>	1	. 2	3	. (4)
d)	I need to do well in mathematics to get the job I want	1	. @	3	. (4)

## How often do you do these things in your mathematics lessons?

		Every or almost every lesson	About half the lessons	Some lessons	Never ↓
a)	We practice adding, subtracting, multiplying, and dividing without using a calculator	_ (1)	. 2	3	. (4)
b)	We work on fractions and decimals	_ (1)	. 2	3	4
c)	We solve problems about geometric shapes, lines and angles	_ (1)	. 2	3	. (4)
d)	We interpret data in tables, charts, or graphs	1	. 2	3	. (4)
e)	We write equations and functions to represent relationships	_ (1)	. 2	3	. (4)
f)	We memorize formulas and procedures	_ (1)	. 2	3	4
g)	We explain our answers	_ (1)	. 2	3	. (4)
h)	We relate what we are learning in mathematics to our daily lives	_ (1)	. 2	3	. (4)
i)	We decide on our own procedures for solving complex problems	_ (1)	. 2	3	. (4)
j)	We review our homework	_ (1)	. 2	3	. (4)
k)	We listen to the teacher give a lecture-style presentation	_ (1)	. 2	3	. (4)
1)	We work problems on our own	_ (1)	. 2	3	. (4)
m)	We work together in small groups	_ (1)	. 2	3	. (4)
n)	We begin our homework in class	_ (1)	. 2	3	4
o)	We have a quiz or test	_ (1)	. 2	3	. (4)
p)	We use calculators	_ (1)	. 2	3	. (4)
q)	We use computers	_ (1)	. (2)	3	4

# **Biology in School**

11

## Are you studying biology in school this year?



If **No**, please go to question **15** 

12

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

		Agree a lot ↓	Agree a little ↓	5	Disagree a lot ↓
a)	I usually do well in biology	1	2	3	- (4)
b)	I would like to take more biology in school	1	- @	3	_ (4)
c)	Biology is more difficult for me than for many of my classmates	1	. @	3	_ (4)
d)	I enjoy learning biology	1		3	- (4)
e)	Biology is not one of my strengths	1		3	- (4)
f)	I learn things quickly in biology	1		3	- (4)
g)	Biology is boring	1		3	- (4)
h)	I like biology	1		3	- (4)

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

		Agree a lot ↓	Agree a little ↓	Disagree a little ↓	Disagree a lot ↓
a)	I think learning biology will help me in my daily life	1	2	3	. (4)
b)	I need biology to learn other school subjects	1	2	3	. (4)
c)	I need to do well in biology to get into the <university> of my choice</university>	1	2	3	. (4)
d)	I need to do well in biology to get the job I want	1	2	3	. (4)

#### 14 <sub>I</sub>

## How often do you do these things in your biology lessons?

	Every or almost every lesson	About half the lessons ↓	Some lessons	Never
We make observations and describe what we see	1	. 2	3	4
We watch the teacher demonstrate an experiment or investigation	. (1)	. 2	3	4
We design or plan an experiment or investigation	1	. 2	3	4
We conduct an experiment or investigation	1	. 2	3	4
We work in small groups on an experiment or investigation	. (1)	. 2	3	4
We read our biology textbooks and other resource materials	. (1)	. 2	3	4
We memorize science facts and principals	1	. 2	3	4
We use scientific formulas and laws to solve problems	. (1)	. 2	3	4
We give explanations about what we are studying	1	. 2	3	4
We relate what we are learning in biology to our daily lives	. (1)	. 2	3	4
We review our homework	1	. 2	3	4
We listen to the teacher give a lecture-style presentation	. (1)	. 2	3	4
We work problems on our own	1	. 2	3	4
We begin our homework in class	1	. 2	3	4
We have a quiz or test	1	. 2	3	4
We use computers	1	. 2	3	4
	We watch the teacher demonstrate an experiment or investigation	almost   every   lesson   We make observations and describe what we see   We watch the teacher demonstrate   an experiment or investigation   1   We design or plan an experiment or investigation   We conduct an experiment or investigation   We conduct an experiment or investigation   1   We work in small groups on an   experiment or investigation   1   We read our biology textbooks and other   resource materials   1   We memorize science facts and principals   1   We use scientific formulas and laws   to solve problems   1   We relate what we are learning in biology   to our daily lives   1   We listen to the teacher give a   lecture-style presentation   1   We work problems on our own   1   We begin our homework in class   1   We have a quiz or test	$ \begin{array}{c} \underset{\text{every}}{\text{almost}} & \underset{\text{half the}}{\text{helsson}} \\ \downarrow & \downarrow$	$\begin{array}{c} \text{almost}\\ \text{every}\\ \text{lesson}\\ \textbf{lesson}\\ les$

# **Earth Science in School**

15

## Are you studying earth science in school this year?



If **No**, please go to question **19** 

16 I

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

		Agree a lot ↓	Agree a little ↓	Disagree a little ↓	Disagree a lot ↓
a)	I usually do well in earth science	1	2	3	- (4)
b)	I would like to take more earth science in school	1	. @	3	- (4)
c)	Earth science is more difficult for me than for many of my classmates	1	. @	3	- (4)
d)	I enjoy learning earth science	1	2	3	4
e)	Earth science is not one of my strengths	1	. @	3	- (4)
f)	I learn things quickly in earth science	1	. @	3	_ (4)
g)	Earth science is boring	1	2	3	4
h)	I like earth science	1	2	3	- (4)

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

		Agree a lot ↓	Agree a little ↓	Disagree a little ↓	Disagree a lot ↓
a)	I think learning earth science will help me in my daily life	1	. 2	3	. (4)
b)	I need earth science to learn other school subjects	1	. 2	3	. (4)
c)	I need to do well in earth science to get into the <university> of my choice</university>	1	2	3	. (4)
d)	I need to do well in earth science to get the job I want	1	. 2	3	. (4)

## How often do you do these things in your earth science lessons?

		Every or almost every lesson	About half the lessons	Some lessons	Never
a)	We make observations and describe what we see	1	. 2	3	4
b)	We watch the teacher demonstrate an experiment or investigation	_ (1)	. 2	3	4
c)	We design or plan an experiment or investigation	1	2	3	4
d)	We conduct an experiment or investigation	1	2	3	4
e)	We work in small groups on an experiment or investigation	_ (1)	. 2	3	4
f)	We read our earth science textbooks and other resource materials	_ (1)	. 2	3	4
g)	We memorize science facts and principles	1	2	3	4
h)	We use scientific formulas and laws to solve problems	_ (1)	. 2	3	4
i)	We give explanations about what we are studying	1	2	3	4
j)	We relate what we are learning in earth science to our daily lives	_ (1)	. 2	3	4
k)	We review our homework	1	. 2	3	4
1)	We listen to the teacher give a lecture-style presentation	_ (1)	. 2	3	4
m)	We work problems on our own	1	. 2	3	4
n)	We begin our homework in class	1	2	3	4
o)	We have a quiz or test	1	. 2	3	4
p)	We use computers	1	2	3	4

# **Chemistry in School**

19

## Are you studying chemistry in school this year?



If **No**, please go to question **23** 

20

## 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 usually do well in chemistry	1		3	- (4)
b)	I would like to take more chemistry in school	1	_ ②	3	- 4
c)	Chemistry is more difficult for me than for many of my classmates	1	_ ②	3	- 4
d)	I enjoy learning chemistry	1		3	- (4)
e)	Chemistry is not one of my strengths	1		3	- ④
f)	I learn things quickly in chemistry	1		3	- (4)
g)	Chemistry is boring	1		3	- (4)
h)	I like chemistry	1		3	- (4)

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

		Agree a lot ↓	Agree a little ↓	Disagree a little ↓	Disagree a lot ↓
a)	I think learning chemistry will help me in my daily life	1	2	3	. (4)
b)	I need chemistry to learn other school subjects	1	2	3	. (4)
c)	I need to do well in chemistry to get into the <university> of my choice</university>	1	2	3	. (4)
d)	I need to do well in chemistry to get the job I want	1	2	3	. (4)

### 22 I

## How often do you do these things in your chemistry lessons?

Fill in <b>one</b> circle for each line
---

		Every or almost every lesson	About half the lessons	Some lessons	Never
a)	We make observations and describe what we see	1	. 2	3	4
b)	We watch the teacher demonstrate an experiment or investigation	_ (1)	. (2)	3	4
c)	We design or plan an experiment or investigation	1	. 2	3	4
d)	We conduct an experiment or investigation	1	. 2	3	4
e)	We work in small groups on an experiment or investigation	_ (1)	. 2	3	4
f)	We read our chemistry textbooks and other resource materials	_ (1)	. 2	3	4
g)	We memorize science facts and principles	1	. 2	3	4
h)	We use scientific formulas and laws to solve problems	1	. 2	3	4
i)	We give explanations about what we are studying	1	. 2	3	4
j)	We relate what we are learning in chemistry to our daily lives	_ (1)	. 2	3	4
k)	We review our homework	1	. 2	3	4
1)	We listen to the teacher give a lecture-style presentation	_ (1)	. (2)	3	4
m)	We work problems on our own	1	. 2	3	4
n)	We begin our homework in class	1	. 2	3	4
o)	We have a quiz or test	1	. 2	3	4
p)	We use computers	1	. 2	3	4

# **Physics in School**

23

### Are you studying physics in school this year?



If **No**, please go to question **27** 

24 I

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

		Agree a lot ↓	Agree a little ↓	Disagree a little ↓	Disagree a lot ↓
a)	I usually do well in physics	1	. (2)	3	4
b)	I would like to take more physics in school	1	. @	3	- (4)
c)	Physics is more difficult for me than for many of my classmates	1	. ②	3	- (4)
d)	I enjoy learning physics	1	. (2)	3	4
e)	Physics is not one of my strengths	1	. (2)	3	4
f)	I learn things quickly in physics	1	. @	3	- (4)
g)	Physics is boring	1	2	3	4
h)	I like physics	1	2	3	4

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

		Agree a lot ↓	Agree a little ↓	Disagree a little ↓	Disagree a lot ↓
a)	I think learning physics will help me in my daily life	1	. 2	3	- (4)
b)	I need physics to learn other school subjects	1	. 2	3	4
c)	I need to do well in physics to get into the <university> of my choice</university>	1	2	3	. (4)
d)	I need to do well in physics to get the job I want	1	. 2	3	. (4)

## How often do you do these things in your physics lessons?

Fill in <b>one</b> circle for each line
---

		Every or almost every lesson ↓	About half the lessons	Some lessons	Never ↓
a)	We make observations and describe what we see	1	. 2	3	4
b)	We watch the teacher demonstrate an experiment or investigation	_ (1)	. 2	3	4
c)	We design or plan an experiment or investigation	1	. 2	3	4
d)	We conduct an experiment or investigation	1	. 2	3	4
e)	We work in small groups on an experiment or investigation	_ (1)	. 2	3	4
f)	We read our physics textbooks and other resource materials	_ (1)	. 2	3	4
g)	We memorize science facts and principles	1	. 2	3	4
h)	We use scientific formulas and laws to solve problems	_ (1)	. 2	3	4
i)	We give explanations about what we are studying	1	. 2	3	4
j)	We relate what we are learning in physics to our daily lives	_ (1)	. 2	3	4
k)	We review our homework	1	. 2	3	4
1)	We listen to the teacher give a lecture-style presentation	_ (1)	. 2	3	4
m)	We work problems on our own	1	. 2	3	4
n)	We begin our homework in class	1	. 2	3	4
o)	We have a quiz or test	1	. 2	3	4
p)	We use computers	1	. 2	3	4

## **Computers**

#### 27 I

A. Do you ever use a computer? (Do not include PlayStation®, GameCube®, XBox®, or other TV/video game computers.)

Yes

↓

Yes

Fill in *one* circle only ----- ① ----- ②

If **No**, please go to question **28** 



#### B. Where do you use a computer?

Fill in <b>one</b> circle for each line
---

No

No

↓

- At home ----- ① ----- ② a) b) At school------ ① ----- ②
- Elsewhere (e.g., public library, c) friend's home, Internet café)----- 1 ---- 2

#### C. How often do you use a computer for your schoolwork (in and out of school)?

Fill in <b>one</b> circle for each	line
------------------------------------	------

		Every day ↓	At least once a week ↓	Once or twice a month	A few times a year ↓	Never ↓
a)	In mathematics	1		3	- (4)	5
b)	In biology	1		3	- (4)	5
c)	In earth science	1		3	- (4)	. (5)
d)	In chemistry	1		3	- (4)	5
e)	In physics	1		3	- (4)	5

# **Your School**

#### 28

## How much do you agree with these statements about your school?

		Agree a lot ↓	Agree a little ↓	Disagree a little	Disagree a lot ↓
a)	I like being in school	1	. 2	3	4
b)	I think that students in my school try to do their best	1	. (2)	3	. (4)
c)	I think that teachers in my school want students to do their best	1	. 2	3	4

#### 29

### In school, did any of these things happen during the last month?

Fill in **one** circle for each line

		Yes ↓	No ↓
a)	Something of mine was stolen	1	2
b)	I was hit or hurt by other student(s) (e.g., shoving, hitting, kicking)	1	2
c)	I was made to do things I didn't want to do by other students	1	2
d)	I was made fun of or called names	1	2
e)	I was left out of activities by other students	1	2

# **Things You Do Outside of School**

#### 30 I

On a normal school day, how much time do you spend before or after school doing each of these things?

		No time ↓	Less than 1 hour	1-2 hours ↓	More than 2 but less than 4 hours	4 or more hours
a)	I watch television and videos	1		3	- (4)	5
b)	I play computer games	1		3	- (4)	5
c)	I play or talk with friends	1	2	3	- (4)	5
d)	I do jobs at home	1	2	3	- (4)	5
e)	I work at a paid job	1	2	3	- (4)	5
f)	I play sports	1	2	3	- (4)	5
g)	I read a book for enjoyment	1	2	3	- (4)	5
h)	I use the Internet	1		3	- (4)	5
i)	I do homework	1		3	- (4)	5

## Homework

31

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

#### Less than 3 or 4 1 or 2 Every times times once day a week Never a week a week Mathematics ----- ① ----- ② ----- ③ ----- ⑤ a) Biology ------ ① ----- ② ----- ③ ----- ⑤ b) Earth science ------ ① ----- ② ----- ③ ----- ⑤ c) Chemistry------ ① ----- ② ----- ③ ----- ⑤ d) e)

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

#### Fill in **one** circle for each line

		Zero minutes ↓	1 - 15 minutes ↓	16–30 minutes ↓	31–60 minutes ↓	61–90 minutes ↓	More than 90 minutes ↓
a)	Mathematics	_ (1)	_ 2	_ (3)		5	- 6
b)	Biology	_ (1)	_ 2	_ (3)		5	- 6
c)	Earth science	_ (1)	2	- 3		5	- 6
d)	Chemistry	_ (1)	2	- 3		5	- 6
e)	Physics	_ (1)	2	_ (3)		5	- 6

## **More About You**

#### 32 💼

A. Was your mother (or stepmother or female guardian) born in <country>?

	Yes	No
	¥	¥
Fill in <b>one</b> circle only	1	- 2

B. Was your father (or stepfather or male guardian) born in <country>?

	Yes ↓	No ↓
Fill in <b>one</b> circle only	(1)	2

#### 33 I

A. Were you born in <country>?

Fill in *one* circle only ----- ① \_\_\_\_ ②

If **Yes**, you have completed the questionnaire

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

Yes

Ţ

No

Ļ

Fill in one circle only

Older than 10 years old15 to 10 years old2Younger than 5 years old3

# Thank You for completing this questionnaire



## **Student Questionnaire**

## SEPARATE SCIENCE SUBJECTS <Grade 8>