# Trends in International Mathematics and Science Study (TIMSS 2023) 

Field Test Data Collection and Main Study Sampling and Recruitment - FT International Questionnaire Update OMB \#1850-0695 v. 18

Appendix C
TIMSS 2023 Draft Field Test Questionnaires

Submitted by
National Center for Education Statistics
U.S. Department of Education

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This appendix provides the final international TIMSS 2023 field test questionnaires. Final U.S. field test questionnaires, adapted for use within the U.S. education context and approved by IEA, will be provided via change memo in January 2022.
Contents
Student Questionnaire - Grade 4 ..... 1
Student Questionnaire - Grade 8 ..... 26
Teacher Questionnaire Covers and Directions - Grade 4 ..... 60
Teacher Questionnaire Mathematics and Science - Grade 4 ..... 64
Teacher Questionnaire Mathematics Covers and Directions - Grade 8 ..... 87
Teacher Questionnaire Mathematics - Grade 8 ..... 91
Teacher Questionnaire Science Covers and Directions - Grade 8 ..... 105
Teacher Questionnaire Science - Grade 8 ..... 109
School Questionnaire Covers and Directions - Grade 4 ..... 127
School Questionnaire - Grade 4 ..... 131
School Questionnaire Covers and Directions - Grade 8 ..... 145
School Questionnaire - Grade 8 ..... 149
U.S. National Items ..... 168

## EIEA TIMSS

## 2023

## Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Student Questionnaire

## <Grade 4>

<TIMSS National Research Center Name> <Address>


## Field Test <br> Version

## Directions

In this booklet, you will find questions about you and what you think. For each question, you should choose the answer you think is best.

Let us take a few minutes to practice the kinds of questions you will answer in this booklet.

Example 1 is one kind of question you will find in this booklet.

## Example 1

## Do you go to school?

$$
\begin{aligned}
& \text { Fill one circle only. } \\
& \text { Yes -- A } \\
& \text { No -- A }
\end{aligned}
$$

Example 2 is another kind of question you will find in this booklet.

## Example 2

How often do you do these things?
Fill one circle for each line.

|  | Every day <br> or almost <br> every day |
| :--- | :--- |
| Once or <br> twice a <br> week | Once or <br> twice a <br> month | | Never or |
| :--- |
| almost |
| never |

Example 3 is another kind of question you will find in this booklet.

## Example 3

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

Fill one circle for each line.
a) Watching movies is fun $-\cdots-\cdots-\cdots----A=A=A$
b) Ice cream tastes good ----------------A A A A
c) Waking up early is difficult ---------- $A=A=A$
d) I enjoy doing chores $------\cdots--\cdots-----A=A=A$

- 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: 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

## G1

Which of these describes you?
Fill one circle only.

Girl -- A<br>Boy -- A<br><Other> -- A

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

| a) Month | b) Year |
| :---: | :---: |
| January -- A | 2010 -- A |
| February -- A | 2011 -- A |
| March -- A | 2012 -- A |
| April -- A | 2013 -- A |
| May -- A | 2014 -- A |
| June -- A | 2015 -- A |
| July -- A | 2016 -- A |
| August -- A | Other -- A |
| September -- A |  |
| October -- A |  |
| November -- A |  |
| December -- A |  |

## G3

How often do you speak <language of test> at home?
Fill one circle only.

> I always speak
> <language of test> at home -- A
> I almost always speak
> <language of test> at home -- A
> I sometimes speak <language of test> and sometimes speak another language at home -- A
> I never speak <language of test> at home -- A

## G4

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) -- A This shows 10 books

## H1.til.

Enough to fill one shelf (11-25 books) -- A
This shows 25 books
배․unthint
Enough to fill one bookcase
(26-100 books) -- A
This shows 100 books


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


Enough to fill three or more bookcases
(more than 200) -- A This shows more than 200 books


Do you have any of these things at your home?
Fill one circle for each line.
a) Your own computer or tablet

| Yes | No |
| :---: | :---: |
| A | A |

b) A shared computer or tablet you can use ----------------------------------------- A
c) Your own smartphone-------------------- A $A$
d) A shared smartphone you $\begin{aligned} & \text { can use --------------------------------- A }\end{aligned}$
e) Access to the internet ------------------- A A
f) Study desk/table for your use-------- A A
g) Your own room ------------------------------ A A
h) <country-specific indicator of wealth>

A
i) <country-specific indicator of wealth> A A
j) <country-specific indicator of wealth>

A
A
k) <country-specific indicator of wealth>

A
A

The following question is 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.>

## G6

Were your <parents/guardians> born in <country>?
A. <Parent/Guardian A>

$$
\begin{gathered}
\text { Fill one circle only. } \\
\text { Yes -- A } \\
\text { No -- A } \\
\text { I don't know -- A } \\
\text { Not applicable -- A }
\end{gathered}
$$

B. <Parent/Guardian B>

$$
\begin{gathered}
\text { Fill one circle only. } \\
\text { Yes -- A } \\
\text { No -- A } \\
\text { I don't know -- A } \\
\text { Not applicable -- A }
\end{gathered}
$$

G7
Were you born in <country>?
Fill one circle only.
Yes -- A
No -- A

## G8

## About how often are you absent from school?

Fill one circle only.<br>Once a week -- A<br>Once every two weeks -- A<br>Once a month -- A<br>Once every two months -- A<br>Never or almost never -- A

## G9

How often do you feel this way when you arrive at school?
Fill one circle for each line.


## G10

How much do you agree with these statements?
Fill one circle for each line.
a) I can write and edit text on a computer, tablet, or smartphone --- A
Agree

a lot $\quad$\begin{tabular}{l}
Agree <br>
a little

$\quad$

Disagree <br>
a little

$\quad$

Disagree <br>
a lot
\end{tabular}

b) I can create school presentations using a computer, tablet, or smartphone $A=A=A$
c) I can create tables, charts, and graphs using a computer, tablet, or smartphone $A=A=A$
d) I can find information that

I need online

$$
A=A=A
$$

e) I can tell if a website is trustworthy $A=A=A$
f) I can easily do new things on computers, laptops, or smartphones---------------------------- A A A
g) I can help my friends or family members with using their computers, laptops, or smartphones $------------\cdots----\cdots-----A=A=A$

## Your School

## G11

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

Fill one circle for each line.

|  | $\begin{aligned} & \text { Agre } \\ & \text { a lot } \end{aligned}$ | Agree a little | Disagree <br> a little | Disagree a lot |
| :---: | :---: | :---: | :---: | :---: |
| a) | I like being in school ----------.-------- A | $A=$ | A | A |
| b) | I feel safe when I am at school ------ A | A | A |  |
| c) | I feel like I belong at this school ---- A | A | A |  |
| d) | Teachers at this school care about me $\qquad$ A |  | $A$ |  |
| e) | I am proud to go to this school ------ A | - | A |  |
| f) | I have friends at this school ---------- A | A | A |  |
| g) | Students in this school respect me $\qquad$ A |  | A |  |
| h) | Students at this school like me the way I am ---------------------------------- A |  |  |  |

## G12

During this school year, how often have other students from your school done any of the following things to you in person, through messaging, or through social media?

Fill one circle for each line.
a) Made fun of me or called me names $\qquad$

| At least <br> once a <br> week | Once or <br> twice <br> a month | A few <br> times <br> a year |
| :--- | :--- | :--- |
| A |  | Never |

b) Left me out of their games or activities $\qquad$ $A=A=A$
c) Spread lies about me $\qquad$ $A=A$ $A=A$
d) Stole something from me $\qquad$ $A=A$ $A=A$
e) Damaged something of mine on purpose $---\cdots---\cdots-\cdots-\cdots-\cdots----A=A=A$
f) Hit or hurt me (e.g., shoving, hitting, kicking) $A=A=A$
g) Made me do things I didn't want to do $A=A=A$
h) Sent me nasty or hurtful messages online $\qquad$ $A=A$ $A=A$
i) Shared nasty or hurtful things about me online --------------- A A A
j) Shared embarrassing photos of me online $A=A=A$
k) Threatened me $A=A$ $A=A$

## Mathematics in School

## MS1

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

Fill one circle only.
Every or almost every lesson -- A

About half the lessons -- A<br>Some lessons -- A<br>Never -- A

## MS2

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

Fill one circle for each line.

| Agree <br> a lot | Agree <br> a little | Disagree <br> a little | Disagree <br> a lot |
| :--- | :--- | :--- | :--- |
| A | A | A | A |

b) I do not like doing mathematics --- $A=A=A$
c) Mathematics is boring $-\cdots-\cdots-\cdots-\cdots---A=A=A$
d) I learn many interesting things in mathematics $--\cdots-\cdots-\cdots-\cdots---A=A=A$
e) I like mathematics $---------\cdots------A=A=A$
f) I like any schoolwork that involves numbers --------------------- A A A
g) I like to solve mathematics problems ------------------------------- A A
h) I look forward to mathematics lessons ----------------A A A A
i) Mathematics is one of my favorite subjects ---------------------- A A A

## MS3

How much do you agree with these statements about your mathematics lessons?

Fill one circle for each line.

Agree

a lot $\quad$\begin{tabular}{l}
Agree <br>
a little

$\quad$

Disagree <br>
a little

$\quad$

D <br>
a
\end{tabular}

a) My teacher makes it clear what we should learn in each lesson $\qquad$
b) My teacher is easy to understand -- $A=A=A$
c) My teacher has clear answers to my questions
$A=A=A$
d) My teacher is good at explaining mathematics $-----------------------A=A=A=A$
e) My teacher does a variety of things to help us learn --------------- A A A
f) My teacher explains a topic again when we don't understand $--\mathrm{A}=\mathrm{A}=\mathrm{A}=\mathrm{A}$
g) My teacher gives me helpful feedback on my work $--------------A=A=A$
h) My teacher asks me to show what I have learned $A=A=A$ $A=A$
i) My teacher asks me to explain my answers $-------------\cdots---\cdots-----A=A=A$

## MS4

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

a) Students don't listen to what the teacher says $\qquad$ $A=A=A$
b) There is too much noise for students to work well ----------------- A $A=A=A$
c) My teacher has to wait a long time for students to be quiet $-\cdots-\cdots---A=A=A$
d) Students interrupt the teacher ----- A A A
e) Students do not follow the classroom rules ------------------------- A $A=A=A$

[^0]
## MS5

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

Fill one circle for each line.


## Science in School

## MS6

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

Fill one circle only.
At least once a week -- A
Once or twice a month -- A

A few times a year -- A

> Never -- A

## MS7

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

Fill one circle for each line.

| Agree | Agree <br> a lot | Disagree <br> a little | Disagree <br> a little |
| :--- | :--- | :--- | :--- |
| a lot |  |  |  |

b) I do not like doing science ----------- A $\quad \mathrm{A}=\mathrm{A}=\mathrm{A}$
c) Science is boring ---------------------- A $A=A$
d) I learn many interesting things in science ---------------------A $A=A$
e) I like science -------------------------- A $\quad A=A$
f) I look forward to learning science in school ------------------------------ A $A=A$
g) Science teaches me how things in the world work ---------------------- A $A=A=A$
h) I like to do science experiments --- $\mathrm{A}=\mathrm{A}=\mathrm{A}=\mathrm{A}$
i) Science is one of my favorite subjects --------------------- A $A=A=A$

## MS8

How much do you agree with these statements about your science lessons?

Fill one circle for each line.
a) My teacher makes it clear what we should learn in each lesson-

b) My teacher is easy to understand--- $A=A=A$
c) My teacher has clear answers to my questions $A=A=A$ $A=A$
d) My teacher is good at explaining science --------------------- A $\quad A=A=A$
e) My teacher does a variety of things to help us learn
$A=A$ $A=A=A$
f) My teacher explains a topic again when we don't understand $--\mathrm{A}=\mathrm{A}=\mathrm{A}=\mathrm{A}$
g) My teacher gives me helpful feedback on my work $\qquad$ $A=A$ $A=A$ $A=A$
h) My teacher asks me to show what I have learned ------------------ A $\quad A=A=A$
i) My teacher asks me to explain my answers ------------------------- A $\quad A=A$

## MS9

## How often do these things happen in your science lessons?

Fill one circle for each line.
a) Students don't listen to what the teacher says $\qquad$

| Every or <br> almost <br> every <br> lesson | About <br> half <br> the <br> lessons | Some <br> lessons | Never |
| :--- | :--- | :--- | :--- |

b) There is too much noise for students to work well $\qquad$ $A=A$ $A$ $A=A$
c) My teacher has to wait a long time for students to be quiet
$A=A$ $A$ $A=A$
d) Students interrupt the teacher ----- $A=A=A$
e) Students do not follow the classroom rules ------------------------ A A $A$
f) Other students' behavior makes it hard for me to concentrate $\qquad$ A A A A

## MS10

How much do you agree with these statements about science?

Fill one circle for each line.

|  | $\begin{aligned} & \text { Agree } \\ & \text { a lot } \end{aligned}$ | Agree a little | Disagree <br> a little | Disagree $a \operatorname{lot}$ |
| :---: | :---: | :---: | :---: | :---: |
| a) | I usually do well in science | A | A | A |
| b) | Science is harder for me than for many of my classmates ---- A |  | A |  |
| c) | I am just not good at science --------- A | A | A |  |
| d) | Science is easy for me----------------- A | A | A |  |
| e) | I am good at explaining science to others $\qquad$ A | $A=$ | $A=$ |  |
| f) | Science is harder for me than any other subject | $\mathrm{A}=$ | $A=$ |  |
|  | Science makes me confused ---------- A | A | A |  |



# BOSTON <br> COLLEGE 

timss.bc.edu

## <Grade 4>

## IEA

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International Association
for the Evaluation of Educational Achievement

## YIEA TIMSS

## 2023

## Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Student Questionnaire

<Grade 8>
<TIMSS National Research Center Name> <Address>


## Field Test Version

## 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 --A
> No --A

## Example 2

How often do you do these things?
Fill one circle for each line.


## Example 3

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

Fill one circle for each line.


- 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: . 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

Which of these describes you?
Fill one circle only.
Girl -- A
Boy -- A
<Other> -- A

## 2

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

| a) Month | b) Year |
| ---: | ---: |
| January -- A | $2005--\mathrm{A}$ |
| February -- A | $2006-\mathrm{A}$ |
| March -- A | $2007-\mathrm{A}$ |
| April -- A | $2008-\mathrm{A}$ |
| May -- A | 2009 -- A |
| June -- A | $2010-\mathrm{A}$ |
| July -- A | $2011-\mathrm{A}$ |
| August -- A | 2012 -- A |
| September -- A | $2013-\mathrm{A}$ |
| October -- A | Other -- A |
| November -- A |  |
| December -- A |  |

## 3

How often do you speak <language of test> at home?
Fill one circle only.
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.)

Fill one circle only.
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) -- A

Do you have any of these things at your home?
Fill one circle for each line.

A
A
a) Your own computer or tablet $\qquad$
b) A shared computer or tablet you can use ------------------------------------------ A
c) Your own smartphone-------------------- A
d) A shared smartphone you can use -----------------------------------------A
e) Access to the internet ------------------ A
f) Study desk/table for your use--------- A A
g) Your own room ------------------------------ A
h) <country-specific indicator of wealth> ----------------------------------------A
i) <country-specific indicator of wealth> AA
j) <country-specific indicator of wealth $>$ AA
k) <country-specific indicator of wealth> ..... A ..... A

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 <parents/guardians>?

Check one circle in each column.

| <Parent / Guardian A> | $<$ Parent / <br> Guardian B> |
| :---: | :---: |
| Some <Primary education- ISCED Level 1 or Lower secondary education-ISCED Level $2>$ or did not go to school ------ A |  |
|  | A |
| <Lower secondary education-ISCED Level 2> ------ A | A |
| <Upper secondary education-ISCED Level 3> ------ A | A |
| <Post-secondary, non-tertiary education-ISCED Level 4>----- A | A |
| <Short-cycle tertiary education-ISCED Level 5> ------ A | A |
| <Bachelor's or equivalent level—ISCED Level 6> ------ A | A |
| $<$ Postgraduate degree: Master's- |  |
| ISCED Level 7 or Doctor-ISCED Level 8> ----- A | A |
| I don't know ------ A | A |
| Not applicable ------ A | A |

How far in your education do you expect to go?

Fill one circle only.
Finish <Lower secondary education------------------------------
Finish <Upper secondary education-
ISCED Level 3> -----------------------------------------
Finish <Post-secondary, non-tertiary education-
ISCED Level 4> ----------------------------------------- A
Finish <Short-cycle tertiary education-
ISCED Level 5> -----------------------------------------
Finish <Bachelor's or equivalent
level-ISCED Level 6>
A
Finish < Postgraduate degree:
Master's—ISCED Level 7 or
Doctor-ISCED Level 8>--------------------- A

8
Were your <parents/guardians> born in <country>?
A. <Parent/Guardian A>

> Fill one circle only.
> Yes -- A
> No-- A
> I don't know -- A
> Not applicable -- A

## B. <Parent/Guardian B>

Fill one circle only.
Yes -- A
No -- A

I don't know -- A
Not applicable -- A
A. Were you born in <country>?

> Fill one circle only.
> 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>?

Fill one circle only.
Older than 10 years old -- A
5 to 10 years old -- A Younger
than 5 years old -- A

10
About how often are you absent from school?
Fill one circle only.
Once a week -- A
Once every two weeks -- A
Once a month -- A
Once every two months -- A

Never or almost never -- A

How often do you feel this way when you arrive at school?
Fill one circle for each line.


12
How often do you use the internet to do the following tasks for mathematics or science schoolwork (including classroom tasks, homework, and studying outside of class)?

Fill one circle for each line.

| At least <br> once a <br> week | Once or <br> twice <br> a month | Never <br> or almost <br> never |
| :--- | :--- | :--- |
| A | A | A |

a) Access the textbook or other course materials $A=A$
b) Access assignments posted online by my teacher ----------------- A $A$
c) Collaborate with classmates on assignments or projects $--------A=A$
d) Ask my teacher questions ----------- $A=A$
e) Find information, articles, or
tutorials about mathematics
or science -------------------------------- A A
f) Access learning games or activities related to mathematics or science --------------- A A

How much do you agree with these statements?
Fill one circle for each line.
a) I can write and edit text on a computer, tablet, or


| Agree <br> a lot | Agree <br> a little | Disagree <br> a little |
| :--- | :--- | :--- | | Disagree |
| :--- |
| a lot |

b) I can create school presentations using a computer, tablet, or smartphone ------------------------- A A A
c) I can create tables, charts, and graphs using a computer, tablet, or smartphone ------------------------ A $A=A$
d) I can find information that I need online $------------------------A=A=A$
e) I can tell if a website is trustworthy $-------------------------A=A=A$
f) I can easily do new things on computers, laptops, or smartphones --------------------------- A $A=A$
g) I can help my friends or family members with using their computers, laptops, or smartphones---------------------------- A A A

## Your School

## 14

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

Fill one circle for each line.
Agree

a lot $\quad$\begin{tabular}{l}
Agree <br>
a little

$\quad$

Disagree <br>
a little

$\quad$

Disagree <br>
a lot
\end{tabular}

a) I like being in school $\qquad$

A
A
b) I feel safe when I am at school ----- A A A A
c) I feel like I belong at this school --- A A A A
d) Teachers at this school care about me $\qquad$ $A=A=A$
e) I am proud to go to this school ----- A A A
f) I have friends at this school $-\cdots-\cdots---A=A=A$
g) Students in this school respect me ------------------------------ A $A=A=A$
h) Students at this school like me the way I am -----------------------------A A A A

During this school year, how often have other students from your school done any of the following things to you in person, through messaging, or through social media?

Fill one circle for each line.

| At least <br> once a <br> week | Once or <br> twice <br> a month | A few <br> times <br> a year |
| :--- | :--- | :--- |
| A |  | Never |

b) Spread lies about me ---------------- A A A
c) Shared my secrets with others ----- $A=A=A$
d) Refused to talk to me ---------------- A $A=A=A$
e) Said hurtful things to or about me because of my cultural background (e.g., <race, ethnicity, religion>)---- A $=A=A$
f) Stole something from me $-\cdots-\cdots-\cdots---A=A=A$
g) Made me do things I didn't want to do ----------------------- A $A=A$
h) Sent me nasty or hurtful messages online ----------------------- A A A
i) Shared nasty or hurtful things about me online $--\cdots--\cdots-\cdots----A=A=A$
j) Shared embarrassing photos of me online $--\cdots--\cdots-\cdots-\cdots-\cdots-----A=A \quad A \quad A$
k) Threatened me -------------------------- A A A
l) Physically hurt me ------------------ A A $\quad A \quad A$
m) Excluded me from their group (e.g., parties, messaging) ---- A A A $\quad A$
n) Damaged something of mine on purpose ---------------------A A A A

## Mathematics in School

## 16

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

Fill one circle only.<br>Every or almost every lesson -- A<br>About half the lessons -- A<br>Some lessons -- A<br>Never -- A

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

Fill one circle for each line.
a) I enjoy learning mathematics

| Agree <br> a lot | Agree <br> a little | Disagree <br> a little |
| :--- | :--- | :--- | | Disagree |
| :--- |
| a lot |

b) I do not like doing mathematics --- $A=A=A$
c) Mathematics is boring ---------------- A A A
d) I learn many interesting things in mathematics --------------- A $A=A$
e) I like mathematics $--\cdots-\cdots-\cdots-\cdots-\cdots----A \quad A \quad A \quad A$
f) I like any schoolwork that involves numbers $--\cdots---\cdots-\cdots-\cdots-\cdots-----A=A=A$
g) I like to solve mathematics problems $----\cdots------A=A=A$
h) I look forward to mathematics class $-----------------A=A=A$
i) Mathematics is one of my favorite subjects $-----\cdots--------A=A=A$

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

Fill one circle for each line.
Agree a lot

b) My teacher is easy to understand -- $\mathrm{A}=\mathrm{A}=\mathrm{A}=\mathrm{A}$
c) My teacher has clear answers to my questions $\qquad$ $A=A$ $A=A$
d) My teacher is good at explaining mathematics -------------------------- A $A=A$
e) My teacher does a variety of things to help us learn $\qquad$ $A=A$ $A=A$
f) My teacher explains a topic again when we don't understand -- $A=A=A$
g) My teacher gives me helpful feedback on my work $\qquad$ $A=A$ $A=A$
h) My teacher asks me to show what I have learned $\qquad$ $A=A$ $A=A$
i) My teacher asks me to explain my answers $-----------------------A=A=A$
j) My teacher asks us to apply what we have learned in new situations ------------------------- A A A

How often do these things happen in your mathematics lessons?

Fill one circle for each line.
a) Students don't listen to what the teacher says

b) There is too much noise for students to work well ------------------ A A $A$
c) My teacher has to wait a long time for students to be quiet $-------A=A=A$
d) Students interrupt the teacher ----- $A=A=A$
e) Students do not follow the classroom rules ----------------------- A A
f) Other students' behavior makes it hard for me to concentrate -------- A A A A

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

Fill one circle for
Agree a lot each line.

Agree a little

Disagree Disagree a little a lot
a) I usually do well in mathematics --- A

A
$A=A$
b) Mathematics is harder for me than for many of my classmates --- $A=A=A$
c) Mathematics is not one of my strengths ---------------------------- A A A
d) Mathematics is easy for me--------A A A A
e) I am good at working out difficult mathematics problems ------------- A A A $A$
f) I am good at explaining mathematics to others $--\cdots-\cdots-\cdots-\cdots---A=A=A$
g) Mathematics is harder for me than any other subject -------------- A A A
h) Mathematics makes me confused--- $A=A=A$

How much do you agree with these statements about mathematics?

Fill one circle for each line.
a) I think learning mathematics will help me in my daily life $\qquad$
Agree

a lot $\quad$\begin{tabular}{l}
Agree <br>
a little

$\quad$

Disagree <br>
a little

$\quad$

Disagree <br>
a lot
\end{tabular}

b) I need mathematics to learn other school subjects
$A=A=A$
c) 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 $-------\cdots------A=A=A$
e) I would like a job that involves
using mathematics ------------------ A $A=A$
f) It is important to learn about mathematics to get ahead in the world ----------------------------- A A A
g) Learning mathematics will give me more job opportunities when $I$ am an adult $-------\cdots--\cdots----A=A=A$
h) My parents think that it is important that I do well in mathematics --------------------------- A $A=A$
i) It is important to do well in mathematics $------------------------A=A=A$

## Science in School

22
In science lessons, how often does your teacher ask you to conduct science experiments?

Fill one circle only.
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 science?


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

Fill one circle for each line.


How often do these things happen in your science lessons?
a) Students don't listen to what
the teacher says
Fill one circle for each line.

b) There is too much noise for students to work well $---\cdots-\cdots-\cdots-----A=A \quad A$
c) My teacher has to wait a long time for students to be quiet $-\cdots-\cdots--A=A=A$
d) Students interrupt the teacher ----- $A=A=A$
e) Students do not follow the classroom rules ------------------------- A $A=A$
f) Other students' behavior makes it hard for me to concentrate $------A=A=A$

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

Fill one circle for each line.
a) I usually do well in science $\qquad$
Agree

a lot $\quad$\begin{tabular}{l}
Agree <br>
a little

$\quad$

Disagree <br>
a little

$\quad$

Disagree <br>
a lot
\end{tabular}

b) Science is more difficult for me
than for many of my classmates --- $A=A=A$
c) Science is not one of my strengths --------------------------- A $A=A=A$
d) Science is easy for me--------------A A A A
e) I am good at working out difficult science problems ----------- A A A
f) I am good at explaining science to others $---------------------------A=A=A$
g) Science is harder for me than any other subject $---------------------A=A=A=A$
h) Science makes me confused $-\cdots-\cdots---A=A=A$

How much do you agree with these statements about science?

Fill one circle for each line.
a) I think learning science will help me in my daily life
Agree

a lot \begin{tabular}{l}
Agree <br>
a little

$\quad$

Disagree <br>
a little

 

Disagree <br>
a lot
\end{tabular}

b) I need science to learn other
school subjects $A=A=A$
c) I need to do well in science to get into the <university> of my choice $\mathrm{A}=\mathrm{A}=\mathrm{A}=\mathrm{A}$
d) I need to do well in science to get the job I want -------------------------- A A A
e) I would like a job that involves using science --------------------------- A $A=A$
f) It is important to learn about science to get ahead in the world $\qquad$ $A \longrightarrow A=A$
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 $A=A=A$
i) It is important to do well in science -------------------------------A A A A

## Homework

28
How often does your teacher give you homework in the following subjects?

Fill one circle for each line.

|  |  | Every day | 3 or 4 times a week | 1 or 2 times a week | Less than once a week | Never |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) | Mathematics | A | A | $\mathrm{A}$ | $\mathrm{A}$ | A |
| b) | Science | A | A | A | A | A |


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## <Grade 8>

## IEA

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International Association
for the Evaluation of
Educational Achievement

## YIEA TIMSS

## 2023

Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Teacher Questionnaire

<Grade 4>
<TIMSS National Research Center Name> <Address>

## Field Test Version

## Teacher Questionnaire

Your school has agreed to participate in TIMSS 2023 (Trends in International Mathematics and Science Study), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS measures trends in student achievement in mathematics and science and studies differences in national education systems in almost 60 countries in order to help improve teaching and learning worldwide.

This questionnaire is addressed to teachers of <fourth grade> students, and seeks information about teachers' academic and professional backgrounds, classroom resources, instructional practices, and attitudes toward teaching. Since your class has been selected as part of a nationwide sample, your responses are very important in helping to describe primary/elementary education in <country>.

Some of the questions in the questionnaire refer to the "TIMSS class" or "this class". This is the class that is identified on the front of this booklet, and which will be tested as part of TIMSS in your school. If you teach some but not all of the students in the TIMSS class, please think only of the students that you teach when answering these classspecific questions. It is important that you answer each question carefully so that the information that you provide reflects your situation as accurately as possible.

Since TIMSS is an international study and all countries are using the same questionnaire, you may find that some of the questions seem unusual or are not entirely relevant to you or schools in <country>. Nevertheless, it is important that you do your best to answer all of the questions so comparisons can be made across countries in the studies.

It is estimated that you will need approximately 35 minutes to complete this questionnaire. We appreciate the time and effort that this takes and thank you for your cooperation and contribution.

To access this questionnaire online, please copy the following link into the address bar of your Web browser:
<Insert LINK>
All necessary teacher login information (Subject Code, ID, and Password) is provided on the identification label located on the cover. "Teacher ID" is your ID and "Checksum" is your password.

You may exit the questionnaire at any time and log in again later-all of your responses will be saved automatically.

If you have problems accessing this online questionnaire or are in need of assistance (e.g., you would prefer to complete a paper copy of the questionnaire, questions related to a subject that you do not teach to the <TIMSS> class are displayed), please contact:
<Insert country-specific information here>.

## Thank You

Thank you for the thought, time, and effort you have put into completing this questionnaire.

$$
\begin{gathered}
\text { BOSTON } \\
\text { COLLEGE } \\
\text { timss.bc.edu }
\end{gathered}
$$

## <Grade 4>



## IEA

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for the Evaluation of Educational Achievement

## §IEA TIMSS

## 2023

## Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Teacher Questionnaire

<Grade 4>
<TIMSS National Research Center Name> <Address>


## Field Test Version

## Teacher Questionnaire

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Some of the questions in the questionnaire refer to the "TIMSS class" or "this class." This is the class that is identified on the front of this booklet, and which will be tested as part of TIMSS in your school. If you teach some but not all of the students in the TIMSS class, please think only of the students that you teach when answering these class-specific questions. It is important that you answer each question carefully so that the information that you provide reflects your situation as accurately as possible.

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It is estimated that you will need approximately 35 minutes to complete this questionnaire. We appreciate the time and effort that this takes and thank you for your cooperation and contribution.

When you have completed the questionnaire, please place it in the accompanying envelope and return it to:
<Insert country-specific information here>. Thank you.

## G1

By the end of this school year, how many years will you have been teaching altogether?

## years

Please round to the nearest whole number.

## G2

Which of these describes you?

> Check one circle only.
> Female -- A
> Male $\cdots$ A
> <Other > -- - A

G3
How old are you?
Check one circle only.
Under 25-....-A
25-29 -- A
30-39 -- A
40-49 -- A
50-59 -- A
60 or more ….-A
G4
What is the highest level of formal education you have completed?

## Check one circle only.

Did not complete <Upper secondary education-

$$
\text { ISCED Level } 3>\cdots \text { A }
$$

<Upper secondary educationISCED Level $3>$... A
(If you have not completed <post-secondary or tertiary education>, go to \#G6)
<Post-secondary, non-tertiary educationISCED Level $4>$ … A
<Short-cycle tertiary educationISCED Level $5>\cdots$ A <Bachelor's or equivalent levelISCED Level $6>$ … A <Master's or equivalent levelISCED Level 7> ... A <Doctor or equivalent levelISCED Level $8>\cdots$ A
A. During your <post-secondary> education, what was your major or main area(s) of study?

Check one circle for each line.


No
a) Education-Primary/Elementary

A
b) Education-Secondary
$A-A$
c) Mathematics

A A
d) Science

A A
e) <language of test>
$A-A$
B. If your major or main area of study was education, did you have a <specialization> in any of the following?

Check one circle for each line.

$$
\begin{array}{ll}
\text { Yes } \\
& \\
& \text { No }
\end{array}
$$

a) Mathematics
A A
b) Science A-A
c) Language/reading

A A
d) Other subject A A

How would you characterize each of the following within your school?
a) Teachers' understanding of the school's curricular goals $\cdots A-A-A A-A-$
b) Teachers' degree of success in implementing the school's curriculum …....A-A A A A -
c) Teachers' expectations for student achievement $\cdots \cdots A-A \quad A \quad A-A-$
d) Teachers' ability to inspire students $A-A-A-$
e) Parental involvement
in school activities --.--......-A A A A-A -
f) Parental commitment to
ensure that students are
ready to learn $\qquad$ $A-A-A-$
g) Parental expectations for student achievement $\qquad$ $A A-A-A-$
h) Parental support for student achievement $\qquad$ $A A-A-A-$
i) Students' desire to do well in school $\qquad$ $A-A-A-$
j) Students' ability to reach school's academic goals …... A-A A A A -
k) Students' respect for classmates who excel academically $\qquad$ $A-A-A-$

How much do you agree or disagree with the following statements about your current school?

Check one circle for each line.
Agree a lot

b) This school's security policies and practices are sufficient …A A A A
c) The students behave in an orderly manner A A A A
d) The students are respectful of the teachers -…...........A A A A
e) The students respect school property -..............-A A A A
f) This school has clear rules about student conduct …… A A A A
g) This school's rules are enforced in a fair and consistent manner -...........-A A-A A

## G8

How often do you have these feelings about being a teacher?

Check one circle for each line.


How much do you agree or disagree with the statements below?
A. How many students are in this class?
students
Write in the number.
B. How many of the students in \#G10A are in <fourth grade>?
$\qquad$ <fourth grade> students
Write in the number.

G11
How many <fourth grade> students experience difficulties understanding spoken <language of test>?
$\overline{\text { Write in the number. }}$

How often do you do the following in teaching this class?
a) Relate the lesson to students' daily lives $\qquad$

$$
A-A \quad A \quad A-
$$

b) Ask students to explain their answers $A-A$ A-
c) Communicate goals or objectives for the lesson to
the students------->-....... A-A A A-
d) Ask students to complete challenging exercises that require them to go beyond the instruction $\cdots-\cdots$ A A A-
e) Encourage classroom discussions among

f) Link new content to students' prior knowledge $\cdots$ - A A A A-
g) Ask students to decide their own problem solving procedures $A-A \quad A-$
h) Encourage students to express their ideas in class $\cdots-A-A \quad A-$

## G13

In your view, to what extent do the following limit how you teach this class?

Check one circle for each line.
Not at all

## Some

A lot
a) Students lacking prerequisite
knowledge or skills …........A A A
b) Students suffering from
lack of basic nutrition $\cdots-\ldots . .-\mathrm{A} \quad \mathrm{A}$
c) Students suffering from
not enough sleep $\cdots-\ldots . . . . . .-\quad$ A A
d) $\quad$ Students absent from class - $-\mathrm{A} \quad \mathrm{A} A$
e) Disruptive students $\cdots-\cdots \cdots \cdots A$ A
f) Uninterested students $\cdots-\cdots \cdots A$ A
g) Distracted students $\cdots-\cdots \cdots \cdots \quad A \quad A$
h) Students with mental, emotional, or psychological impairment -------........--AAA A
i) Students with difficulties understanding the language of instruction $\cdots-\cdots-A_{A}$

In a typical week, how much time do you spend teaching mathematics to the students in this class?

## _minutes per week

Write in the number of minutes per week.
Please convert the number of hours into minutes.
g)
h)

In teaching mathematics to this class, how often do you ask students to do the following?

Check one circle for each line.
Every or almost every lesson
About half the lessons
Some lessons
Never
a) Listen to me explain new mathematics content $\cdots \cdots-\cdots-A A A$
b) Listen to me explain how to solve problems -.-............A-A A A
c) Memorize rules, procedures,
and facts $\cdots \cdots \cdots \cdots \cdots-\cdots-\cdots-\cdots A$
d) Practice procedures
on their own $-\cdots-\cdots-\cdots-\cdots-\cdots-A$ - $A$
e) Apply what they have learned to new problem
situations on their own $\cdots \cdots-A-A A A$
f) Work problems together in the whole class with direct
guidance from me $\cdots \cdots-\cdots \cdots-A-A$ A $A$
Work in mixed ability groups $-A-A$ A
Work in same ability groups - A A A A

Are students in this class permitted to use calculators during mathematics lessons?

Check one circle only.
Yes, with unrestricted use $\cdots \mathrm{A}$
Yes, with restricted use $\cdots \mathrm{A}$
No -.. A

## M4

A. Do the students in this class have digital devices (including computers, tablets, or smartphones) available to use during mathematics lessons?

Check one circle only.

$$
\begin{aligned}
& \text { Yes -- A } \\
& \text { No -.. A }
\end{aligned}
$$

(If No, go to \#M5)

## If Yes,

B. What access do the students have to digital devices?

Check one circle for each line.
a) The class has digital devices for each student to use A A
b) The class has digital devices that students can share A A
c) The school has digital devices that the class can use sometimes A A
d) Students bring their own digital devices $\qquad$ A A
C. How often do you have students use digital devices during mathematics instruction?

Check one circle only.
At least once a week ... A
Once or twice a month ... A
A few times a year … A
Never or almost never $\cdots \Delta$
D. How often do you ask the students in your class to use digital devices to do these mathematics activities?

Check one circle for each line.
At least once a week
a) Practice problems and procedures $A-A-A \quad A$
b) Solve extended or contextualized problems $\cdots \cdots \cdots \cdots-A-A$
c) Create graphs, tables, or other data displays
$A-A-A$
d) Play games involving mathematics calculations or concepts $-\ldots . . . . . . . . . . . . . . . . . . . . . .-A-A ~ A ~ A ~$
e) Read the textbook or watch instructional videos $\cdots \cdots \cdots \cdots \cdots \cdots \cdots-A-A$

M5
How much do each of these keep you from incorporating digital devices into mathematics instruction?

Check one circle for each line.
Not at all
Somewhat
A lot
a) Not knowing how to
use digital devices to improve
student learning
$A-A$
b) Not enough access to
digital devices $A-A \quad A$
c) Keeping students on task
when the class is using digital devices A - A A
d) Lack of technical support
from the school $\qquad$ $A$ A A

## Mathematics Topics Taught to the TIMSS Class

## The following list includes topics addressed by the TIMSS mathematics test. Choose the response that best describes when each topic is taught for students in this class. <br> If a topic was in the curriculum before <fourth grade>, choose "Mostly taught before this year". If you have taught a topic this year, choose "Mostly taught this year". If a topic is not in the <fourth grade> curriculum for this year or you have not yet taught a topic, choose"Not yet taught".

Check one circle for each line. Mostly taught before this year
Mostly taught this year
Not yet taught

## A. Number

a) Recognize place value and order whole numbers A-A A
b) Add and subtract up to 4 -digit numbers ..... A A A
c) Multiply up to 3 -digit by 1 -digit and 2 -digit by 2 -digit numbers ..... A-A A
d) Divide up to 3 -digit by 1 -digit numbers ..... A A A
e) Solve problems with odd/even numbers, multiples, or factors- ..... A A A-
f) Round or make estimations with whole numbers ..... A-A A
g) Find the missing number or operation in a number sentence ..... A A A-
h) Extend a number pattern or find the missing number in a pattern ..... $A$ A A
i) Represent, compare, and order fractions ..... A A A
j) Add and subtract simple fractions ..... A A A
k) Represent, compare, and order decimals up to two decimal places ..... $A-A$
I) Add and subtract with decimals up to two decimal places ..... A A A-
B. Measurement and Geometry
a) Measure, estimate, add, and subtract lengths ..... A A A
b) Add and subtract mass, volume, or time in appropriate units ..... A A A
c) Find perimeters of polygons ..... A A A
d) Find areas of shapes covered with squares or volumes of shapes filled with cubes ..... A A A
e) Recognize and draw parallel and perpendicular lines ..... A A A-
f) Compare and draw angles ..... A A A
g) Describe and draw common two-dimensional shapes (e.g., circles, triangles, quadrilaterals) ..... $A-A$
h) Describe and draw common three-dimensional shapes (e.g., cubes, rectangular solids, cones, cylinders, spheres) ..... A-A A
C. Data
a) Read and interpret data displays ..... A A A
b) Create or complete data displays ..... A A A
c) Draw conclusions from two or more data sources-.........................................................................-A-A A

Mathematics Homework for the TIMSS Class

Mathematics Assessment of the TIMSS Class

M8
How much importance do you place on these strategies to assess students' learning in mathematics?
a) Observing students as they work …...............-A A A
b) Asking students to answer questions during class $\cdots \cdots-\cdots A A$
c) Short, regular written

d) Longer tests (e.g., unit
tests or exams) $\cdots \cdots \cdots \cdots \cdots \cdots A$ A
e) Long-term projects $\cdots-\ldots . . . . . . A$ A

M9
About how often do <fourth grade> students in this class take mathematics tests on computers or tablets?

Check one circle only.
More than once a month $-\cdots$ A
Once a month --- A
Twice a year -- A
Once a year --. A
Never -- A

## M10

A. In the past two years, have you participated in professional development in any of the following?

# B. Do you need future professional development in any of the following? 

Check one circle for each line.
Yes No
a) Mathematics content $\cdots$ A A-.............. A A
b) Mathematics pedagogy/
instruction-----.......... A A --............ A A
c) Mathematics curriculum - A A--............ A A
d) Integrating technology
into mathematics
instruction--..............-A A--.............AA A
e) Improving students'
critical thinking or
problem solving skills--.-A A-.............. A A
f) Mathematics assessment-A A--............ A A
g) Addressing individual students' needs--......--- A

A A

## Teaching Science to the TIMSS Class

A. Is science taught mainly as a separate subject (i.e., not integrated with other subjects) to the students in this class?

Check one circle only.

$$
\begin{aligned}
& \text { Yes -- A } \\
& \text { No }--\mathrm{A}
\end{aligned}
$$

B. Please estimate the time that you spend on science topics with students in this class.
$\qquad$ minutes per week
Write in the number of minutes per week. Please convert the number of hours into minutes.

## S2

In teaching science to the students in this class, how often do you ask them to do the following?

Check one circle for each line.
Every or almost every lesson
a) Listen to me explain new science content $\qquad$ $A-A \quad A \quad A-$
About half the lessons
Some lessons
Never
b) Observe natural phenomena
such as the weather or a plant growing and describe what they see -------.........A-A A A-
c) Watch me demonstrate an
experiment or investigation $\cdots A-A \quad A \quad A-$
d) Read their textbooks or other resource materials $\cdots \cdots-A-A \quad A-$
e) Memorize facts and principles $\qquad$ $A-A$ A-
f) Do field work outside the class ------...............-. A-A A A-
g) Work in mixed ability groups --......................- A-A A A-
h) Work in same ability
$\qquad$

How much emphasis do you place on the following when teaching science to students in this class?

Check one circle for each line.
A lot
a) Encouraging students to ask questions about scientific phenomena

A-A A
b) Having students predict the outcomes of experiments or investigations $A-A \quad A$
c) Having students create representations (e.g., models, graphs) to explain scientific phenomena $-\cdots \cdots-\cdots-A \quad A$
d) Having students use scientific concepts to explain
phenomena $A-A \quad A$
A. How often do you provide opportunities for students to do the following when teaching this class?

Check one circle for each line.
Once a week or more
Once or twice a month
Once or twice every few months

Never or almost never
a) Experiments or investigations
that are carried out in a single

b) Experiments or investigations
that are carried out over a
series of lessons $\cdots \cdots \cdots \cdots \cdots-\cdots-\cdots \quad A \quad A-$
c) Hands-on activities to
explore science concepts $\cdots \cdots-A \not A \quad A-$
d) Experiments with a
prescribed set of steps to
answer a given question $\cdots-\cdots A-A \quad A \quad A$ -
e) Experiments where
students determine their
own procedures to answer
a given question $\cdots \cdots \cdots \cdots \cdots-\cdots A-A$ A $A$
B. How often do you go to a separate science laboratory when conducting experiments or investigations with students in this class?

Check one circle only.
Always or almost always ... A
Sometimes … A
Never or almost never - ..... A

## S5

A. Do the students in this class have digital devices (including computers, tablets, or smartphones) available to use during science lessons?

Check one circle only.
Yes --- A № -..

A
(If No , go to \#S6)

## If Yes,

B. What access do the students have to digital devices?

Check one circle for each line.
a) The class has digital devices for each student to use A A
b) The class has digital devices that students can shār̄ē------------------------------ A A
c) The school has digital devices that the class can use sometimēs ${ }^{-1---------------------~ A ~ A ~}$
d) Students bring their own digital devices ........ A A
C. How often do you have students use digital devices during science instruction?

Check one circle only.
At least once a week … A
Once or twice a month ... A
A few times a year $\cdots \mathrm{A}$
D. How often do you ask the students in your class to use digital devices to do these science activities?

Check one circle for each line.
At least once a week

b) Create graphs, tables, or other data displays $A-A-A$
c) Play games involving science concepts - - $\cdots \cdots \cdots \cdots \cdots \cdots-\cdots-A-A$
d) Conduct virtual experiments or other simulations-$A-A-A \quad A$
e) Read the textbook or watch instructional videos $A-A-A$

How much do each of these keep you from incorporating digital devices into science instruction?

Check one circle for each line.
Not at all
Somewhat
A lot
a) Not knowing how to use digital devices to improve student learning...... A - A A
b) Not enough access to digital devices $A-A \quad A$
c) Keeping students on task when the class is using digital devices $A-A \quad A$
d) Lack of technical support from the school $A-A \quad A$

## Science Topics Taught to the TIMSS Class

The following list includes topics and concepts addressed by the TIMSS science test. Choose the response that best describes when each topic or concept is taught for students in this class.

If a topic or concept was in the curriculum before <fourth grade>, choose "Mostly taught before this year". If you have taught a topic this year, choose "Mostly taught this year". If a topic is not in the <fourth grade> curriculum for this year or you have not yet taught a topic, choose"Not yet taught".
Check one circle for each line. Mostly taught before this year Mostly taught this year
Not yet taught
A. Life Science






g) How human actions impact the environment $---------------------------------------------------A$ A A


j) Competition within ecosystems
k) Ways for humans to maintain good health and avoid illness ---.................................................................-A-A A
B. Physical Science
a) Solids, liquids, gases, and how their shapes and volumes differ ................................................................. A A-
b) Grouping objects based on their physical properties ........................................................................................ A-

d) Magnetic attraction and repulsion ------------------------------------------------------------------A A
e) Examples of physical and chemical changes in everyday life -.............................................................. A A A-
f) How to make solids dissolve faster in liquids (e.g., stirring, heating) ..................................................... A $A$ A
g) Concentration of solutions
h) Sources of energy (e.g., the Sun, wind, water, coal, oil, and gas) -........................................................ A A A
i) How light is related to shadows, reflections, and rainbows ................................................................................ A
j) How vibrations are related to sound
k) Movement of heat from hotter to cooler objects-...................................................................................... A A-
l) Simple electrical circuits A A A
m) How motion is affected by forces (e.g., gravity, pushing, pulling, friction) $A-A$
n) Examples of simple machines (e.g., levers, ramps) A A A-

## (continued)

Choose the response that best describes when each topic or concept is taught for students in this class.
If a topic or concept was in the curriculum before <fourth grade>, choose "Mostly taught before this year". If you have taught a topic this year, choose "Mostly taught this year". If a topic is not in the <fourth grade> curriculum for this year or you have not yet taught a topic, choose "Not yet taught".


## Science Homework

 for the TIMSS Class
## S8

A. How often do you usually assign science homework to the students in this class?

Check one circle only.
I do not assign science
homework --- A
(Go to \#59)
Less than once a week ... A
1 or 2 times a week $\cdots \mathrm{A}$
3 or 4 times a week … A
Every day … A
B. How often do you do the following with the science homework assignments for this class?
a) Correct assignments and give feedback to students

Check one circle for each line.
b) Discuss the homework
in class
A A A
c) Monitor whether or not the
homework was completed $\cdots$ A A

How much importance do you place on these strategies to assess students' learning in science?
a) Observing students
as they work …............... A A A
b) Asking students to answer
questions during class $\cdots-\cdots$ A A A
c) Short, regular written
assessments --.................-A A A
d) Longer tests (e.g., unit
tests or exams)
A A A
e) Long-term projects A A A

S10

About how often do <fourth grade> students in this class take science tests on computers or tablets?

Check one circle only.
More than once a month … A
Once a month $\cdots \mathrm{A}$
Twice a year -- A
Once a year … A
Never -- A
A. In the past two years, have you participated in professional development in any of the following?
B. Do you need future professional development in any of the following?

Check one circle for each line.

Yes No
b) Science pedagogy/
instruction
A A--............ A A
c) Science curriculum $\cdots \cdots A$ A $A \cdots \cdots \cdots-\cdots A$
d) Integrating technology
into science instruction- $A \quad A \cdots \cdots \cdots \cdots \cdots A$
e) Improving students' critical thinking or
inquiry skills $\cdots \cdots \cdots \cdots-\cdots A B A$

g) Addressing individual

h) Integrating science with other subjects
(e.g., mathematics, technology) A A-…......... A A

put into completing this questionnaire.

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## <Grade 4>



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## <Grade 4>



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## YIEA TIMSS

## 2023

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Teacher Questionnaire Mathematics

## <Grade 8>

<TIMSS National Research Center Name>
<Address>

## Identification Label



## Field Test <br> Version

## Teacher Questionnaire

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It is estimated that you will need approximately 35 minutes to complete this questionnaire. We appreciate the time and effort that this takes and thank you for your cooperation and contribution.

To access this questionnaire online, please copy the following link into the address bar of your Web browser:
<Insert LINK>
All necessary teacher login information (Subject Code, ID, and Password) is provided on the identification label located on the cover. "Teacher ID" is your ID and "Checksum" is your password.

You may exit the questionnaire at any time and log in again later-all of your responses will be saved automatically.

If you have problems accessing this online questionnaire or are in need of assistance (e.g., you would prefer to complete a paper copy of the questionnaire, questions related to a subject that you do not teach to the <TIMSS> class are displayed), please contact:
<Insert country-specific information here>.

## Thank You

Thank you for the thought, time, and effort you have put into completing this questionnaire.

> BOSTON

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## <Grade 8>



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## YIEA TIMSS

## 2023

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Teacher Questionnaire Mathematics

## <Grade 8>

<TIMSS National Research Center Name>
<Address>

## Identification Label



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When you have completed the questionnaire, please place it in the accompanying envelope and return it to:
<Insert country-specific information here>.

Thank you.

By the end of this school year, how many years will you have been teaching altogether?
$\qquad$ years
Please round to the nearest whole number.

## 2

Which of these describes you?
Check one circle only.
Female -.. A
Male --- A
<Other> --- A

## 3

How old are you?
Check one circle only.
Under 25 … A
25-29 -- A
30-39 -- A
40-49 -- A
50-59 -- A
60 or more ... A

What is the highest level of formal education you have completed?

## Check one circle only.

Did not complete <Upper secondary
education-ISCED Level 3> ... A
<Upper secondary educationISCED Level 3> ... A
(If you have not completed <post-secondary or tertiary education>, go to \#b)

> <Post-secondary, non-tertiary education-ISCED Level 4> $\ldots$ A
<Short-cycle tertiary education-ISCED Level $5 \gg$... A
<Bachelor's or equivalent levelISCED Level $6>\cdots$ A
<Master's or equivalent levelISCED Level $7>$... A
<Doctor or equivalent levelISCED Level $8>\cdots$ A

## 5

During your <post-secondary> education, what was your major or main area(s) of study?

Check one circle for each line.

| Yes |
| :--- |
| No |

a) Mathematics----------------------- A
b) Biolog $y$

A A
c) Physics

A A
d) Chemistry

A A
e) <Earth Science>
$A-A$
f) Education-Mathematics ........................- A -A
g) Education-Science -.............................- $A-A$
h) Education-General -.............................- $A-A$
i) Other------------------------------- A

## 6 <br> How would you characterize each of the following within your school?

Check one circle for each line.
Very high
High
Medium
Low
Very
low
a) Teachers' understanding of the school's curricular goals $\cdots A-A-A \quad A-A-$
b) Teachers' degree of success in implementing the school's curriculum $A-A-A \quad A-$
c) Teachers' expectations
for student achievement $\cdots \cdots-A_{A}$ A A -
d) Teachers' ability to inspire students $A-A-A-$
e) Parental involvement in school activities $A-A-A-$
f) Parental commitment to
ensure that students are
ready to learn
$A-A-A-$
g) Parental expectations for
student achievement $\qquad$ $A A-A-A-$
h) Parental support for student achievement --....... A A A A-A -
i) Students' desire to do well in school $\qquad$ $A-A-A-$
j) Students' ability to reach school's academic goals ....... A-A A A-A -
k) Students' respect for classmates who excel academically $\qquad$ $A-A-A-$

How much do you agree or disagree with the following statements about your current school?

Check one circle for each line.
Agree a lot
Agree a little
Disagree a little
Disagree a lot
a) I feel safe at this school -....... A-A A A-
b) This school's security policies and practices are sufficient $\cdots \mathrm{A}-\mathrm{A} \quad \mathrm{A} \quad \mathrm{A}-$
c) The students behave in an orderly manner -...............A A A A -
d ) The students are respectful of the teachers $A-A \quad A \quad A-$
e) The students respect school property $A-A \quad A \quad A-$
f) This school has clear rules about student conduct $\cdots-\cdots=A-A \quad A-$
g) This school's rules are enforced in a fair and consistent manner $\qquad$ $A-A \quad A \quad A-$

## About Being a Teacher

How often do you have these feelings about being a teacher?

|  |  | Check one circle for each line. Very often |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Often |  |  |
|  |  |  | Sometimes |  |
|  |  |  |  | Never or almost never |
| a) I am content with my profession as a teacher $\qquad$ $A-A \quad A \quad A$ |  |  |  |  |
| b) I find my work full of meaning and purpose $A-A \quad A-$ |  |  |  |  |
| c) I am enthusiastic about my job $\qquad$ A-A A A |  |  |  |  |
| d) My work inspires me - ........ $A-A$ A $A$ |  |  |  |  |
| e) I am proud of the work I do $\qquad$ $A-A \quad A-$ |  |  |  |  |
| f) I feel appreciated as a teacher $A-A$ A- |  |  |  |  |
| g) I enjoy the challenges of teaching $\qquad$ $A-A$ A |  |  |  |  |

How much do you agree or disagree with the statements below?

Check one circle for each line.
Agree a lot
Agree a little
Disagree a little
Disagree a lot
a) There are too many students in the classes
$A-A$ A-
b) I have too much material to cover in class $A-A$ A-
c) I have too many teaching hours A-A A A-
d) I need more time to prepare for class A-A A
e) I need more time to assist individual students
$A-A$ A-
I feel too much pressure from parents $A-A$ A-
g) I have difficulty keeping up with all of the changes to the curriculum $A-A$ A-
h) I have too many administrative tasks
$A-A \quad A \quad A-$

## About Teaching the TIMSS Class

How many students are in this class?
$\qquad$
Write in the number.

## 11

How many <eighth grade> students experience difficulties understanding spoken <language of test>?
$\qquad$ students in this class
Write in the number.
12
How often do you do the following in teaching this class?


In your view, to what extent do the following limit how you teach this class?

Check one circle for each line.
Not at all
a) Students lacking prerequisite knowledge or skills .-........... A Some

A A
b) Students suffering from
lack of basic nutrition $A-A \quad A$
c) Students suffering from not enough sleep $\cdots-\ldots . . . . . .$. A A
d) Students absent from class $-\cdots \mathrm{A}$ A A
e) Disruptive students $\cdots \cdots \cdots \cdots$ A $A$
f) Uninterested students $\cdots-\cdots-\cdots A$
g) Distracted students $\cdots-\cdots \cdots \cdots \quad A \quad A$
h) Students with mental, emotional, or psychological impairment A-A A
i) Students with difficulties understanding the language of instruction ....... A $-A \quad A$

## Teaching Mathematics to the TIMSS Class

## 14

In a typical week, how much time do you spend teaching mathematics to the students in this class?
$\qquad$ minutes per week Write in the number of minutes per week. Please convert the number of hours into minutes.
g)
h)

In teaching mathematics to this class, how often do you ask students to do the following?

Check one circle for each line.
Every or almost every lesson
a) Listen to me explain new mathematics content
$A-A$
About half the lessons
Some lessons
Never

A A-
b) Listen to me explain how to solve problems $A-A$ A-
c) Memorize rules, procedures, and facts $A-A$ A-
d) Practice procedures on their own $A-A \quad A-$
e) Apply what they have learned to new problem situations on their own $\cdots \cdots \cdot A-A \quad A \quad A-$
f) Work problems together in the whole class with direct guidance from me $-\cdots \cdots \cdots-\cdots-A$ A $A$

Work in mixed ability groups -- $A-A \quad A \quad A$
Work in same ability groups - $A-A \quad A \quad A$

Are students in this class permitted to use calculators during mathematics lessons?

Check one circle only.
Yes, with unrestricted use … A
Yes, with restricted use $\cdots \mathrm{A}$
No … A
A. Do the students in this class have digital devices (including computers, tablets, or smartphones) available to use during mathematics lessons?

Check one circle only.
Yes $-\cdots$ A
No $-\cdots$ A
(If No, go to \#18)

If Yes,
B. What access do the students have to digital devices?

Check one circle for each line.

## Yes

 Noa) The class has digital devices for each student to use

A A
b) The class has digital devices that students can share

A A
c) The school has digital devices that the class can use sometimes $\bar{A} A$
d) Students bring their own digital devices $\cdots \cdots \cdot \bar{A} \quad \bar{A}$
C. How often do you have students use digital devices during mathematics instruction?

Check one circle only.
At least once a week $\cdots \mathrm{A}$
Once or twice a month $\cdots \mathrm{A}$
A few times a year $\cdots \mathrm{A}$
D. How often do you ask the students in your class to use digital devices to do these mathematics activities?

Check one circle for each line.
At least once a week
Once or twice a month
A few times
a year
Never or
almost
never
a) Practice problems and procedures $\qquad$ $A-A-A$
b) Solve extended or contextualized problems $\cdots \cdots \cdot \mathrm{A}-\mathrm{A} A \mathrm{~A}$
c) Create graphs, tables, or
other data displays
$A-A-A \quad A$
d) Play games involving
mathematics calculations or concepts
$A-A-A$
e) Read the textbook or watch instructional videos $\qquad$ $A-A-A \quad A$

How much do each of these keep you from incorporating digital devices into mathematics instruction?

Check one circle for each line. Not at all

Somewhat
A lot
a) Not knowing how
to use digital devices to
improve student learning $-\cdots-\cdots-A \quad A$
b) Not enough access to
digital devices $\cdots \cdots-\cdots \cdots-\cdots A-A \quad A$
c) Keeping students on task when the class is using

d) Lack of technical support from the school $\cdots \cdots-\cdots-\cdots-\cdots-A-A$

## Mathematics Topics Taught to the TIMSS Class

## The following list includes topics addressed by the TIMSS mathematics test. Choose the response that best describes when each topic is taught for students in this class. <br> If a topic was in the curriculum before <eighth grade>, choose "Mostly taught before this year". If you have taught a topic this year, choose "Mostly taught this year". If a topic is not in the <eighth grade> curriculum for this year or you have not yet taught a topic, choose "Not yet taught".

|  |  | Check one circle for each line. Mostly taught before this year |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Mostly taught this year |  |
|  |  |  |  | Not yet taught |
| A. Number |  |  |  |  |
| a) Add and subtract positive and negative numbers $\qquad$ $A-A \quad A$ |  |  |  |  |
| b) Find and use factors, multiples, positive powers, or square roots of positive whole numbers-*........................ A A A |  |  |  |  |
| c) Compare fractions and decimals |  |  |  |  |
| d) Add, subtract, and multiply with fractions and decimals ..................................................................... A A - |  |  |  |  |
|  |  |  |  |  |
| f) Determine proportions and ratios -----------------------------------------------------------1A A |  |  |  |  |
|  |  |  |  |  |
| B. Algebra |  |  |  |  |
|  |  |  |  |  |
| b) Solve simple linear equations |  |  |  |  |
| c) Solve simple linear inequalities |  |  |  |  |
| d) Solve simultaneous linear equations (two variables) --...................................................................-A-A A |  |  |  |  |
| e) Write expressions, equations, or inequalities to represent problems--............................................... A A A A |  |  |  |  |
| f) Interpret linear functions in graphs, tables, or words - ....................................................................... A A - |  |  |  |  |
| g) Interpret simple non-linear functions (e.g., quadratic, cubic) in graphs, tables, or words-.................................. A A A |  |  |  |  |
| h) Generalize linear and non-linear pattern relationships or sequences |  |  |  |  |
| C. Geometry and Measurement |  |  |  |  |
| a) Read and plot points in the Cartesian plane -----------------------------------------------------1A A |  |  |  |  |
| b) Recognize and draw different types of angles and lines $\qquad$ A$A \quad A=$ |  |  |  |  |
| c) Use geometric properties of polygons to calculate lengths, perimeter, and area (including the Pythagorean Theorem) $\qquad$ |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| f) Calculate surface area and volume of common three-dimensional shapes ............................................. A A A |  |  |  |  |
| D. Data and Probability |  |  |  |  |
| a) Interpret data from one or more data sources |  |  |  |  |


--------------------------------------------------------A A A
c) Calculate and interpret the mean or median of a data distribution ......................................................... A A A
d) Calculate probabilities of simple and compound events-.................................................................. A A A
A. How often do you usually assign mathematics homework to the students in this class?

Check one circle only.
I do not assign mathematics homework … A
(Go to \#21)
Less than once a week … A
1 or 2 times a week $\cdots \mathrm{A}$
3 or 4 times a week … A
Every day … A
B. How often do you do the following with the mathematics homework assignments for this class?


About how often do <eighth grade> students in this class take mathematics tests on computers or tablets?

## Professional Development to Teach Mathematics

## 23

## A. In the past two years, have you participated in professional development in any of the following?

B. Do you need future professional development in any of the following?

Check one circle for each line.

Yes
No
a) Mathematics content $\cdots$ A.-. A - -............ A A
b) Mathematics pedagogy/
instruction---.-......-.... A A--............ A A
c) Mathematics curriculum - A A-.............. A A
d) Integrating technology
into mathematics
instruction
A-A
A A
e) Improving students'
critical thinking or problem solving skills $-\cdots A \quad A-\cdots \cdots \cdots \cdots-\cdots A$

g) Addressing individual

put into completing this questionnaire.

## <Grade 8>



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Teacher Questionnaire Science Covers and Directions - Grade 8

## CIEA TIMSS

## 2023

## Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Teacher Questionnaire Science

## <Grade 8>

<TIMSS National Research Center Name>
<Address>


## Field Test Version

## Teacher Questionnaire

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<Insert LINK>
All necessary teacher login information (Subject Code, ID, and Password) is provided on the identification label located on the cover. "Teacher ID" is your ID and "Checksum" is your password.

You may exit the questionnaire at any time and log in again later-all of your responses will be saved automatically.

If you have problems accessing this online questionnaire or are in need of assistance (e.g., you would prefer to complete a paper copy of the questionnaire, questions related to a subject that you do not teach to the <TIMSS> class are displayed), please contact:
<Insert country-specific information here>.

## Thank You

Thank you for the thought, time, and effort you have put into completing this questionnaire.

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## <Grade 8>



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## YIEA TIMSS

## 2023

Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## Teacher Questionnaire Science

## <Grade 8>

<TIMSS National Research Center Name>
<Address>


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When you have completed the questionnaire, please place it in the accompanying envelope and return it to:
<Insert country-specific information here>.

Thank you.

By the end of this school year, how many years will you have been teaching altogether?
$\qquad$ years
Please round to the nearest whole number.

## 2

Which of these describes you?
Check one circle only.
Female -.. A
Male --- A
<Other> --- A

## 3

How old are you?
Check one circle only.
Under 25 … A
25-29 -- A
30-39 -- A
40-49 -- A
50-59 --- A
60 or more -.. A

What is the highest level of formal education you have completed?

## Check one circle only.

Did not complete <Upper secondary

$$
\text { education-ISCED Level } 3>\text {... A }
$$

<Upper secondary education-
ISCED Level 3> ... A
(If you have not completed <post-secondary or tertiary education>, go to \#6)

> <Post-secondary, non-tertiary education-ISCED Level 4> $\ldots \mathrm{A}$
<Short-cycle tertiary education-ISCED Level $5 \gg$... A
<Bachelor's or equivalent levelISCED Level $6>$-.. A
<Master's or equivalent levelISCED Level $7>$... A
<Doctor or equivalent levelISCED Level $8>\cdots$ A

5
During your <post-secondary> education, what was your major or main area(s) of study?

Check one circle for each line.
Yes

| No |
| :--- |

a) Mathematics------------------------- A
b) Biology

A A
c) Physics

A A
d) Chemistry

A A
e) <Earth Science>
$A-A$
f) Education-Mathematics .-......................- A $A$
g) Education-Science -.............................- $A-A$
h) Education-General -.............................. A -A
i) Other--------------------------------A A

## 6

How would you characterize each of the following within your school?

Check one circle for each line.
Very high
a) Teachers' understanding of the school's curricular goals $\cdots \mathrm{A}-\mathrm{A}-\mathrm{A} A-\mathrm{A}-$
b) Teachers' degree of success in implementing the school's curriculum $\cdots-\cdots-A-A$ A- $A-$
c) Teachers' expectations for student achievement $\cdots-\cdots-A-A \quad A-A-$
d) Teachers' ability to inspire students $\qquad$
e) Parental involvement in school activities $\qquad$ $A A-A-A=$
f) Parental commitment to ensure that students are
ready to learn $A-A$ A-A -
g) Parental expectations for
student achievement $\qquad$ $A A-A-A-$
h) Parental support for student achievement --......-A A A A-A -
i) Students' desire to do well in school $\qquad$ $A-A-A-$
j) Students' ability to reach school's academic goals …... A-A A A-A -
k) Students' respect for classmates who excel academically $\qquad$ $A-A-A-$

How much do you agree or disagree with the following statements about your current school?

Check one circle for each line.
Agree a lot
Agree a little
Disagree a little
Disagree
a lot
a) Ifeel safe at this school ….... A-A A A-
b) This school's security policies
and practices are sufficient $\cdots A \quad A \subset A-A$
c) The students behave in an
orderly manner ---...........- A A A A
d) The students are respectful

e) The students respect school property -..............-A A A A
f) This school has clear rules
about student conduct $\cdots-{ }^{-} \cdot-$ A $A-A$
g) This school's rules are enforced in a fair and consistent manner

$$
\cdots \cdots-\cdots-\cdots A-A
$$

## About Being a Teacher

How often do you have these feelings about being a teacher?
a) I am content with my
profession as a teacher …-... A - A A A
b) I find my work full of
meaning and purpose $\cdots-\cdots \cdots-A$ A $A$
c) I am enthusiastic
about my job --................ A-A A A
d) My work inspires me $\cdots \cdots \cdots A-A \quad A \quad A$
e) I am proud of the
workIdo ---..............-....-A A A A
f) I feel appreciated as a
teacher ---.....................-A-A A A
g) I enjoy the challenges of
teaching ---............-....- A-A A A

How much do you agree or disagree with the statements below?

Check one circle for each line.
a) There are too many students in the classes $\cdots-\cdots \cdots A \quad A-A$
b) I have too much material to cover in class -.................-A A-A A
c) I have too many teaching
hours ------..................-A A A A
d) I need more time to prepare

e) I need more time to assist
individual students $\cdots-\cdots-{ }^{-} \cdot-\quad A \quad A-A-A$
f) I feel too much pressure
from parents $-\cdots-\cdots-\cdots-\cdots-\cdots A A A-A$
g) I have difficulty keeping up with all of the changes to the curriculum
$A A A-A$
h) I have too many administrative tasks
$A A-A$

How many students are in this class?
$\qquad$
Write in the number.
11
How many <eighth grade> students experience difficulties understanding spoken <language of test>?
$\qquad$
Write in the number.
12
How often do you do the following in teaching this class?

e) Encourage classroom
discussions among students $\qquad$ A A A A
f) Link new content to students' prior knowledge $\cdots-A \quad A-A-A$
g) Ask students to decide their own problem solving procedures $\cdots-\cdots . . . .-\cdots A-A \quad A$
h) Encourage students to
express their ideas in class $\cdots-A \quad A-A$

In your view, to what extent do the following limit how you teach this class?

Check one circle for each line.
Not at all
a) Students lacking prerequisite
knowledge or skills $\qquad$ Some
A. A
b) Students suffering from
lack of basic nutrition $\cdots-. . .-\cdots A$ A
c) Students suffering from
not enough sleep $-\cdots-. . . . . . .-\quad$ A A
d) Students absent from class $-\cdots \mathrm{A} \quad \mathrm{A}$
e) Disruptive students $\cdots-\cdots \cdots \cdots$ A $A$
f) Uninterested students $\cdots \cdots \cdots A$ A
g) Distracted students $\cdots \cdots \cdots \cdots-\cdots \quad A$
h) Students with mental, emotional, or psychological impairment A A A
i) Students with difficulties understanding the
language of instruction $\cdots-\cdots A$ A

## Teaching Science to the <TIMSS Class/Class with the TIMSS students>

## 14

In a typical week, how much time do you spend teaching science to the students in this class?
$\qquad$ minutes per week
Write in the number of minutes per week.
Please convert the number of hours into minutes.

## 15

In teaching science to the students in this class, how often do you ask them to do the following?
a) Listen to me explain new science content $\qquad$ $A-A \quad A \quad A$
b) Observe natural phenomena and describe what they see $\cdots A-A \quad A \quad A-$
c) Watch me demonstrate
an experiment or
investigation $-\cdots-\cdots \cdots \cdots \cdots-\cdots$ - $A$ A $A-$
d) Read their textbooks or other resource materials $\cdots \cdots-\cdots-A \quad A \quad A-$
e) Memorize facts and principles--....................-A A A A-
f) Use scientific formulas and laws to solve routine

g) Do field work outside of class-- $A-A \quad A \quad A-$
h) Work in mixed ability groups $-\mathrm{A}-\mathrm{A} \quad \mathrm{A} \quad \mathrm{A}-$
i) Work in same ability groups $\cdots \mathrm{A}-\mathrm{A} \quad \mathrm{A} \quad \mathrm{A}-$

## 16

How much emphasis do you place on the following when teaching science to students in this class?

Check one circle for each line.

## A lot

## Some

None
a) Encouraging students to ask questions about scientific phenomena $\cdots A-A \quad A$
b) Having students predict the outcomes of experiments or investigations $A-A \quad A$
c) Having students discuss variation in data from experiments or investigations $A-A \quad A$
d) Having students use multiple sources of evidence to explain scientific phenomena $\cdots \cdots-\cdots$ A - A A
e) Having students create
representations (e.g., models, graphs) to explain scientific phenomena $\cdots \cdots-\cdots A-A \quad A$
f) Having students use scientific concepts to explain phenomena $A-A \quad A$
g) Having students argue about science questions $\cdots \cdots-\cdots-A \quad A$
A. How often do you provide opportunities for students to do the following when teaching this class?
B. How often do you go to a separate science laboratory when conducting experiments or investigations with students in this class?

## Check one circle only.

Always or almost always … A<br>Sometimes ... A<br>Never or almost never ... A

Never
or almost
never
a) Experiments or investigations that are carried out in a single lesson $A-A$ A
b) Experiments or investigations
that are carried out over a
series of lessons $\qquad$ $A-A \quad A-$
c) Hands-on activities to explore science concepts $\cdots-\cdots A-A \quad A-$
d) Experiments with a
prescribed set of steps to
answer a given question $\cdots \cdots-A \quad A \quad A-$
e) Experiments where
students determine their
own procedures to answer
a given question --............ A-A A A-
A. Do the students in this class have digital devices (including computers, tablets, or smartphones) available to use during science lessons?

Check one circle only.
Yes .-. A

$$
\text { No } \cdots A
$$

(If No , go to \#19)

## If Yes,

B. What access do the students have to digital devices?

Check one circle for each line.
a) The class has digital devices for each student to use A A
b) The class has digital devices that students can
shār̄é----------------------------- A A
c) The school has digital devices that the class can use sometimés A A
d) Students bring their own digital devices …..... A A
C. How often do you have students use digital devices during science instruction?

Check one circle only.
At least once a week … A
Once or twice a month … A
A few times a year $\cdots \mathrm{A}$
D. How often do you ask the students in your class to use digital devices to do these science activities?

Check one circle for each line.
At least once a week
Once or twice a month
A few times a year

Never or almost never
a) Solve extended or contextualized problems $\qquad$ $A-A-A$
b) Create graphs, tables, or other data displays $A-A-A$
c) Play games involving science concepts $A-A-A$
d) Conduct virtual experiments or other simulations $A-A-A$
e) Read the textbook or watch instructional videos $A-A-A$

## 19

How much do each of these keep you from incorporating digital devices into science instruction?

Check one circle for each line.
Not at all
Somewhat
A lot
a) Not knowing how to use digital devices to improve student learning-...- $A-A \quad A$
b) Not enough access to digital devices $A-A \quad A$
c) Keeping students on task when the class is using digital devices $A-A \quad A$
d) Lack of technical support from the school $A-A \quad A$

## Science Topics Taught to the <TIMSS Class/Class with the TIMSS students>

Choose the response thatbest describes when each topic or concept is taught for students in this class.
If a topic or concept was in the curriculum before <eighth grade>, choose "Mostly taught before this year". If you have taught a topic this year, choose "Mostly taught this year". If a topic is not in the <eighth grade> curriculum for this year or you have not yet taught a topic, choose "Not yet taught".

h) Matter and energy in chemical reactions, including evidence of chemical change ..... $A-A \quad A$
i) How to change the rate of chemical reactions ..... $A$ A A
j) Chemical bonds (e.g., role of electrons) $A$ A A

Choose the response thatbest describes when each topic or concept is taught for students in this class.
If a topic or concept was in the curriculum before <eighth grade>, choose "Mostly taught before this year". If you have taught a topic this year, choose "Mostly taught this year". If a topic is not in the <eighth grade> curriculum for this year or you have not yet taught a topic, choose "Not yet taught".

k) Phenomena caused by the motion of Earth and the Moon (e.g., seasons, tides, Moon phases) -........................... A A A
l) The Sun as a star and physical features of the Earth, Moon, and other planets ............................................ A A A

Science Homework for the <TIMSS Class/Class with the TIMSS students>

## 21

A. How often do you usually assign science homework to the students in this class?

Check one circle only.
I do not assign science
homework … A


Less than once a week … A
1 or 2 times a week $\cdots \mathrm{A}$
3 or 4 times a week … A
Every day -.. A
B. How often do you do the following with the science homework assignments for this class?
a) Correct assignments and give feedback to students …- A A A
b) Have students correct their own homework $\qquad$ $A$ A
c) Discuss the homework in class A A A
d) Monitor whether or not the homework was completed … A A A
e) Use the homework to contribute towards students' grades or marks $\cdots$ A A A

How much importance do you place on these strategies to assess students' learning in science?
a) Observing students as they work $\cdots-\cdots . . . . . . . . . . . .-A ~ A ~ A$
b) Asking students to answer questions during class $\cdots-\cdots$ A.....A A
c) Short, regular written
assessments $\cdots-\cdots-\cdots-\cdots-\cdots-\cdots A A$
d) Longer tests (e.g., unit
tests or exams) A A A
e)

Long-term projects …........-A A A
23
About how often do <eighth grade> students in this class take science tests on computers or tablets?

Check one circle only.
More than once a month ... A
Once a month --- A
Twice a year -- $A$
Once a year -- A
Never -- A

## Professional Development to Teach Science

## 24

| A. In the past two years, have you participated in professional development in any of the following? | B. Do you need future professional development in any of the following? |
| :---: | :---: |
| Check one circle for each line. | Check one circle for each line. |
| Yes | Yes |
| No | No No |
| a) Science content $\ldots-\ldots . . .-\ldots \mathrm{A}$ | A-............. A A |
| b) Science pedagogy/ instruction----............. A | $A \cdots-\cdots \cdot . . . . . . .-A$ |
| c) Science curriculum - .-..... A | A-............ A A |
| d) Integrating technology into science instruction… A | A--............-A A |
| e) Improving students' critical thinking or inquiry skills--............-A | A-.............. A A |
| f) Science assessment $\cdots \cdots-\cdots$ | A-............ A A |
| g) Addressing individual students' needs--..........- A | A--........... A A |

put into completing this questionnaire.

$$
\begin{gathered}
\text { BOSTON } \\
\text { COLLEGE } \\
\text { timss.bc.edu }
\end{gathered}
$$

## <Grade 8>



## IEA

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## YIEA TIMSS

## 2023

Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## School

 Questionnaire
## <Grade 4>

<TIMSS National Research Center Name> <Address>

## Field Test Version

## School Questionnaire

Your school has agreed to participate in TIMSS 2023 (Trends in International Mathematics and Science Study), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS measures trends in student achievement in mathematics and science and studies differences in national education systems in almost 60 countries in order to help improve teaching and learning worldwide.

This questionnaire is addressed to school principals and department heads who are asked to supply information about their schools. Since your school has been selected as part of a nationwide sample, your responses are very important in helping to describe primary/ elementary education in <country>.

It is important that you answer each question carefully so that the information provided reflects the situation in your school as accurately as possible. Some of the questions will require that you look up school records, so you may wish to arrange for the assistance of another staff member to help provide this information.

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It is estimated that you will need approximately 30 minutes to complete this questionnaire. We appreciate the time and effort that this takes and thank you for your cooperation and contribution.

To access this questionnaire online, please copy the following link into the address bar of your Web browser:
<Insert LINK>
All necessary login information is provided on the identification label located on the cover. "School ID" is your ID and "Checksum" is your password.

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If you have problems accessing this online questionnaire or are in need of assistance (e.g., you would prefer to complete a paper copy of this questionnaire), please contact:
<Insert country-specific information here>.

## Thank <br> 

## Thank you for the thought, time, and effort you have put into completing this questionnaire.

## <Grade 4>



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## YIEA TIMSS

## 2023

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TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

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<Grade 4>
<TIMSS National Research Center Name>
<Address>


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When you have completed the questionnaire, please place it in the accompanying envelope and return it to:
<Insert country-specific information here>.

Thank you.

What is the total enrollment of students in your school as of <first day of month TIMSS testing begins, 2022>?
$\overline{\text { Write in the number }}$ students
Write in the number.

2
What is the total enrollment of <fourth grade> students in your school as of <first day of month TIMSS testing begins, 2022>?
$\qquad$
Write in the number.
3
Approximately what percentage of students in your school have the following backgrounds?
Check one circle for each line.
$\frac{0 \text { to } 10 \%}{11 \text { to } 25 \%}$
$\frac{26 \text { to } 50 \%}{}$

| More than |
| :--- |
| $50 \%$ |

## 5

A. How many people live in the city, town, or area where your school is located?

## Check one circle only.

$$
\begin{aligned}
& \text { More than } 500,000 \text { people } \cdots \text { A } \\
& \text { 100,001 to 500,000 people ... A } \\
& 50,001 \text { to } 100,000 \text { people } \cdots \text { A } \\
& \text { 30,001 to 50,000 people … A } \\
& \text { 15,001 to 30,000 people … A } \\
& \text { 3,001 to 15,000 people … A } \\
& \text { 3,000 people or fewer … A }
\end{aligned}
$$

B. Which best describes the immediate area in which your school is located?

> Check one circle only.

Urban-Densely populated … A
Suburban-On fringe or outskirts of urban area … A

Medium size city or large town … A
Small town or village $\cdots \mathrm{A}$
Remote rural … A
a) Come from economically disadvantaged homes $\cdots-\cdots-\cdots A-A \quad A-$
b) Come from economically
affluenthomes----........... A-A A A-

4
Approximately what percentage of students in your school have <language of test> as their native language?

Check one circle only.

$$
\begin{array}{r}
\text { More than } 90 \% \text { … } \mathrm{A} \\
76 \text { to } 90 \% \\
51 \text { to } 75 \% \\
\text { A } \\
26 \text { to } 50 \%
\end{array}
$$

$25 \%$ or less … A

## 6

For the <fourth grade> students in your school:
A. How many days per year is your school open for instruction?
$\qquad$
Write in the number.
B. What is the total instructional time, excluding breaks, in a typical day?
$\qquad$ minutes
Write in the number of minutes per day.
Please convert the number of hours into minutes.
C. In one calendar week, how many days is the school open for instruction?

Check one circle only.
6 days ... A
$51 / 2$ days -.. A
5 days … A
41/2 days … A
4 days … A
Other … A

How many computers (including tablets) does your school have for use by <fourth grade> students?
$\qquad$ computers
Write in the number.

8
A. Does your school have a science laboratory that can be used by <fourth grade> students?

Check one circle only.

$$
\begin{aligned}
& \text { Yes -. A } \\
& \text { No }- \text {-. A }
\end{aligned}
$$

B. Do teachers usually have assistance available when students are conducting science experiments?

Check one circle only.

$$
\begin{aligned}
& \text { Yes -- A } \\
& \text { No --. A }
\end{aligned}
$$

## 9

Does your school use an online learning management system to support learning (e.g., teacher-student communication, management of grades, student access to course materials)?

Check one circle only.
Yes --- A
No --- A

10
Do students in your school have access to these resources?

Check one circle for each line.
Yes
No
a) A library or media center -.......................- $A-A$
b) Digital devices (e.g., computers, laptops, tablets) A A
c) High speed internet -............................-- A A

How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following?


How would you characterize each of the following within your school?

Check one circle for each line.


To what degree is each of the following a problem among <fourth grade> students in your school?

Check one circle for each line.

b) Absenteeism (i.e.,
unjustified absences) $\cdots \cdots-\cdots$ A A A A
c) Classroom disturbance $\cdots-\cdots-A$ A $A$
d) Cheating $\cdots-\cdots-\cdots-\cdots-\cdots-\cdots A \quad A \quad A$



h) Intimidation or verbal abuse among students (including texting, emailing, etc.) $\cdots-\cdots-A-A$ A
i) Physical fights among
students
$A-A$ A
j) Intimidation or verbal abuse of teachers or staff (including
texting, emailing, etc.) $\cdots-\cdots-\cdots$ A $A$

## 14

To what degree is each of the following a problem among teachers in your school?

Check one circle for each line. Not a problem

Minor problem
Moderate problem Serious problem
a) Arriving late or leaving early $\cdots \mathrm{A}-\mathrm{A} \quad \mathrm{A} \quad \mathrm{A}-$
b) Absenteeism A A

## School Readiness

About how many of the students in your school can do the following when they begin the <first grade> of primary/elementary school?

Check one circle for each line.
Less than $25 \%$
25-50\%
51-75\%
a) Recognize most of the
letters of the alphabet
at $\cdots-\cdots \cdot-A-A \quad A-$
b) Read some words $-\cdots-\cdots-\cdots-\cdots A-A$ A-
c) Read sentences
$A-A \quad A \quad A$
d) Write letters of the alphabet $\cdots \mathrm{A}-\mathrm{A} \quad \mathrm{A} \quad \mathrm{A}$
e) Write their names $\qquad$ $A-A \quad A \quad A$
f) Write words other than
their names --.................-A-A A A
g) Count up to 100 or higher $\cdots \mathrm{A}-\mathrm{A} \quad \mathrm{A} A$
h) Recognize written numbers
from 1-10 --................... A-A A A
i) Recognize written numbers
higher than 10 --.............. A-A A A-
j) Write numbers from 1-10 $\cdots \cdots A-A \quad A \quad A-$
k) Do simple addition ............. A - A A A-

1) Do simple subtraction $\cdots-\cdots \cdots-A$ A $A-$

By the end of this school year, how many years will you have been a principal altogether?
$\qquad$ years
Please round to the nearest whole number.

17
By the end of this school year, how many years will you have been a principal at this school?
$\qquad$ years
Please round to the nearest whole number.

## 18

What is the highest level of formal education you have completed?

Check one circle only.
Did not complete <Bachelor's or equivalent level-ISCED Level 6> … A
<Bachelor's or equivalent levelISCED Level $6>$... A
<Master's or equivalent levelISCED Level $7>$... A
<Doctor or equivalent levelISCED Level $8>\cdots$ A

## 19

Do you hold the following qualifications or credentials in educational leadership?

Check one circle for each line.
Yes
No
a) <Certificate or license>
$A-A$
b) <Master's or equivalent level-ISCED Level 7> ….... A - A
c) <Doctor or equivalent level-ISCED Level 8> $\qquad$ $A-A$

## 20

For how long was your school fully closed for in-person instruction because of the COVID-19 pandemic?

Check one circle for each line.
The school did not fully close

Less than one month One to three
months months

More than three months
a) $<2019-2020>$ school year -- A - A A -
b) <2020-2021> school year -- A - A A A-
c) <2021-2022> school year -- A - A A A-

## 21

Did your school provide these additional remote learning resources during the COVID-19 pandemic?
a) Printed learning materials for students
b) Digital devices (e.g., laptops, tablets) for students $A-A$
c) Online resources for
students
A A
d) Pedagogical resources for
teachers ----------------------------A A
e) Digital devices (e.g., laptops,
tablets) for teachers-................................. -A
f) Technical support for
$\qquad$


Appendix C - Page 141

Thank you for the thought, time, and effort you have put into completing this questionnaire.

$$
\begin{gathered}
\text { BOSTON } \\
\text { COLLEGE } \\
\text { timss.bc.edu }
\end{gathered}
$$

## <Grade 4>



## IEA

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School Questionnaire Covers and Directions - Grade 8


## School Questionnaire

Your school has agreed to participate in TIMSS 2023 (Trends in International Mathematics and Science Study), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS measures trends in student achievement in mathematics and science and studies differences in national education systems in almost 60 countries in order to help improve teaching and learning worldwide.

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<Insert country-specific information here>.

## Thank <br> 

[^1]
## <Grade 8>



## IEA

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School Questionnaire - Grade 8

## §IEA TIMSS

## 2023

## Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

## School Questionnaire

<Grade 8>
<TIMSS National Research Center Name> <Address>


## Field Test Version

## School Questionnaire

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Since TIMSS is an international study and all countries are using the same questionnaire, you may find that some of the questions seem unusual or are not entirely relevant to you or schools in <country>. Nevertheless, it is important that you do your best to answer all of the questions so comparisons can be made across countries in the study.

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When you have completed the questionnaire, please place it in the accompanying envelope and return it to:
<Insert country-specific information here>.

Thank you.

## 1

What is the total enrollment of students in your school as of <first day of month TIMSS testing begins, 2022>?
$\overline{\text { Write in the number }}$

2
What is the total enrollment of <eighth grade> students in your school as of <first day of month TIMSS testing begins, 2022>?
$\qquad$ students
Write in the number.

## 3

Approximately what percentage of students in your school have the following backgrounds?
Check one circle for each line.

| 0 to $10 \%$ |
| :--- |
| $\underline{11 \text { to } 25 \%}$ |
| More than |
| $50 \%$ |

a) Come from economically
disadvantaged homes $\cdots-\cdots$ A - A A
b) Come from economically
affluent homes $A-A \quad A-$

## 4

Approximately what percentage of students in your school have <language of test> as their native language?

Check one circle only.

$$
\begin{array}{r}
\text { More than } 90 \% \\
76 \text { to } 90 \%
\end{array} \mathrm{~A} \text {-.. A }
$$

## 6

For the <eighth grade> students in your school:
A. How many days per year is your school open for instruction?
days
Write in the number.
B. What is the total instructional time, excluding breaks, in a typical day?
$\qquad$ minutes
Write in the number of minutes per day.
Please convert the number of hours into minutes.
C. In one calendar week, how many days is the school open for instruction?

Check one circle only.


## 7

How many computers (including tablets) does your school have for use by <eighth grade> students?
$\qquad$ computers
Write in the number.

8
A. Does your school have a science laboratory that can be used by <eighth grade> students?

Check one circle only.
Yes $-\cdots$ A
No ... A
B. Do teachers usually have assistance available when students are conducting science experiments?

Check one circle only.

$$
\begin{aligned}
& \text { Yes } \cdots \mathrm{A} \\
& \text { No } \cdots \mathrm{A}
\end{aligned}
$$

9
Does your school use an online learning management system to support learning (e.g., teacher-student communication, management of grades, student access to course materials)?

Check one circle only.

$$
\begin{aligned}
& \text { Yes }-\cdots A \\
& \text { No } \cdots A
\end{aligned}
$$

10
Do students in your school have access to these resources?

Check one circle for each line.
Yes
No
a) A library or media center -.......................-- $\mathrm{A}-\mathrm{A}$
b) Digital devices (e.g., computers, laptops, tablets) A A
c) High speed internet -.............................- A A

How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following?


## How would you characterize each of the following within your school?

How much do you agree with these statements about mathematics and science education within your school?
a) The school provides students with information about career

Check one circle for each line. options in mathematics
and science----.............-- A A A
b) The school has initiatives to promote student interest in mathematics and science (e.g., student clubs,

$$
\text { competitions) } \cdots-\cdots-\cdots-\cdots-\cdots A \text { A A A }
$$

c) The school promotes
professional development for
teachers of mathematics and
science---.---..............--A A A A
d) The school provides extra lessons to help students excel in mathematics and science $\cdots A \quad A-A-A$
e) The school provides special activities in mathematics and science for interested
students --...................-- A A A A
f) The school has a specific goal to improve mathematics and science education --............A A A A
g) The school encourages students to continue studying mathematics and science in the future $\cdots \cdots$ A A A A
h) Mathematics and science teachers in this school spend extra time working with students interested in mathematics and science $\cdots$ A $A-A-A$

## 14

To what degree is each of the following a problem among <eighth grade> students in your school?

Check one circle for each line.
Not a problem
Minor problem
a) Arriving late at school $\cdots-\cdots \cdot \cdots-A$ A $A-$
b) Absenteeism (i.e.,

c) Classroom disturbance $\cdots-\cdots-A$ A $A$
d) Cheating $-\cdots-\cdots+\cdots-\cdots-\cdots-\cdots \quad A \quad A-A$
e) Profanity $\cdots-\cdots-\cdots \cdots-\cdots-\cdots-\cdots A \quad A-A$
f) Vandalism $-\cdots-\cdots-\cdots-\cdots \cdot-\cdots A$ A $A-A$

h) Intimidation or verbal abuse among students (including texting, emailing, etc.) $\cdots-\cdots A-A$ A $A$
i) Physical injury to students $\cdots \mathrm{A}-\mathrm{A} \quad \mathrm{A} A$
j) Intimidation or verbal abuse of teachers or staff (including texting, emailing, etc.) $\cdots \cdots-\cdots-A$ A $A$
k) Physical injury to teachers
or staff--....................--A A A A

## 15

To what degree is each of the following a problem among teachers in your school?

Check one circle for each line.
Not a problem
Minor problem
Moderate problem
Serious problem
a) Arriving late or leaving early -- $A-A \quad A \quad A-$
b) Absenteeism $\qquad$ A-A A $A-$

## 16

By the end of this school year, how many years will you have been a principal altogether?
$\qquad$ years
Please round to the nearest whole number.

17
By the end of this school year, how many years will you have been a principal at this school?
$\overline{\text { Please round to the }}$ yearest whole number.

## 18

What is the highest level of formal education you have completed?

Check one circle only.

> Did not complete <Bachelor’s or equivalent level-ISCED Level 6> … A
<Bachelor's or equivalent levelISCED Level $6>$ … A
<Master's or equivalent levelISCED Level 7> … A
<Doctor or equivalent levelISCED Level $8>\ldots$ A

## 19

Do you hold the following qualifications or credentials in educational leadership?

Check one circle for each line.
Yes
No
a) <Certificate or license> -................................. A $A$
b) <Master's or equivalent level-ISCED Level 7> …... A A
c) <Doctor or equivalent level-ISCED Level 8>-......... A -A

## 20

For how long was your school fully closed for in-person instruction because of the COVID-19 pandemic?

Check one circle for each line.
The school did not fully close

Less than one month One to three
months months

More than three months
a) $<2019-2020>$ school year -- A - A A A-
b) <2020-2021> school year -- A - A A A-
c) <2021-2022> school year -- A - A A A-

## 21

Did your school provide these additional remote learning resources during the COVID-19 pandemic?

Check one circle for each line.
Yesa) Printed learning materials for students(e.g., worksheets, textbooks)$A-A$
b) Digital devices (e.g., laptops, tablets) for students ..... $A-A$
c) Online resources for
students ..... $A-A$
d) Pedagogical resources for
teachers ..... A A
e) Digital devices (e.g., laptops, tablets) for teachers ..... $A-A$
f) Technical support for
teachers ..... A A


Appendix C - Page 163

Thank you for the thought, time, and effort you have put into completing this questionnaire.

## <Grade 8>


(2)


IEA
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International Association
for the Evaluation of Educational Achievement

## U.S. National Items

## National Items for TIMSS 2023

## Student Qx

The next few questions ask for your opinion about different things, so there are no right or wrong answers. How much do you agree or disagree with the following statements? ${ }^{1}$

| Select one answer for each row. | Agree a lot | Agree <br> a little | Disagree a little | Disagree a lot |
| :---: | :---: | :---: | :---: | :---: |
| a. You have a certain amount of intelligence and you can't really do much to change it. | 1 O | 2 O | 3 O | 4 O |
| b. Your intelligence is something about you that you can't change very much. | 1 O | 2 O | 3 O | 4 O |
| c. You can learn new things, but you can't really change your basic intelligence. | 1 O | 2 O | 3 O | 4 O |
| d. No matter who you are, you can change your intelligence a lot. | 1 O | 2 O | 3 O | 4 O |
| e. You can always greatly change how intelligent you are. | 10 | 2 O | 3 O | 4 O |
| f. No matter how much intelligence you have, you can always change it quite a bit. | 10 | 2 O | 3 O | 4 O |

How many of the following ICT devices are currently used in your home? ${ }^{2}$
(Please mark one choice in each row)

|  |  | None | One | Two | Three or more |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a) | Desktop or laptop computers | $\square$ | $\square$ | $\square$ |  |
| b) | Tablet devices (e.g., iPad, Surface Pro, Kindle) |  | $\square$ | $\square$ |  |

[^2]
## Six national items for both grades ${ }^{3}$

B. Are you Hispanic or Latino?

Fill in one oval only.
Yes, I am Hispanic or Latino -- (1)
No, I am not Hispanic or Latino -- (2)
C. Which of the following best describes you?

Fill in ovals for all that apply.
White -- (1)
Black or African American -- (1)
Asian -- (1)
American Indian or Alaska Native -- (1)
Native Hawaiian or other
Pacific Islander -- ©
B. What language do you speak at home (other than English)?

Fill in one oval only.
Spanish --(1)
Other --(2) Please specify $\qquad$

The following questions ask about activities you do outside of school.

> Fill in only one oval for each row.

a) Do you play on a sports team outside of school?
b) Do you often play a musical instrument outside of school? $\qquad$ (1) $\qquad$ (1)
c) Are you studying something in a class outside of school? $\qquad$ © $\qquad$
d) Do you belong to a club outside of school (like Boy/Girl Scouts, 4-H, or Boys and Girls Club)? .--........- $\odot-$ ( 1

[^3]2. How much effort did you apply to succeed on this test?
(4) No effort at all
(B) Very little effort
© Some effort
(1) Quite a bit of effort
(c) A lot of effort

Adaptation for country-specific indicator of wealth: A gaming system (e.g., PlayStation, Nintendo Switch, Xbox)

Two (2) items that are similar for grade 4 and grade $8^{3}$

| Grade 4 | Grade 8 |
| :---: | :---: |
| 9 <br> Are you preparing for or have you participated in a science club, a science fair, or a science competition? $\begin{aligned} & \quad \text { Fill in one oval only. } \\ & \text { Yes -- (1) } \\ & \text { No -- (2) } \end{aligned}$ | 11 <br> In this school year, are you preparing for or have you participated in any of the following activities? <br> Fill in only one oval for each row. <br> a) Science fair $\qquad$ Yes $\qquad$ <br> b) Science club $\qquad$ (1) $\qquad$ -(2) <br> c) Science competition $\qquad$ (1) $\qquad$ (2) |


| Grade 4 | Grade 8 |
| :---: | :---: |
| 10 | 13 |
| Have you ever repeated a grade in elementary school? | Have you ever repeated a grade? |
| Fill in one oval only. | Fill in only one oval for each row. |
| Yes -- (1) | Yes No |
| No -- (2) | a) In elementary school |
|  | b) In middle or junior high school |

## Teacher

## One item that is the same for all teachers ${ }^{4}$

## What year did you start teaching?

## Please write in a year.

## One item that is similar for math and science teachers for grade $\mathbf{8}^{\mathbf{4}}$



[^4]
## School

Two items that are the same for all grades ${ }^{5}$
Of the students currently enrolled in your school, what percentage has been identified as limitedEnglish proficient (LEP)/English language learners (ELL)?

Fill in one circle only.

| $0 \%-\text { - (1) }$ |
| :---: |
|  |  |
|  |
|  |
| 50\% |
| -75\% -- (6) |
|  |
|  |

Around the 1st of October 2018, what percentage of students at this school were eligible to receive free or reduced-price lunches through the National School Lunch Program?
percentage of students

[^5]${ }^{5}$ TIMSS 2019 School Questionnaire


[^0]:    f) Other students' behavior makes it hard for me to concentrate

    A $A=A$ A

[^1]:    Thank you for the thought, time, and effort you have put into completing this questionnaire.

[^2]:    ${ }^{1}$ Source: Middle Grades Longitudinal Study of 2017-18 (MGLS:2017)
    ${ }^{2}$ Source: International Computer and Information Literacy Study (ICILS) 2023 Proposed Field Test Student Questionnaire.

[^3]:    ${ }^{3}$ Source: 2019 TIMSS Student Questionnaire

[^4]:    ${ }^{4}$ TIMSS 2019 Teacher Questionnaire

[^5]:    Write in the number.

