

**Identification Label** 

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

# Learner Questionnaire

### **Grade 9**

**Human Sciences Research Council** 34 Pretorius Street, Pretoria, 0002 South Africa

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TIMSS & PIRLS
International Study Center
Lynch School of Education
BOSTON COLLEGE

### **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?

Shade one circle only.

Yes -- 🔘

No --()

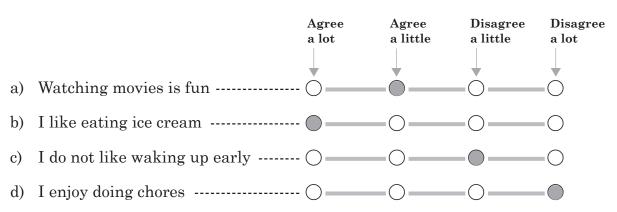
### Example 2

How often do you do these things?

		Every day or almost every day	Once or twice a week	Once or twice a month	Never or almost never
a)	I talk with my friends				
b)	I play sports				
c)	I ride a skateboard				

### Example 3

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



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

### About you

1

Are you a girl or a boy?

Shade one circle only.

Girl -- 🔾

Boy -- ()

9

When were you born?

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

a) Month	b) Year
January 🔘	2000 🔘
February 🔘	2001 🔾
March 🔘	2002 🔘
April 🔘	2003 🔘
May 🔘	2004 🔘
June 🔘	2005 🔘
July 🔘	2006 🔾
August 🔘	2007 🔾
September $\bigcirc$	2008 🔘
October 🔘	2009 🔘
November $\bigcirc$	Other 🔘
December $\bigcirc$	

# To which population group do you belong? (For research purposes only)

Shade one circle only.

African -- 🔾

Coloured -- 🔾

Indian/Asian -- 🔾

White --  $\bigcirc$ 

Other --  $\bigcirc$ 

### 4

### A. How often do you speak English at home?

Shade one circle only.

Always -- 🔘

Almost always -- 🔘

Sometimes -- 🔾

Never --  $\bigcirc$ 

### B. What language do you speak the most at home?

Shade one circle only.

Afrikaans 🔘
English 🔾
IsiNdebele 🔾
IsiXhosa 🔾
IsiZulu 🔾
Sepedi 🔾
Sesotho 🔾
Seswati 🔾
Setswana 🔾
Tshivenda 🔾
Xitsonga 🔾
Other 🔾

### C. Who do you live with?

Shade **all** circles that apply.

Mother 🔾
Father 🔾
Stepmother 🔾
Stepfather 🔾
Sister or brother 🔾
Grandmother or grandfather 🔾
Aunt or uncle 🔾
I live by myself 🔾
Other 🔘

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

Shade **one** circle only.

None or very few $(0-10 \text{ books}) - \bigcirc$
Enough to fill one shelf $(11-25 \text{ books}) - \bigcirc$
Enough to fill one bookcase $(26-100 \text{ books}) - \bigcirc$
Enough to fill two bookcases (101–200 books) 〇
Enough to fill three or more bookcases (more than 200) (

# B. How often do you use the books in your home for the following?

		At least once a week	Once or twice a month	A few times a year	Never
a)	Help with my homework	<u> </u>			
b)	Reading because I love it	O			
b)	Reading because my parents tell me to	O ———			

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

Shade one circle for each line.

		Yes	No
a)	A computer or tablet	0	$$ $\stackrel{\downarrow}{\circ}$
b)	Study desk/table for your use	🔾 —	
c)	Your own room	🔾 —	
d)	Internet connection	🔾 —	
e)	Your own cell phone	🔾 —	
f)	Dictionary	🔾 —	
g)	Electricity	🔾 —	
h)	Running tap water	🔾 —	
i)	Hot running water from a geyser -	🔾 —	
j)	M-Net or DSTV	🔾 —	
k)	Flush toilet	🔾 —	
l)	Car	🔾 —	
m)	Washing machine	🔾 —	
n)	Dishwashing machine	🔾 —	

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

Shade one circle only.

None 🔾
1 - 3 devices 🔾
4 - 6 devices 🔾
7 - 10 devices 🔾
More than 10 devices (

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

Shade <b>one</b> circle onl
Did not finish Grade 9 or did not go to school 🔘
Completed Grade 9 🔾
Completed Grade 12 $\bigcirc$
Completed post-matric certificate 🔾
Completed Diploma 🔾
Completed First Degree 🔾
Completed Honour's Degree 🔾
Completed Master's or Doctoral Degree 🔾
I don't know ○
Not applicable 🔾

### 7

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

Shade <b>one</b> circle only.
Did not finish Grade 9 or did not go to school $\bigcirc$
Completed Grade 9 $\bigcirc$
Completed Grade 12 $\bigcirc$
Completed post-matric certificate 🔾
Completed Diploma 🔾
Completed First Degree 🔘
Completed Honour's Degree 🔘
Completed Master's or Doctoral Degree 🔘
I don't know ○
Not applicable 🔘

### A. How far in your education do you think you will go?

Shade <b>one</b> circle only.			
Finish Grade 9			
Finish Grade 12			
Finish post-matric certificate			
Finish Diploma			
Finish First Degree			
Finish Honour's Degree			
Finish Master's or Doctoral Degree			
B. How far in your education do you <u>hope</u> you will go			
Shade <b>one</b> circle only.			
Finish Grade 9			
Finish Grade 12			
Finish post-matric certificate			
Finish Diploma			
Finish Diploma O			

Finish Master's or Doctoral Degree -----

# A. Was your mother (or stepmother or female guardian) born in South Africa?

	Shade <b>one</b> circle only
Yes	$\circ$
No	$\circ$
I don't know	$\bigcirc$
Not applicable	$\bigcirc$

# B. Was your father (or stepfather or male guardian) born in South Africa?

	Shade <b>one</b> circle only.
Yes	$\circ$
No	$\bigcirc$
I don't know	$\bigcirc$
Not applicable	$\bigcirc$

<b>A.</b> '	Were	you	born	in	South	Africa:	?
-------------	------	-----	------	----	-------	---------	---

Shade **one** circle only.

Yes -- ()

No --()

(If Yes, go to #11)

If No,

B. If you were not born in South Africa, how old were you when you came to South Africa?

Shade one circle only.

Older than 10 years old -- ()

5 to 10 years old -- ()

Younger than 5 years old -- 🔾

11

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

Shade one circle only.

Once a week --  $\bigcirc$ 

Once every two weeks -- 🔘

Once a month -- 🔘

Once every two months --  $\bigcirc$ 

Never or almost never --  $\bigcirc$ 

## A. How often do you feel this way when you arrive at school?

Shade one circle for each line.

		Every day	Almost every day	Sometimes	Never
a)	I feel tired	0			
b)	I feel hungry	🔾			

### B. How often do you eat breakfast at home on school days?

Shade one circle only.

Every day -	-0
Most days -	-0
Sometimes -	-0
Never or almost never	-0

### C. How do you get to and from school every day?

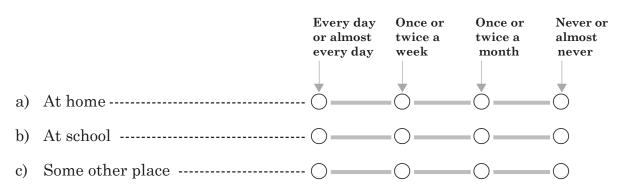
Shade in as many circles as you need.

By car 🔾
By taxi 🔾
By bus 🔾
By bicycle 🔾
Walking 🔾
Other 🔘

### 13

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

Shade one circle for each line.

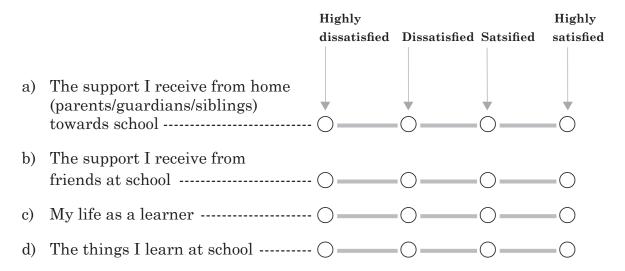


### 14

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

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

### How satisfied are you with the following?



### Your School

**16** —

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

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

# A. During this school year, how often have <u>other learners</u> from your school done any of the following things to you, including through texting or the Internet?

		At least once a week	Once or twice a month	A few times a year	Never
a)	Said mean things about my physical appearance (e.g., my hair, my size)	- 0	-0-		-0
b)	Spread lies about me	- 0			
c)	Shared my secrets with others	- 0	-0	-0	
d)	Refused to talk to me	- 0		-0	
e)	Insulted a member of my family	- 0	-0	-0	
f)	Stole something from me	- 0		-0	
g)	Made me do things I didn't want to do	- 🔾			
h)	Sent me nasty or hurtful messages online	- 0			
i)	Shared nasty or hurtful things about me online	- 0			
j)	Shared embarrassing photos of me online	- 0			
k)	Threatened me	- 0			
1)	Physically hurt me	- 0		-0	
m)	Excluded me from their group (e.g., parties, messaging)	- ()	-0-		
n)	Damaged something of mine on purpose	- 🔾			

# B. During this school year, how often have <u>you</u> done any of the following things to anyone in your school, including through texting or the Internet?

		At least once a week	Once or twice a month	A few times a year	Never
a)	Said mean things about someone's physical appearance (e.g., their hair, their size)				
b)	Spread lies about someone			0	$\bigcirc$
c)	Shared someone's secrets with others				$\bigcirc$
d)	Refused to talk to someone			0	$\bigcirc$
e)	Insulted a member of someone's family				$\bigcirc$
f)	Stole something from someone		<u> </u>	0	$\bigcirc$
g)	Made someone do things they didn't want to do				$\bigcirc$
h)	Sent someone nasty or hurtful messages online				$\bigcirc$
i)	Shared nasty or hurtful things about someone online				$\bigcirc$
j)	Shared embarrassing photos of someone online				$\bigcirc$
k)	Threatened someone			0	$\bigcirc$
1)	Physically hurt someone				$\bigcirc$
m)	Excluded someone from my group (e.g., parties, messaging)				$\bigcirc$
n)	Damaged something of someone's on purpose				$\bigcirc$

### C. To whom do you report being bullied?

Shade one circle only.

I have not been bullied -- 🔾

I do not report bullying -- 🔾

To my friends -- 🔾

To my teachers -- 🔾

To my parents -- 🔾

### **Mathematics in School**

18 \_\_\_\_\_

Α.	In mathematics lesson	s, how	often	do you	work	on
	problems on your own	?				

Shade <b>one</b> circle only.
Every or almost every lesson $\bigcirc$
About half the lessons $\bigcirc$
Some lessons $\bigcirc$
Never $\bigcirc$
B. Do you have a mathematics workbook?
Shade <b>one</b> circle only.
No ()
Yes, I have my own workbook 🔘
Yes, I share a workbook with a classmate $\bigcirc$
C. How would you describe your access to a mathematics textbook?
Shade <b>one</b> circle only.
I have my own textbook
I share a mathematics textbook with one other learner
I share a mathematics textbook with more than one other learner $\bigcirc$
I do not have access to a mathematics textbook

### A. Do you have access to a calculator at school?

	Shade <b>one</b> circle only.
Yes, I have my own calculator that I brought from home	
Yes, the school has given me my own calculator	
Yes, I have access to a calculator that is shared with other learners	
No	$\circ$
B. If yes, do you use the calculate problems?	or to work out mathematics
	Shade <b>one</b> circle only.
Always	$\circ$
Almost always	0
Sometimes	$\bigcirc$

Never --  $\bigcirc$ 

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I enjoy learning mathematics		<u> </u>	<b>—</b>	
b)	I wish I did not have to study mathematics				
c)	Mathematics is boring				
d)	I learn many interesting things in mathematics				
e)	I like mathematics		0	0	
f)	I like any schoolwork that involves numbers				
g)	I like to solve mathematics problems				
h)	I look forward to mathematics lessons			0	
i)	Mathematics is one of my favourite subjects			0	

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I know what my teacher expects me to do	<u> </u>			
b)	My teacher is easy to understand	O			
c)	My teacher has clear answers to my questions	0	0	0	
d)	My teacher is good at explaining mathematics	0	0	0	
e)	My teacher does a variety of things to help us learn	0	0	0	
f)	My teacher links new lessons to what I already know	0	0	0	
g)	My teacher explains a topic again when we don't understand				

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

		Every or almost every lesson	About half the lessons	Some lessons	Never
a)	Learners don't listen to what the teacher says	- 0			
b)	There is disruptive noise	- 🔾			
c)	It is too disorderly for learners to work well	- ()			
d)	My teacher has to wait a long time for learners to quiet down	- 🔾			
e)	Learners interrupt the teacher	- 🔾	_0		
f)	My teacher has to keep telling us to follow the classroom rules	- 🔾			

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

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

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

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

### Science in School

25 \_\_\_\_\_

A.	In	science	lessons,	$\mathbf{how}$	often	$\mathbf{does}$	your	teacher	ask	you
	to	conduct	science	expe	erimer	nts?				

	Shade <b>one</b> circle only.
At least once a week (	$\circ$
Once or twice a month (	$\circ$
A few times a year (	$\circ$
Never (	$\circ$
B. Do you have a science workboo	ok?
	Shade <b>one</b> circle only.
No (	$\circ$
Yes, I have my own workbook (	$\circ$
Yes, I share a workbook with my classmate (	
C. How would you describe your textbook?	access to a science
	Shade <b>one</b> circle only.
I have my own textbook	$\circ$
I share a science textbook with one other learner (	$\circ$
I share a science textbook with more than one other learner (	$\circ$
I do not have access to a science textbook(	$\supset$

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I enjoy learning science	<u> </u>	<u> </u>	<u> </u>	Ŏ
b)	I wish I did not have to study science	O			$\circ$
c)	Science is boring	O			$\bigcirc$
d)	I learn many interesting things in science	O			$\circ$
e)	I like science	O			$\bigcirc$
f)	I look forward to learning science in school	0	O	0	$\circ$
g)	Science teaches me how things in the world work	0		0	$\circ$
h)	I like to conduct science experiments	0	O	0	$\circ$
i)	Science is one of my favourite subjects	O		O	$\bigcirc$

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

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I know what my teacher expects me to do		Ŏ	<b>\</b>	
b)	My teacher is easy to understand				
c)	My teacher has clear answers to my questions				
d)	My teacher is good at explaining science				
e)	My teacher does a variety of things to help us learn				
f)	My teacher links new lessons to what I already know				
g)	My teacher explains a topic again when we don't understand				

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

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

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

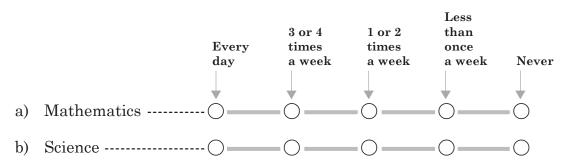
			,		
		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	I think learning science will help me in my daily life	- 0			
b)	I need science to learn other school subjects	- 🔾			
c)	I need to do well in science to get into the university of my choice	- 🔾			
d)	I need to do well in science to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

### Homework

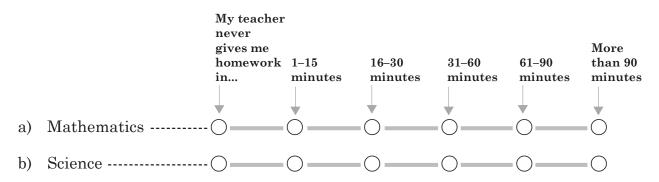
30

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

Shade **one** circle for each line.

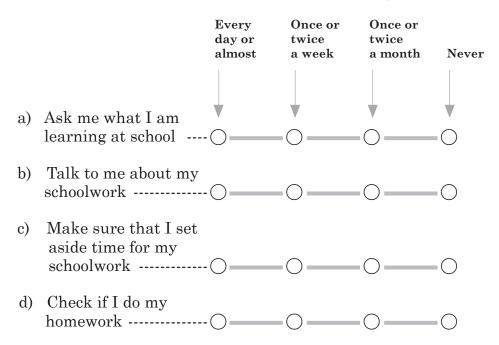


B. When your teacher gives you homework in the following subjects, about how many minutes do you usually spend on your homework?



### A. How often does someone at home do these things?

Shade one circle for each line.

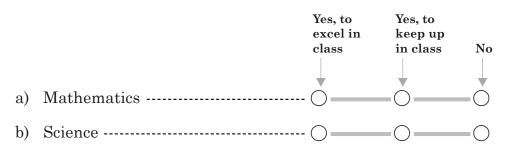


# B. How often does the following happen at home in relation to your school work?

		Always or almost always	Sometimes	Never or almost never
a)	My schoolwork is in a language that my parents / caregivers do nunderstand	_		
b)	My schoolwork is so difficult that my parents / caregivers are able to help	not		_0

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

Shade one circle for each line.

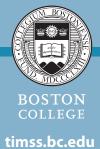


B. For how many of the last 12 months have you attended extra lessons or tutoring?

Shade one circle for each line.

		Did not attend	Less than 4 months	4–8 months	More than 8 months
,	N. (1)	•	•	•	<u></u>
a)	Mathematics		$\bigcirc$	$\bigcirc$	$\bigcirc$
b)	Science	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

# Thank You! Thank you for filling out the questionnaire!



### **Grade 9**



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