

Identification Label

2023 - 2024

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

# Student Questionnaire

**Separate Science Subjects** 

<Grade 9>

<TIMSS National Research Center Name>
<Address>





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?

Fill **one** circle only.

Yes -- 🔘

No --()

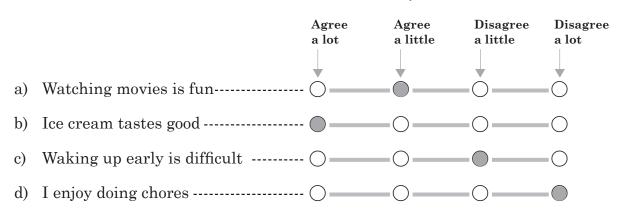
### Example 2

How often do you do these things?

|    |                        | Every<br>day | Almost<br>every day | Sometimes | Never |
|----|------------------------|--------------|---------------------|-----------|-------|
| a) | I talk with my friends |              |                     |           |       |
| ,  | I play sports          | 0            |                     |           |       |
| 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.
- Fill in the circle next to or under your answer.
- If you decide to change your answer, draw an X through your first answer, like this: X. Then, fill in the circle next to or under your new answer.
- Ask for help if you do not understand something or are not sure how to answer.
- You may recognize some of these questions from a questionnaire you completed last school year. Please respond to the questions again to give information about your experiences this school year.

1

Which of these describes you?

Fill one circle only.

Girl -- 🔘

Boy -- 🔘

<Other> --  $\bigcirc$ 

2

When were you born?

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

| a) Month             | b) Year          |
|----------------------|------------------|
| January 🔘            | 2006 🔘           |
| February $\bigcirc$  | 2007 🔾           |
| March 🔘              | 2008 🔘           |
| April 🔘              | 2009 🔾           |
| May ()               | 2010 🔾           |
| June 🔘               | 2011 🔾           |
| July 🔘               | 2012 🔾           |
| August 🔘             | 2013 🔾           |
| September $\bigcirc$ | 2014 🔾           |
| October $\bigcirc$   | Other $\bigcirc$ |
| November $\bigcirc$  |                  |
| December $\bigcirc$  |                  |

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

Fill one circle only.

Always -- 🔘

Almost always -- 🔘

Sometimes -- ()

Never -- 🔾

4

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

Fill one circle only.

None or very few (0–10 books) -- (

(0–10 books) -- (

Enough to fill one shelf  $(11-25 \text{ books}) - \bigcirc$ 

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

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

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

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

|    |   | Yes | No |
|----|---|-----|----|
| a) | Your own computer or tablet             | - 0 |    |
| b) | A shared computer or tablet you can use | - 0 |    |
| c) | A smartphone                            | - 0 |    |
| d) | Access to the internet                  | - 0 |    |
| e) | Study desk/table for your use           | - 0 |    |
| f) | Your own room                           | - 0 |    |

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 a="" guardian=""></parent>  | <parent b="" guardian=""></parent> |
|---|------------------------------------|
| Some <primary 1="" 2="" education—="" education—isced="" isced="" level="" lower="" or="" secondary=""> or did not go to school</primary> |                                    |
| <lower 2="" education—isced="" level="" secondary=""></lower>   |                                    |
| <upper 3="" education—isced="" level="" secondary=""></upper>   |                                    |
| <post-secondary, 4="" education—isced="" level="" non-tertiary=""></post-secondary,>  |                                    |
| <short-cycle 5="" education—isced="" level="" tertiary=""></short-cycle>  | $\Diamond$                         |
| <bachelor's 6="" equivalent="" level="" level—isced="" or=""></bachelor's>  | <b>\rightarrow</b>                 |
| <pre><postgraduate 7="" 8="" degree:="" doctor—isced="" isced="" level="" master's—="" or=""></postgraduate></pre>                        |                                    |
| I don't know  |                                    |
| Not applicable  |                                    |

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

| 77.77 |      | . 7    | 7                   |
|-------|------|--------|---------------------|
| Hill  | ana  | circle | $\alpha n I \alpha$ |
| I UUU | UILE | Curcus | OTTUVY.             |
|       |      |        |                     |

| Finish <lower 2="" education—isced="" level="" secondary=""></lower>                                       |  |
|--|--|
| Finish < Upper secondary education—ISCED Level 3>  |  |
| Finish <post-secondary, 4="" education—isced="" level="" non-tertiary=""></post-secondary,>                |  |
| Finish <short-cycle 5="" education—isced="" level="" tertiary=""></short-cycle>                            |  |
| Finish <bachelor's 6="" equivalent="" level="" level—isced="" or=""></bachelor's>                          |  |
| Finish <postgraduate 7="" 8="" degree:="" doctor—isced="" level="" master's—isced="" or=""></postgraduate> |  |

8

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

Fill **one** circle only.

Once a week -- 
Once every two weeks -- 
Once a month -- 
Once every two months -- 
Never or almost never --

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

|    |  | Every day | Almost<br>every day | Sometimes | Never |
|----|--|-----------|---------------------|-----------|-------|
| a) | I feel tired   |           |                     |           |       |
| b) | I feel hungry  | - 0       |                     |           |       |
| c) | I feel <unwell> (e.g., headache, stomachache)</unwell> | - ()      |                     |           |       |
| d) | I feel happy   | - 0       | _0_                 |           |       |
| e) | I feel worried about the school day                    | - ()      |                     |           |       |

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

|    |  | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|--|----------------|-------------------|----------------------|-------------------|
| a) | I can write and edit text on<br>a computer, tablet, or<br>smartphone                                 | 0              |                   |                      |                   |
| b) | I can create school presentations using a computer, tablet, or smartphone                            | 🔾              |                   | _0                   |                   |
| c) | I can create tables, charts, and graphs using a computer, tablet, or smartphone                      | 🔾              |                   | _0                   |                   |
| d) | I can find information that I need online  | 🔾              |                   |                      |                   |
| e) | I can tell if a website is trustworthy   | 🔾              |                   |                      |                   |
| f) | I can easily do new things on computers, laptops, or smartphones                                     | 🔾              |                   | -0                   |                   |
| g) | I can help my friends or family<br>members with using their<br>computers, laptops, or<br>smartphones | ()             |                   |                      | -0                |
|    | smartpnones  | 0              |                   | $ \cup$              | $=$ $\bigcirc$    |

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

|    |   | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|---|----------------|-------------------|----------------------|-------------------|
| a) | I care about the protection of plants and animals                                   | . •            | Ŏ                 | Ŏ                    |                   |
| b) | Nature exists to benefit humans regardless of the consequences                      |                |                   |                      |                   |
| c) | The most important reason for protecting natural areas is so people can enjoy them  | . ()           | O                 | O                    |                   |
| d) | I am confident that environmental problems will be solved by science and technology | . ()           | 0                 | O                    |                   |
| e) | It makes me sad when nature is destroyed by humans                                  |                |                   |                      |                   |
| f) | I enjoy finding out what kinds of plants and animals live in my surrounding area    | . ()           | O                 |                      |                   |
| g) | I enjoy being in nature (e.g., <forests, deserts="" parks,="">)</forests,>          |                |                   |                      |                   |
| h) | Protecting nature is more important than economic growth                            | . ()           |                   |                      |                   |
| i) | Addressing climate change should be a high priority                                 | . ()           |                   | O                    |                   |

#### How often do you do these things to help the natural environment?

|    |   | Every<br>day | Almost<br>every day | Sometimes | Never    |
|----|---|--------------|---------------------|-----------|----------|
| a) | I try to reuse things (e.g., <bags, bottles="">)</bags,>  |              |                     |           | <u>`</u> |
| b) | I try to use less resources (e.g., <water, food="">)</water,>   | - 🔾 —        |                     |           |          |
| c) | I talk about how to help the environment (e.g., <saving picking="" trash="" up="" water,="">)</saving>      | . ()         |                     |           |          |
| d) | I try to learn about environmental problems (e.g., <climate animals="" change,="" endangered="">)</climate> | . ()         |                     |           |          |
| e) | I try to participate in group activities to help the environment-   |              |                     |           |          |
| f) | I tell my friends when they are doing things that harm the environment                                      | . ()         |                     |           |          |

### Your School

13.

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

|    |  | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|--|----------------|-------------------|----------------------|-------------------|
| a) | I like being in school                       | Š              | <u> </u>          | <b>*</b>             | Ŏ                 |
| b) | I feel safe when I am at school              | O              |                   | 0                    | $\bigcirc$        |
| c) | I feel like I belong at this school          | O              |                   | $\circ$              | $\bigcirc$        |
| d) | Teachers at this school care about me        | O              | O                 |                      | $\circ$           |
| e) | I am proud to go to this school              | O              |                   |                      | $\bigcirc$        |
| f) | I have friends at this school                | O              |                   | 0                    | $\bigcirc$        |
| g) | Students in this school respect me           | O              |                   |                      | $\circ$           |
| h) | Students at this school like me the way I am | O              |                   |                      | $\circ$           |
| i) | I am satisfied with school                   | $\bigcap$      |                   | $\cap$               | $\bigcirc$        |

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?

|    |  |                            | ,                     |                          |            |
|----|--|----------------------------|-----------------------|--------------------------|------------|
|    |  | At least<br>once a<br>week | Once or twice a month | A few<br>times<br>a year | Never      |
| a) | Said mean things about my physical appearance (e.g., my hair, my size)   | <b>_</b>                   |                       |                          |            |
| b) | Spread lies about me   | O                          |                       | O                        |            |
| c) | Shared my secrets with others  | O                          |                       |                          |            |
| d) | Refused to talk to me  | O                          |                       |                          |            |
| e) | Said hurtful things to or about me because of my cultural background (e.g., <race, ethnicity,="" religion="">)</race,> | $\bigcirc$                 |                       |                          | $\circ$    |
| f) | Stole something from me  | O                          |                       |                          |            |
| g) | Made me do things I didn't want to do  | O                          |                       | $\circ$                  | $\bigcirc$ |
| h) | Sent me nasty or hurtful messages online   | O                          | 0                     |                          | $\bigcirc$ |
| i) | Shared nasty or hurtful things about me online   | O                          |                       |                          | $\bigcirc$ |
| j) | Shared embarrassing photos of me online  | O                          |                       | 0                        | $\bigcirc$ |
| k) | Threatened me  | O                          |                       |                          |            |
| 1) | Physically hurt me   | O                          |                       | O                        |            |
| m) | Excluded me from their group (e.g., parties, messaging)  | O                          |                       |                          | $\bigcirc$ |
| n) | Damaged something of mine on purpose   | 0                          |                       |                          | $\bigcirc$ |

### **Mathematics in School**

**15** 

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

| Fill <b>one</b> circle only.            |
|---|
| Every or almost every lesson $\bigcirc$ |
| About half the lessons $\bigcirc$       |
| Some lessons $\bigcirc$                 |
| Never $\bigcirc$                        |

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

|    |  | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|--|----------------|-------------------|----------------------|-------------------|
| a) | I enjoy learning mathematics                   | - 🗸            | - <del>\</del>    | - 🗸                  | -                 |
| b) | I learn many interesting things in mathematics | - ()           |                   |                      |                   |
| c) | I like mathematics                             | - 0            |                   |                      |                   |
| d) | I like any schoolwork that involves numbers    | - ()           |                   | -O                   |                   |
| e) | I like to solve mathematics problems           | - ()           |                   | 0                    |                   |
| f) | I look forward to mathematics class            | - 0            | -0                | -0                   |                   |
| g) | Mathematics is one of my favorite subjects     | - 🔾            |                   |                      |                   |

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

|    |  | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|--|----------------|-------------------|----------------------|-------------------|
| a) | My teacher makes it clear what we should learn in each lesson      | <u></u>        |                   |                      | Ŏ                 |
| b) | My teacher is easy to understand                                   | O              |                   |                      | $\bigcirc$        |
| c) | My teacher has clear answers to my questions                       | 0              |                   | O                    | $\circ$           |
| d) | My teacher is good at explaining mathematics                       | 0              |                   | 0                    | $\circ$           |
| e) | My teacher does a variety of things to help us learn               | 0              | 0                 | 0                    | $\circ$           |
| f) | My teacher explains a topic again when we don't understand         | 0              | 0                 | 0                    | $\circ$           |
| g) | My teacher gives me helpful feedback on my work                    | 0              | 0                 | 0                    | $\bigcirc$        |
| h) | My teacher asks me to show what I have learned                     | 0              | 0                 | 0                    | $\bigcirc$        |
| i) | My teacher asks me to explain my answers                           | 0              | 0                 | 0                    | $\circ$           |
| j) | My teacher asks us to apply what we have learned in new situations | O              |                   |                      | $\circ$           |

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

|    |  | Every or<br>almost<br>every<br>lesson | About half the lessons | Some<br>lessons | Never |
|----|--|---------------------------------------|------------------------|-----------------|-------|
| a) | Students don't listen to what the teacher says               | 0                                     |                        |                 |       |
| b) | There is too much noise for students to work well            | 🔾                                     |                        |                 |       |
| c) | My teacher has to wait a long time for students to be quiet  | 🔾                                     |                        |                 |       |
| d) | Students interrupt the teacher                               | ()                                    |                        |                 |       |
| e) | Students do not follow the classroom rules                   | ()                                    |                        |                 |       |
| f) | Other students' behavior makes it hard for me to concentrate | ()                                    |                        |                 |       |

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

|    |   | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|---|----------------|-------------------|----------------------|-------------------|
| a) | I usually do well in mathematics                            | Ŏ              | Ŏ                 | Ŏ                    | Ŏ                 |
| b) | Mathematics is harder for me than for many of my classmates | 0              |                   | 0                    | $\bigcirc$        |
| c) | Mathematics is not one of my strengths                      | 0              | $\circ$           | 0                    | $\circ$           |
| d) | Mathematics is easy for me                                  | O              |                   |                      | $\bigcirc$        |
| e) | I am good at working out difficult mathematics problems     | 0              |                   | 0                    | $\circ$           |
| f) | I am good at explaining mathematics to others               | 0              |                   | 0                    | $\bigcirc$        |
| g) | Mathematics is harder for me than any other subject         | 0              | 0                 | 0                    | $\circ$           |
| h) | Mathematics makes me confused                               | O              | 0                 | 0                    | $\bigcirc$        |

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

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

### **Biology in School**

21

Are you studying biology in school this year?

Yes -- (If No, go to #27)

Fill **one** circle only.

**22** 

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

Fill one circle only.

At least once a week --  $\bigcirc$ 

Once or twice a month --  $\bigcirc$ 

A few times a year --  $\bigcirc$ 

Never --  $\bigcirc$ 

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

| a) | I enjoy learning biology                        | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree a lot |
|----|---|----------------|-------------------|----------------------|----------------|
| b) | I learn many interesting things in biology      |                |                   |                      |                |
| c) | I like biology                                  |                |                   | 0                    |                |
| d) | I look forward to learning biology in school    |                |                   |                      |                |
| e) | Biology teaches me how things in the world work |                |                   |                      |                |
| f) | I like to conduct biology experiments           |                |                   |                      |                |
| g) | Biology is one of my favorite subjects          |                |                   |                      |                |

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

|    |  | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|--|----------------|-------------------|----------------------|-------------------|
| a) | My teacher makes it clear what we should learn in each lesson      | <u></u>        |                   | <u></u>              | Č                 |
| b) | My teacher is easy to understand                                   | O              |                   |                      | $\bigcirc$        |
| c) | My teacher has clear answers to my questions                       | O              |                   | O                    | $\circ$           |
| d) | My teacher is good at explaining biology                           | O              |                   | O                    | $\circ$           |
| e) | My teacher does a variety of things to help us learn               | O              |                   | O                    | $\bigcirc$        |
| f) | My teacher explains a topic again when we don't understand         | O              |                   | O                    | $\bigcirc$        |
| g) | My teacher gives me helpful feedback on my work                    | O              |                   | O                    | $\circ$           |
| h) | My teacher asks me to show what I have learned                     | O              |                   | O                    | $\circ$           |
| i) | My teacher asks me to explain my answers                           | O              |                   | O                    | $\bigcirc$        |
| j) | My teacher asks us to apply what we have learned in new situations | O              |                   | O                    | $\circ$           |

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

|    |  | Every or<br>almost<br>every<br>lesson | About<br>half<br>the<br>lessons | Some<br>lessons | Never |
|----|--|---------------------------------------|---------------------------------|-----------------|-------|
| a) | Students don't listen to what the teacher says               | - 0                                   |                                 |                 | -0    |
| b) | There is too much noise for students to work well            | - 0                                   |                                 | -0              | -0    |
| c) | My teacher has to wait a long time for students to be quiet  | - 🔾                                   |                                 |                 | -0    |
| d) | Students interrupt the teacher                               | - 0                                   |                                 |                 |       |
| e) | Students do not follow the classroom rules                   | - 0                                   |                                 | -0              | -0    |
| f) | Other students' behavior makes it hard for me to concentrate | - ()                                  | -0                              | -0              | -0    |

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

|    |   | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|---|----------------|-------------------|----------------------|-------------------|
| a) | I usually do well in biology                            | Ŏ              | Ŏ                 | <u> </u>             | Ŏ                 |
| b) | Biology is harder for me than for many of my classmates | 0              | 0                 | 0                    | $\bigcirc$        |
| c) | Biology is not one of my strengths                      | 0              | $\circ$           | 0                    | $\bigcirc$        |
| d) | Biology is easy for me                                  | O              |                   |                      | $\bigcirc$        |
| e) | I am good at working out difficult biology problems     | 0              |                   | 0                    | $\bigcirc$        |
| f) | I am good at explaining biology to others               | 0              |                   | 0                    | $\bigcirc$        |
| g) | Biology is harder for me than any other subject         | 0              | 0                 | 0                    | $\bigcirc$        |
| h) | Biology makes me confused                               | O              |                   |                      | $\bigcirc$        |

### Earth Science in School

|        | ' / |
|--------|-----|
|        | - 4 |
| $\sim$ | -   |

Are you studying earth science in school this year?

Fill **one** circle only.

Yes --()

No -- 🔾

(If No, go to #33)

| _ |   |
|---|---|
| _ | 3 |
|   |   |
|   |   |

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

Fill one circle only.

At least once a week --  $\bigcirc$ 

Once or twice a month --  $\bigcirc$ 

A few times a year --  $\bigcirc$ 

Never --  $\bigcirc$ 

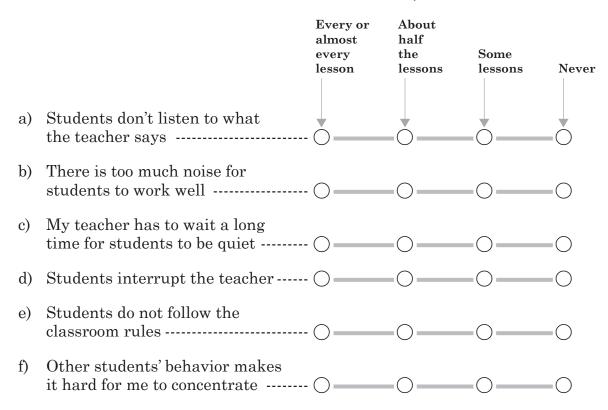
## How much do you agree with these statements about learning earth science?

|    |   | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|---|----------------|-------------------|----------------------|-------------------|
| a) | I enjoy learning earth science                        | Ŏ              | <u> </u>          | Ŏ                    | Ŏ                 |
| b) | I learn many interesting things in earth science      | 0              |                   | O                    | $\circ$           |
| c) | I like earth science                                  | O              |                   |                      | $\bigcirc$        |
| d) | I look forward to learning earth science in school    | 0              |                   |                      | $\circ$           |
| e) | Earth science teaches me how things in the world work | 0              | O                 | O                    | $\bigcirc$        |
| f) | I like to conduct earth science experiments           | 0              | O                 | O                    | $\circ$           |
| g) | Earth science is one of my favorite subjects          | O              |                   | O                    | $\circ$           |

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

|    |  | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|--|----------------|-------------------|----------------------|-------------------|
| a) | My teacher makes it clear what we should learn in each lesson      | . •            |                   |                      |                   |
| b) | My teacher is easy to understand                                   | - 0            |                   |                      |                   |
| c) | My teacher has clear answers to my questions                       | . ()           |                   | 0                    |                   |
| d) | My teacher is good at explaining earth science                     | . ()           |                   | 0                    |                   |
| e) | My teacher does a variety of things to help us learn               | . ()           |                   | 0                    |                   |
| f) | My teacher explains a topic again when we don't understand         | . ()           |                   |                      |                   |
| g) | My teacher gives me helpful feedback on my work                    |                |                   |                      |                   |
| h) | My teacher asks me to show what I have learned                     |                |                   |                      |                   |
| i) | My teacher asks me to explain my answers                           |                |                   |                      |                   |
| j) | My teacher asks us to apply what we have learned in new situations |                |                   | 0                    |                   |

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



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

| a) | I usually do well in earth science                            | Agree a lot | Agree<br>a little | Disagree<br>a little | Disagree a lot |
|----|---|-------------|-------------------|----------------------|----------------|
| b) | Earth science is harder for me than for many of my classmates |             | 0                 | 0                    | 0              |
| c) | Earth science is not one of my strengths                      | O           |                   |                      | $\bigcirc$     |
| d) | Earth science is easy for me                                  | 0           |                   | 0                    |                |
| e) | I am good at working out difficult earth science problems     | O           |                   |                      | $\bigcirc$     |
| f) | I am good at explaining earth science to others               | O           |                   |                      | $\bigcirc$     |
| g) | Earth science is harder for me than any other subject         | 0           |                   |                      | $\bigcirc$     |
| h) | Earth science makes me confused                               | 0           |                   | $\circ$              | $\circ$        |

### **Chemistry in School**

33

Are you studying chemistry in school this year?

Fill **one** circle only.

Yes -- ()

No -- 🔾

(If No, go to #39)

34

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

Fill one circle only.

At least once a week -- ()

Once or twice a month -- ()

A few times a year --  $\bigcirc$ 

Never --  $\bigcirc$ 

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

|    |   | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|---|----------------|-------------------|----------------------|-------------------|
| a) | I enjoy learning chemistry                        | Ŏ              | Ŏ                 | Ŏ                    |                   |
| b) | I learn many interesting things in chemistry      | O              |                   |                      |                   |
| c) | I like chemistry                                  | O              |                   |                      |                   |
| d) | I look forward to learning chemistry in school    | 0              |                   |                      |                   |
| e) | Chemistry teaches me how things in the world work | 0              | 0                 | 0                    |                   |
| f) | I like to conduct chemistry experiments           | O              |                   |                      |                   |
| g) | Chemistry is one of my favorite subjects          | O              |                   |                      |                   |

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

|    |  | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|--|----------------|-------------------|----------------------|-------------------|
| a) | My teacher makes it clear what we should learn in each lesson      | Ŏ              |                   |                      | $\circ$           |
| b) | My teacher is easy to understand                                   | O              | $\circ$           |                      | $\bigcirc$        |
| c) | My teacher has clear answers to my questions                       | O              |                   |                      | $\bigcirc$        |
| d) | My teacher is good at explaining chemistry                         | O              | 0                 |                      | $\bigcirc$        |
| e) | My teacher does a variety of things to help us learn               | O              |                   |                      | $\bigcirc$        |
| f) | My teacher explains a topic again when we don't understand         | O              |                   |                      | $\bigcirc$        |
| g) | My teacher gives me helpful feedback on my work                    | O              |                   |                      | $\bigcirc$        |
| h) | My teacher asks me to show what I have learned                     | O              |                   |                      | $\bigcirc$        |
| i) | My teacher asks me to explain my answers                           | O              |                   |                      | $\bigcirc$        |
| j) | My teacher asks us to apply what we have learned in new situations | $\bigcirc$     |                   |                      | $\circ$           |

## How often do these things happen in your <a href="mailto:chemistry lessons">chemistry lessons</a>?

|    |  | Every or<br>almost<br>every<br>lesson | About<br>half<br>the<br>lessons | Some<br>lessons | Never |
|----|--|---------------------------------------|---------------------------------|-----------------|-------|
| a) | Students don't listen to what the teacher says               | . •                                   |                                 |                 |       |
| b) | There is too much noise for students to work well            |                                       |                                 |                 |       |
| c) | My teacher has to wait a long time for students to be quiet  | . ()                                  |                                 |                 |       |
| d) | Students interrupt the teacher                               |                                       | 0                               | O               |       |
| e) | Students do not follow the classroom rules                   |                                       |                                 |                 |       |
| f) | Other students' behavior makes it hard for me to concentrate | . ()                                  | -0                              | -O              |       |

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

|    |   | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot               |
|----|---|----------------|-------------------|----------------------|---------------------------------|
| a) | I usually do well in chemistry                            | <b>Č</b> ——    | <b>Ö</b> ——       | <b>Ö</b> ——          | $\stackrel{\bigstar}{\bigcirc}$ |
| b) | Chemistry is harder for me than for many of my classmates | O              | O                 | O                    | $\circ$                         |
| c) | Chemistry is not one of my strengths                      | O              | O                 | O                    | $\bigcirc$                      |
| d) | Chemistry is easy for me                                  | O              | O                 | O                    | $\bigcirc$                      |
| e) | I am good at working out difficult chemistry problems     | O              | O                 | O                    | $\circ$                         |
| f) | I am good at explaining chemistry to others               | O              | O                 | O                    | $\circ$                         |
| g) | Chemistry is harder for me than any other subject         | 0              | O                 | O                    | $\circ$                         |
| h) | Chemistry makes me confused                               | O              | O                 | O                    | $\bigcirc$                      |

### Physics in School

39

Are you studying physics in school this year?

Fill one circle only.

Yes -- ()

No -- ()

(If No, go to #45)

**40** 

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

Fill one circle only.

At least once a week -- ()

Once or twice a month --  $\bigcirc$ 

A few times a year --  $\bigcirc$ 

Never --  $\bigcirc$ 

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

|    |   | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|---|----------------|-------------------|----------------------|-------------------|
| a) | I enjoy learning physics                        | . •            |                   | <u> </u>             |                   |
| b) | I learn many interesting things in physics      |                |                   |                      |                   |
| c) | I like physics                                  |                |                   |                      |                   |
| d) | I look forward to learning physics in school    |                | 0                 |                      |                   |
| e) | Physics teaches me how things in the world work |                |                   |                      |                   |
| f) | I like to conduct physics experiments           |                |                   |                      |                   |
| g) | Physics is one of my favorite subjects          |                |                   |                      |                   |

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

|    |  | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|--|----------------|-------------------|----------------------|-------------------|
| a) | My teacher makes it clear what we should learn in each lesson      | <u> </u>       |                   |                      |                   |
| b) | My teacher is easy to understand                                   |                | $\circ$           | $\circ$              |                   |
| c) | My teacher has clear answers to my questions                       | 0              |                   |                      |                   |
| d) | My teacher is good at explaining physics                           | 0              |                   |                      |                   |
| e) | My teacher does a variety of things to help us learn               | 0              |                   |                      |                   |
| f) | My teacher explains a topic again when we don't understand         | 0              |                   |                      |                   |
| g) | My teacher gives me helpful feedback on my work                    | O              |                   |                      |                   |
| h) | My teacher asks me to show what I have learned                     | O              |                   |                      |                   |
| i) | My teacher asks me to explain my answers                           | O              |                   |                      |                   |
| j) | My teacher asks us to apply what we have learned in new situations | 0              | 0                 | 0                    |                   |

# How often do these things happen in your <u>physics lessons</u>?

|    |  | Every or<br>almost<br>every<br>lesson | About<br>half<br>the<br>lessons | Some<br>lessons | Never |
|----|--|---------------------------------------|---------------------------------|-----------------|-------|
| a) | Students don't listen to what the teacher says               | - 0                                   |                                 |                 |       |
| b) | There is too much noise for students to work well            | - 🔾                                   |                                 |                 |       |
| c) | My teacher has to wait a long time for students to be quiet  | - 🔾                                   |                                 |                 |       |
| d) | Students interrupt the teacher                               | - 🔾                                   | O                               |                 |       |
| e) | Students do not follow the classroom rules                   | - 0                                   |                                 | -0              | -0    |
| f) | Other students' behavior makes it hard for me to concentrate | - ()                                  |                                 | -0              |       |

44 \_

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

|    |   | Agree<br>a lot | Agree<br>a little | Disagree<br>a little | Disagree<br>a lot |
|----|---|----------------|-------------------|----------------------|-------------------|
| a) | I usually do well in physics                            | <u> </u>       | <b>Ö</b>          | Ŏ                    |                   |
| b) | Physics is harder for me than for many of my classmates |                |                   |                      |                   |
| c) | Physics is not one of my strengths                      |                |                   |                      |                   |
| d) | Physics is easy for me                                  |                | $\circ$           |                      |                   |
| e) | I am good at working out difficult physics problems     |                |                   |                      |                   |
| f) | I am good at explaining physics to others               |                |                   |                      |                   |
| g) | Physics is harder for me than any other subject         |                |                   |                      |                   |
| h) | Physics makes me confused                               |                |                   |                      |                   |

### **Learning Science**

**45** 

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

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

#### 46 -

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

Fill one circle for each line.

|    |               | Every day | 3 or 4<br>times<br>a week | 1 or 2<br>times<br>a week | Less<br>than<br>once<br>a week | Never |
|----|---------------|-----------|---------------------------|---------------------------|--------------------------------|-------|
| a) | Mathematics   |           |                           | <u> </u>                  | -0-                            |       |
| b) | Biology       |           |                           |                           |                                |       |
| c) | Earth science |           |                           |                           |                                |       |
| d) | Chemistry     |           |                           |                           |                                |       |
| e) | Physics       |           |                           |                           |                                |       |

If your teacher "Never" gives you homework in these subjects, thank you for completing this questionnaire!

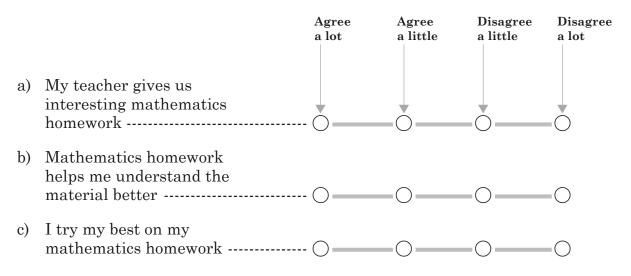
#### **47**

When your teacher gives you homework in the following subjects, about how much time do you usually spend on your homework?

|    |               | 30 minutes or less | 31-60 minutes | More than 60 minutes |
|----|---------------|--------------------|---------------|----------------------|
| a) | Mathematics   | · Ŏ                | · O           | Ŏ                    |
| b) | Biology       |                    | $\circ$       |                      |
| c) | Earth science |                    |               |                      |
| d) | Chemistry     |                    |               |                      |
| e) | Physics       |                    | 0             |                      |

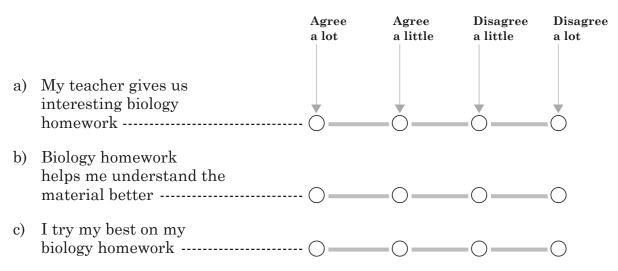
## How much do you agree with these statements about your mathematics homework?

Fill one circle for each line.



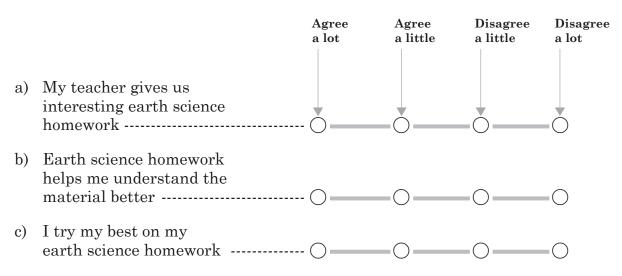
#### 49

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



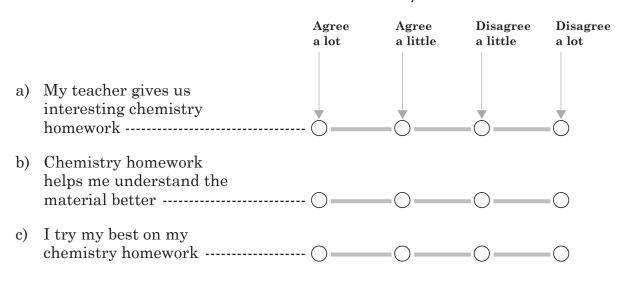
# How much do you agree with these statements about your earth science homework?

Fill one circle for each line.



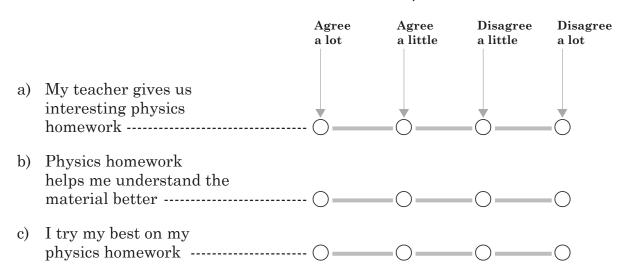
#### **51**

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



How much do you agree with these statements about your physics homework?

Fill one circle for each line.



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



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## <Grade 9>





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